

GOVERNMENT OF NAGALAND
OFFICE OF THE CHIEF SECRETARY
NAGALAND : KOHIMA

NO.CSO/PMU/NGT OA NO.606/2025

Kohima,

March, 2026.

To

The Registrar General
National Green Tribunal
Faridkot House, Copernicus Marg
New Delhi-110001
Email: judicial-ngt@gov.in

Sub: Submission of Six-Monthly Progress Report July-December 2025 on Solid & Liquid Waste Management on behalf of the State of Nagaland in compliance with the directives of the Hon'ble NGT in O.A. No. 606 of 2018, pursuant to Order dated 22.08.2025.

Sir/Madam,

With reference to the directives made by the Hon'ble NGT in O.A No. 606/2018 vide its Order dated 22.08.2025, "Six-Monthly Progress Report July-December 2025" in respect of Solid & Liquid Waste Management for the State of Nagaland is hereby submitted for necessary consideration.

Encl.: *As above*

Yours Faithfully,



(Sentianger Imchen) IAS
Chief Secretary, Nagaland

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI.
ORIGINAL APPLICATION NO. 606 /2018**

IN THE MATTER OF:-

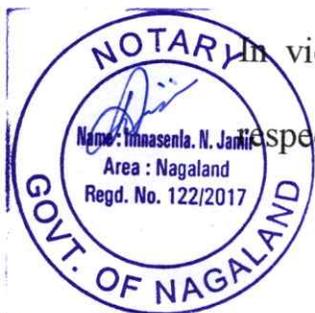
In Re: Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues

**SUBMISSION OF SIX-MONTHLY PROGRESS REPORT IN
RESPECT OF THE STATE OF NAGALAND.**

I, SENTIYANGER IMCHEN, S/o JONGPONGYAPANG having office at Civil Secretariat, Kohima, Nagaland, do hereby solemnly affirm and state as under:-

1. That I am the Chief Secretary, Government of Nagaland, and being familiar with the facts of the case based on official records state that I am competent to swear this present affidavit in my official capacity.
2. That the State is placing on record Six monthly Progress Report of the State pursuant to the directions issued by this Hon'ble Tribunal on 24.11.2022. It is stated that the report has been prepared as per the format provided by this Hon'ble Tribunal vide order dated 22.8.2025.

A copy of the Six Monthly report in respect for the State of Nagaland (July – December 2025) is attached herewith as **Annexure R/1**.



In view of the submissions made, the Six Monthly Progress Report in respect of the State of Nagaland may kindly be taken on record for kind

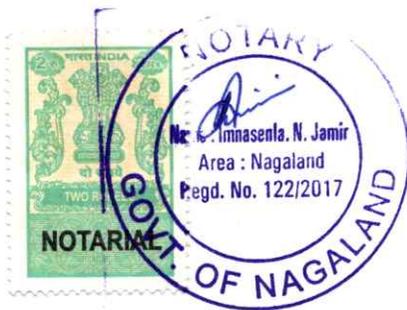
perusal and appropriate directions to be passed by this Hon'ble Tribunal. It is prayed accordingly.



DEPONENT
Sentiyanger Imchen, IAS
 Chief Secretary
 Government of Nagaland, Kohima

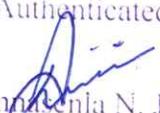
VERIFICATION

Verified at Kohima on this the 2nd day of March, 2026 that the contents of the above affidavit are true and correct to the best of my knowledge and belief. No part of it is false and nothing material has been concealed there from.




DEPONENT
Sentiyanger Imchen, IAS
 Chief Secretary
 Government of Nagaland, Kohima

Authenticated by


 Immasenla N. Jamir
 Notary Public

SIXTH MONTHLY PROGRESS REPORT (JULY – DECEMBER 2025) SUBMITTED ON BEHALF OF THE STATE OF NAGALAND BY THE CHIEF SECRETARY, GOVERNMENT OF NAGALAND IN COMPLIANCE OF THE DIRECTION OF THE HON'BLE NGT VIDE ITS ORDER DATED 22.08.2025 IN OA NO. 606 OF 2018

ANNEXURE 1

1. SOLID WASTE MANAGEMENT IN THE STATE OF NAGALAND:

Sl No	Name of ULB	Waste Generation (TPD)	Whether based on per capita / or weighment	Composition of waste			Waste Collected (in TPD)	Waste Transported (in TPD)	Final destination of Transported Waste
				Biodegradable	Dry/ Recyclable	Inerts			
1	Kohima	67	per capita @540 gm	40.25 TPD	20 TPD	6.75 TPD	43	43	Scrap dealer/ Municipal dumpsite
2	Dimapur	78.3	Weightment	48.54 TPD	26.6 TPD	3.1 TPD	74.6	74.6	Scrap dealer/ Municipal dumpsite
3	Mokokchung	13.5	NA	5.73 TPD	4.01 TPD	1.72 TPD	11.475	NA	Dumpsite/ scrap dealers & MRF
4	Wokha	13	Based on per capita	5.73 TPD	4.02 TPD	1.25 TPD	11	NA	Dumping site & scrap dealer
5	Zunheboto	1.5	NA	60%	20%	20%	0.75	0.75	Dumping site MRF
6	Noklak	2.26	NA	50%	30%	20%	2.26	2.26	Dumpsite
7	Chumukedima	10	NA	6 TPD (60% of Total waste generated mostly compromised of Home composting)	2.3 TPD (23.50% of dry/ recyclable waste)	10.30%	2.3	NA	CTC Dumping site MRF, Scrap dealers
8	Kiphire	5.80	Per capita @ 280 gm	3.19 TPD	1.74 TPD	0.87 TPD	2.26	2.26	Scrap dealer/ dumpsite
9	Longleng	3	Per capita @ 394 gm	1.5 TPD (50% of Total waste generated mostly compromised of home composting)	0.9 TPD (30% of Recyclable waste & mostly compromised of waste collected by	0.6 TPD (20% of plastic waste)	0.9	0.8	Scrap dealers/ dumping site

Sl No	Name of ULB	Waste Generation (TPD)	Whether based on per capita / or weighment	Composition of waste			Waste Collected (in TPD)	Waste Transported (in TPD)	Final destination of Transported Waste
				Biodegradable	Dry/ Recyclable	Inerts			
					registered scrap dealers)				
10	Phek	3.3	Weightment	60%	22%	2%	2.5	2.5	NA
11	Mon	2.53	NA	0.7 TPD	0.4 TPD	0.08 TPD	1.35	1.35 TPD (Dumpsite), 0.4 TPD (Scrap dealer)	Scrap dealer/ dumpsite
12	Tuensang	13.85	NA	NA	NA	NA	4.5	NA	NA
13	Peren	2.5	NA	30%	20%	40%	1.5	Not recorded	NA
14	Tseminyu	2.17	Per capita @ 280 gm	1.30 TPD	0.65 TPD	0.22 TPD	0.67	0.67	NA
15	Shamator	1	Weightment	NA	NA	NA	1	1	Solid waste management site
16	Niuland	0.15	NA	0.04 TPD	0.08 TPD	0.03 TPD	0.15	0.15	Dump site
17	Meluri	1.82	NA	1.00 TPD	0.64 TPD	0.18 TPD	0.88	0.88	Dumpsite
18	Mangkolemba	0.4	NA	0.14 TPD	0.23 TPD	0.03 TPD	0.35	0.35	Dumping site
19	Changtongya	3	NA	1.6 TPD (Source managed at 55%)	0.5 TPD	Construction floor soiling, drainage (0.14 TPD)	2.5	2.5	Biodegradable composting and reuse at source, Recycle rag pickers & waste dealers, RDF managed by ULB for disposal at landfill (0.10 TPD)
20	Tuli	3	NA	1.6 TPD (Managed at source) 55%	0.5 TPD	0.3 TPD (Soiling of roads/ Landscaping/ Landfill) 10%	2.5	2.5	Biodegradable composting and reuse at source, Recyclable rag pickers & waste dealers, RDF managed by ULB for disposal at landfill
21	East Dimapur	4	NA	30%	20%	50%	4	4	NA
22	Longkhim	0.25	NA	0.1 TPD	0.1 TPD	0.05 TPD	0.2	0.2	NA

Sl No	Name of ULB	Waste Generation (TPD)	Whether based on per capita / or weighment	Composition of waste			Waste Collected (in TPD)	Waste Transported (in TPD)	Final destination of Transported Waste
				Biodegradable	Dry/ Recyclable	Inerts			
23	Pfutsero	3.91	NA	2.15 TPD	1.37 TPD	0.39 TPD	1.62	1.62	Dumpsite
24	Pungro	0.4	Per capita for population of 6000-7000	80-85%	5-10 %	<10%	0.1	0.1 (waste transported to dumpsite once a week)	Waste/Scrap dealers and dumpsite
25	Seyochung	0.05	NA	0.03 TPD	0.02 TPD	NA	NIL	Nil	NA
26	Tamlu	0.1	NA	40%	30%	30%	0.339	0.250	NA
27	Medziphema	3	per capita	1.5 TPD (50% of Total waste generated mostly compromised of home composting)	0.9 (30% mostly recyclable)	0.6 (20% plastic waste)	0.9	0.9	Dumping site
28	Bhandari	1	NA	40%	20%	40%	0.75	0.75	Dumpsite
29	Jalukie	2.7	NA	1.1 TPD	1.2 TPD	0.4 TPD	3.6	3.6	Dumpsite
30	Tening	0.92	NA	0.58 TPD	0.34 TPD	NA	0.3	0.3	NA
31	Chozuba	1.3	NA	0.71 TPD	0.45 TPD	0.14 TPD	0.8	0.8	Scrap dealer/ dumpsite
32	Chiephobozou	0.65	Per capita @ 280 gm	0.36 TPD	0.23 TPD	0.065 TPD	0.295	Scrap dealer /dumping site	NA
33	Satakha	1	NA	0.55 TPD	0.35 TPD	0.1 TPD	0.857	0.857	Scrap dealer/Landfill
34	Aghunato	0.36	Per capita	0.3 TPD recycled through household composting (85% Approx)	0.01 TPD (5% Approx)	0.03 TPD (10% Approx)	0.05	0.05	Recyclable: Scrap dealers, Inerts: Dumping site
35	Atoizu	10	NA	90%	10%	NA	Yes	Yes	Dumping site
36	Naginimora	3	NA	0.9	0.6	1.5	Yes	Yes	NA
37	Tizit	2.17	Based on 280 gm/capita	1.19 TPD	0.76 TPD	0.22 TPD	0.22	0.22	Scrap dealers/ Landfill site
38	Tobu	1.0	NA	0.4 TPD	0.3 TPD	0.3 TPD	0.5	0.5	Dumpsite
39	Aboi	1.5	NA	0.7 TPD	0.6 TPD	0.2 TPD	0.5	0.5	Landfill site
		265.39					181.476	150.617	

ANNEXURE 2

SOLID WASTE MANAGEMENT IN THE STATE OF NAGALAND:

Sl. No	Name of ULB	Waste processing																				Gap in waste generation & processing	Time bound plan to fill up the gap	
		Composting						Refuse Derived Fuel				Waste to energy(Thermal/ Methanation route)						Other processing						
		Intake Qty	Method adopted	Output Qty. as compost	Quality	Residue, Rejects & Management	Utilization of compost	Capacity of plant	Sources of waste for making RDF	RDF produced	Residue, Rejects & Management	Utilization of RDF	Plant capacity	Daily inputs of feed	Sources of waste	Output (Energy)	Residue, Rejects & Management	Fly ash & Bottom ash management	Qty. of inputs	Quality of inputs	Products & it's utilisation			Residue, Rejects & Management
1	Kohima	50 TPD	Aerobic composting	4.83 TPD	Not assessed	Municipal dumpsite	Manure	Not available	Households & Commercial	Nil	Nil	Not applicable	Nil	NA	NA	NA	NA	NA	29.55 TPD	Not assessed	Kitchen garden/ floriculture & scrap dealer	Municipal Dumpsite	9.6 TPD	Preparation in progress
2	Dimapur	46.25	Vermi composting	14.56 TPD	Not assessed	Municipal dumpsite	Manure	Not available	Households / Commercial	Nil	Nil	Not applicable	Nil	Not available	Not available	Nil	Nil	Nil	3.7 TPD	Not assessed	Kitchen garden/ floriculture & scrap dealer	Municipal Dumpsite	26.06 TPD	Under preparation
3	Mokokchung	1.5 TPD Approx	Pit/Vermi/ Home community composting & green heap composting unit.	0.9 TPD	NA	Land filling	Organic manure/ fertilizer for flower and garden	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Wokha	1.5 TPD Approx	Home & community compost pit	0.5 TPD	NA	Landfill	Organic manure/ fertilizer for flower and garden	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Sl. No	Name of ULB	Waste processing																				Gap in waste generation & processing	Time bound plan to fill up the gap	
		Composting						Refuse Derived Fuel					Waste to energy(Thermal/ Methanation route)						Other processing					
		Intake Qty	Method adopted	Output Qty. as compost	Quality	Residue, Rejects & Management	Utilization of compost	Capacity of plant	Sources of waste for making RDF	RDF produced	Residue, Rejects & Management	Utilization of RDF	Plant capacity	Daily inputs of feed	Sources of waste	Output (Energy)	Residue, Rejects & Management	Fly ash & Bottom ash management	Qty. of inputs	Quality of inputs	Products & it's utilisation			Residue, Rejects & Management
5	Zunheboto	NA	NA	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Noklak	2.26 TPD	Composting	NA	NA	NA	Organic fertilizer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Chumukedima	10 TPD	Aerobic	6 TPD	NA	NA	Manure in flower pot along NH-29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Kiphire	3.54 TPD (processed at Home, Animals feeds and Home composting)						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Scrap dealers	NA	2026
9	Longleng	3 TPD	Home/ pit composting	1.5 TPD	Animal fooder	Compost	Organic fertilizer for gardens, lawns and potted plants	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Biomedical medical waste from health centers are processed through sharp pit & deep burial				NA	31.03.2026
10	Phek	0.8 % of organic waste is used for animal feeds and home composting						Nil					Nil						Nil				NA	Nil
11	Mon	2.53 TPD	Household composting	0.7 TPD	NA	NA	Organic fertilizer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Tuensang	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Peren	0.10% of organic waste is used for animal feeds and home composting						Nil					Nil						Nil				NA	Nil
14	Tseminyu	NA	(Community compost pit) Natural composting	NA	NA	Reject pit	Agriculture / Florist	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.20TPD	0.67 TPD-GAP October 2026
15	Shamator	Not estimated	Household composting	Not estimated	NA	NA	Domestic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Niuland	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
17	Meluri	NA	Natural composting	NA	NA	NA	Farming	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Mangkolemba	0.4 TPD	Home based pit composting and reuse at source, recyclable waste dealers	0.14 TPD	NA	Animal feed	Kitchen garden, lawn care	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	01.12.2030

Sl. No	Name of ULB	Waste processing																				Gap in waste generation & processing	Time bound plan to fill up the gap	
		Composting						Refuse Derived Fuel					Waste to energy(Thermal/ Methanation route)						Other processing					
		Intake Qty	Method adopted	Output Qty. as compost	Quality	Residue, Rejects & Management	Utilization of compost	Capacity of plant	Sources of waste for making RDF	RDF produced	Residue, Rejects & Management	Utilization of RDF	Plant capacity	Daily inputs of feed	Sources of waste	Output (Energy)	Residue, Rejects & Management	Fly ash & Bottom ash management	Qty. of inputs	Quality of inputs	Products & it's utilisation			Residue, Rejects & Management
19	Changtongya	3 TPD	Household composting & Reuse	1.6 TPD	NA	NA	Soil enrichment & Plant health	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	01.12.2030
20	Tuli	3 TPD	Household composting & Reuse	1.6 TPD	NA	NA	Soil enrichment & Plant health/ lawn care	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	01.12.2030
21	East dimapur	4 TPD	Household composting/ Reuse	NA	NA	NA	Soil enrichment & Plant health	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Longkhim	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	01.12.2026
23	Pfutsero	1 Tonne Approx	Natural composting	NA	NA	NA	Farming	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.62 TPD	31.03. 2027
24	Pungro	0.3 TPD	Household composting	NA	NA	NA	Gardening, Soil enrichment	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	NA	NA
25	Seyochung	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	01.12.2031
26	Tamlu	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	NA	Nil
27	Medziphema	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Biomedical medical waste from health centers are processing by themselves	NA	NA	NA	NA	01.12.2026
28	Bhandari	NA	Composting	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29	Jalukie	NA	Natural composting	NA	NA	NA	Farming	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Tening	NA	Household level	NA	NA	NA	Household level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Sl. No	Name of ULB	Waste processing																				Gap in waste generation & processing	Time bound plan to fill up the gap	
		Composting						Refuse Derived Fuel					Waste to energy(Thermal/ Methanation route)						Other processing					
		Intake Qty	Method adopted	Output Qty. as compost	Quality	Residue, Rejects & Management	Utilization of compost	Capacity of plant	Sources of waste for making RDF	RDF produced	Residue, Rejects & Management	Utilization of RDF	Plant capacity	Daily inputs of feed	Sources of waste	Output (Energy)	Residue, Rejects & Management	Fly ash & Bottom ash management	Qty. of inputs	Quality of inputs	Products & it's utilisation			Residue, Rejects & Management
31	Chozuba	0.5 TPD	Composting	Not ascertained	Not ascertained	Compost	Organic fertilizer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.03.2027
32	Chiephobozou	0.36 TPD	Home pit composting	Not asserted	NA	Compost	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.03. 2026
33	Satakha	0.5 TPD	Composting	Not ascertained	Not ascertained	Compost	Organic fertilizer	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	10 Years
34	Aghunato	0.30 TPD	Household composting	0.15 TPD	NA	NA	Farm/ Gardening manure	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	01.12.2028
35	Atoizu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
36	Nagimora	NA	Household level	NA	NA	NA	Household level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
37	Tizit	0.69 TPD	Home/ pit composting	Not estimated	Good for garden / agriculture use	Not estimated	Organic fertilizer for gardens, lawns and potted plants	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Biomedical waste from health centers are processed through sharp pit & deep burial	NA	NA	Landfill/ Incineration	NA	31.03. 2026
38	Tobu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
39	Aboi	0.2 TPD	Pit composting	Not estimated	Good for garden / agriculture use	Not estimated	Gardens	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		134.8589		33.88														33.25						

ANNEXURE 3

2. SOLID WASTE MANAGEMENT IN THE STATE OF NAGALAND: LEGACY WASTE

Sl No	Name of ULB	Legacy waste				Quantification & Utilization of out of Bioremediation and Biomining				Gap in legacy waste remediation & time bound plan
		No. of legacy waste dump sites	Qty. of legacy waste reported	Present qty. Of legacy waste	Daily legacy waste being added as unprocessed waste	Digested material	Plastics	Rubber	Inert & Others	
1	Kohima	1 (Dziiriizou)	40,253 MT	50,786.5 MT	28 TPD	28.6%	18.4%	53%	October, 2026	
2	Dimapur	1 (Sunrise colony)	1.611 LMT*	2.031 LMT*	34.48 TPD	49%	19%	32%	October, 2026	
3	Mokokchung	1	29 th Jan, 2026	1293 Tons	4 Tons	NA	NA	NA	NA	
4	Wokha	1	28 th Jan 2026	5940 MT	2 Tons	NA	NA	NA	NA	
5	Zunheboto	1	NA	NA	0.5 TPD	NA	NA	NA	NA	
6	Noklak	NA	NA	NA	NA	NA	NA	NA	NA	
7	Chumukedima	1	14 th Jan 2026	250 MT (Approx)	2 TPD (Approx)	NA	NA	NA	NA	
8	Kiphire	1	800 Tons approx	10 Tons	1.5 TPD	NA	30%	10%	40%	June, 2026
9	Longleng	1	28 th Jan, 2026	10 Tons	1 Tons Approx	NA	NA	NA	NA	31 st March 2030
10	Phek	1	30.01.2026	20 Tons	1.5 Tons Approx	NA	NA	NA	NA	Nil
11	Mon	1	NA	50 T Approx	1.35 TPD	NA	NA	NA	NA	NA
12	Tuensang	1	NA	NA	NA	NA	NA	NA	NA	NA
13	Peren	1	31 st Jan 2026	80 T Approx	Not measured	NA	NA	NA	NA	Nil
14	Tseminyü	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Shamator	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Niuland	1 at Henito village (8 Kms from Niuland Town)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
17	Meluri	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Mangkolemba	Nil	Nil	Nil	Nil	NA	NA	NA	NA	NA
19	Changtongya	Nil	Nil	Nil	Nil	NA	NA	NA	NA	NA
20	Tuli	Nil	Nil	Nil	Nil	NA	NA	NA	NA	NA
21	East Dimapur	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Longkhim	Nil	Nil	7.3	0.05	NA	NA	NA	NA	NA
23	Pfutsero	1	6000 MT 2022	7773.9 MT	1.62 TPD	NA	NA	NA	NA	31 st March, 2026

SI No	Name of ULB	Legacy waste				Quantification & Utilization of out of Bioremediation and Biomining				Gap in legacy waste remediation & time bound plan
		No. of legacy waste dump sites	Qty. of legacy waste reported	Present qnty. Of legacy waste	Daily legacy waste being added as unprocessed waste	Digested material	Plastics	Rubber	Inert & Others	
24	Pungro	Nil	NA	NA	NA	NA	NA	NA	NA	NA
25	Seyochung	1	Nil	Nil	Nil	NA	NA	NA	NA	NA
26	Tamlu	Nil	NA	NA	NA	NA	30%	NA	30%	NA
27	Medziphema	1	No	NA	NA	NA	NA	NA	NA	Yet to initiate
28	Bhandari	1	NA	NA	NA	NA	NA	NA	NA	NA
29	Jalukie	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Tening	NA	Not assessed	Not assessed	NA	NA	NA	NA	NA	NA
31	Chozuba	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
32	Chiephobozou	Nil	Nil	Nil	Nil	NA	NA	NA	NA	Nil
33	Satakha	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
34	Aghunato	Nil	Nil	Nil	Nil	NA	NA	NA	NA	NA
35	Atoizu	1	2 nd Feb, 2026	NA	NA	NA	NA	NA	NA	NA
36	Naginimora	1	250 MT	250 MT	2 MT	NA	NA	NA	NA	NA
37	Tizit	Nil	Nil	Nil	Nil	NA	NA	NA	NA	Nil
38	Tobu	NA	NA	NA	NA	NA	NA	NA	NA	NA
39	Aboi	Nil	Nil	Nil	Nil	NA	NA	NA	NA	Nil

Note: LMT*-Lakhs metric tonne

ANNEXURE 4

3. SEWAGE WASTE MANAGEMENT IN NAGALAND

Sl. No	Name of ULB	(B)	(C)			(D)						(E)							
		Sewage status estimation & measurement	Sewage conveyance/sewers			Drains						Sewage treatment & Utilities							
		Total sewage generation per day (MLD)	Targeted Household (HH) to be connected to sewers	HHs connected	Time targets to complete connectivity (gap in connectivity)	Sewage and sillage flowing in open drains (Storm water drains/ concretised drains/ unlined/ Katcha drains) (No. of drains)	Flow in each drain (MLD)	Quality/ Characteristics of effluents	Qty. of industrial effluent discharged in drain (MLD)	Final point of discharge of drain	Time bound action plan to prevent sewage discharge into drain	Installed Treatment capacities of existing STPs (MLD)	Utilisation capacity of existing STPs (MLD)	Gap in sewage generation and treatment (MLD)	Time bound plan to set up and operationalise STPs	Performance of STPs with reference to standards	Final point of discharge of Treated effluent	Level of utilisation of Treated sewage	Sludge generation and its management
1	Kohima	10.78 MLD	Nil	Nil	Nil	Not assessed	Not assessed	Nil	Sanorii / Dziiviiri / Hospital nala/ lerie nala	10.43 MLD, I&D under tendering stage	90	Nil	10.78 MLD	Nil	Nil	Not applicable	Not applicable	Not applicable	
2	Dimapur	17.4 MLD	27,950	Nil	Nil	There is no underground sewer network system. Therefore, HH connectivity to a sewer is not possible	Not assessed	Not assessed	Nil	Dhansiri river	Not applicable	25.43 MLD	18.4 MLD	Nil	Operational	Not assessed	Dhansiri river	Not applicable	Not applicable

3	Mokokchung	4.87 MLD	Nil	Nil	Nil	14 Major drains	Not estimated	No STP installed	Not estimated										
4	Wokha	4.75	NA	NA	NA	15 drains	Not estimated	NA	NA	NA	NA	NA	NA	NA	NA				
5	Zunheboto	Nil	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nil	NA						
6	Noklak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Chumukedima	0.69 MLD	NA	NA	NA	NA	NA	NA	NA	Khuov arÜ	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Kiphire	0.64505	NA	NA	NA	26 No. Of drain	Not estimated	No STP installed	Not estimated										
9	Longleng	Nil	NA	NA	NA	11 Major drains	Not estimated	No STP installed	Not estimated										
10	Phek	1.8 MLD	Nil	Nil	Nil	18 No. of drains	Nil	Nil	Nil	Nil	Nil	No STP installed	Nil						
11	Mon	0.07 MLD	Not estimated	Not estimated	Not estimated	11 Major drains	Not estimated	NA	NA	NA	NA	NA	NA	NA	NA				
12	Tuensang	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Peren	Nil	Nil	Nil	Nil	22 Major drains	Not estimated	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil				
14	Tseminyu	0.20 MLD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Shamator	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Niuland	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
17	Meluri	0.364 MLD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Mangkolemba	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Changtongya	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Tuli	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	East dimapur	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Longkhim	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Pfutsero	0.729	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24	Pungro	NA	NA	NA	NA	NA	NA	NA	Nil	NA	NA	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

25	Seyochung	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
26	Tamlu	Not Assessed	Nil	Nil	Nil	5 Katcha drainage	NA	Not Assessed	Not Assessed	Stream	Not Assessed	NA	NA	NA	NA	NA	NA	NA	NA
27	Medziphema	Nil	NA	NA	NA	Major drain	Not estimated	Not estimated	Not estimated	Not estimated	Not estimated	No STP installed	NA						
28	Bhandari	NA	Nil	Nil	Nil	24	0.31	NA	Nil	River	NA	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
29	Jalukie	0.56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Tening	Not Estimated	Not Estimated	Not Estimated	Not Estimated	Not Estimated	Not Estimated	Not Estimated	Not Estimated	Not Estimated	Not Estimated	NA	NA	NA	NA	NA	NA	NA	NA
31	Chozuba	0.31887	Not estimated	Not estimated	Not estimated	9 Major drains	Not estimated	Not estimated	Not estimated	Not estimated	Not estimated	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
32	Chiephobozou	0.129472	NA	NA	NA	4 Major drains	Not estimated	Not estimated	Not estimated	Not estimated	Not estimated	No STP installed	Not estimated						
33	Satakha	Not Assessed	847	Nil	10 Years	6	NA	NA	Nil	River/Ponds	10 Years	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
34	Aghunato	NA	NA	NA	NA	Nil	NA	NA	Nil	NA	NA	Nil	Nil	Nil	NA	NA	NA	NA	NA
35	Atoizu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
36	Naganimora	0.08 MLD	Not estimated	Not estimated	Not estimated	10	Not estimated	Not estimated	Not estimated	Nallah/Tributary	Not estimated	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
37	Tizit	0.21	NA	NA	NA	6 Major	Not estimated	Not estimated	Not estimated	Not estimated	Not estimated	No STP installed	Not estimated						
38	Tobu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
39	Aboi	NA	NA	NA	NA	5 Major	Not estimated	Not estimated	Not estimated	Not estimated	Not estimated	No STP installed	Not estimated						
		43.59639																	

*Report received from 39 ULBs and compiled by Nagaland Pollution Control Board (NPCB)

Clarification/reply to the observations on compliance status made by the Hon'ble National Green Tribunal's Order 22.08.2025 in O.A NO. 606 of 2018 is given as follows for necessary consideration:

Sl. No	Observation of the Hon'ble NGT	State's Response
4	<ul style="list-style-type: none"> • The State has not prepared a workable plan to reduce gap for management of liquid and solid waste. • Variation in data disclosed in ATR and SMPR. 	<p>The State has developed actionable plans addressing both Solid Waste Management (SWM) and Liquid Waste Management (LWM). These include:</p> <ul style="list-style-type: none"> • Preparation 39 ULB Wise Action Plans with defined processing capacities and implementation timelines on Solid Waste Management (Annexure 1) and Liquid Waste Management (Annexure II) • Remediation plans for 12 legacy waste dumpsites under Swachh Bharat Mission - Urban 2.0. • Preparation 39 ULB Wise Action Plans for Implementation of Faecal Sludge Treatment Plants (FSTPs) and Sewage Treatment Plants (STPs), STPs with Interception & Diversion (I&D), and I&D under CSS Schemes. • Strengthening of door-to-door collection, source segregation, material recovery facilities for 39 ULBs. • To address the data discrepancies, the Urban Development Department issued a notification vide No. UD/SBM2/22/SWM/NGT/2023/179 dated 11th June 2025 (Annexure X). Continuous follow-up through reminders and close coordination with the ULBs and concerned reporting departments is being undertaken to ensure accuracy and consistency in data reporting. Additionally, a training programme was conducted on 14th October 2025, attended by 80 participants including CEOs and Eos, Sanitation inspectors. The Session focused on the new reporting formats in accordance with the orders of the NGT, the SWM Rules 2016, and other related aspects, with officials from the Nagaland Pollution Control Board as the resource persons.
4(A)	SOLID WASTE MANAGEMENT	

i.	Out of total estimated 278.63 TPD of waste generated by 39 ULBs, 124.55 TPD is being processed, leaving a gap of 154.08 TPD. Details should be provided, along with an action plan to bridge the gap with specific timelines, ULB wise.	Under SBM-U, construction of 14 TPD MRF and Compost pit are in progress in 4 ULBs namely Chiephobozou, Changtongya, Medzhiphema and Tseminyu and is expected to be completed by March 2026. Further, MRF and compost pit for the remaining 35 ULBs (292 TPD) DPR has been prepared and approved by SLTC and is awaiting approval by National Advisory and Review Committee (NARC) under SBM-U. An Action Plan outlining a total processing capacity of 306 TPD for 39 Urban Local Bodies (ULBs), along with the proposed implementation timeline, has been prepared and is enclosed as Annexure I.
ii.	Details of door-to-door collection and segregation should be provided	Out of 263.18 TPD waste generated, 49% i.e 128.95 TPD quantity of waste are being segregated and 45.61% practice door to door collection. Details of ULB wise segregation and Door-Door collection is enclosed as Annexure II.
iii.	Details of legacy waste and its remediation, ULB-wise, along with particulars of the land recovered, should be provided.	Out of 39 ULBs, 12 ULBs have legacy waste. The total quantity of waste in these 12 ULBs is 408,946 MT with proposed amount of ₹2,249.2 lakh . Under SBM-U, Work order for bio-remediation have been issued and work are in progress in 3 ULBs namely Kohima, Dimapur and Chumoukedima and is expected to be completed by March 2026 and May 2026. For the remaining 9 ULBs, in-house bio-remediation work have been initiated and is expected to be completed by Oct'2026. Action plan for Legacy waste and its remediation enclosed as Annexure III . The particulars of land recovered will be furnished upon completion of the Activity. The timeline for its completion is October 2026.
4(B)	LIQUID WASTE MANAGEMENT	
i.	Estimated sewage generation (including rural) is 91.0 MLD. Urban Local Bodies (39) generate 52.63 MLD, against which the available treatment capacity is 25.43 MLD, leaving a gap of 27.20 MLD. Details, along with	An Action Plan has been prepared for all 39 ULBs under SBM (U) to strengthen sewage management through FSTPs, STPs with Interception & Diversion (I&D), and standalone I&D. Under AMRUT 2.0, construction of 0.15 MLD FSTP is in progress and will be completed by March 2026 and under SBM-U, 4 MLD STP is in progress in Mokokchung and is expected to be completed by February 2027. For the remaining ULBs,

	an action plan to bridge the gap of 27.20 MLD, should be provided.	construction of 34.63 MLD of I&D, STP with I&D and FSTP are proposed to be taken up under SBM-U & AMRUT and will be tendered shortly. It aims to bridge the existing gaps with a total planned capacity of 50.058 MLD at an estimated cost of ₹224.60 lakh. ULB wise details enclosed as Annexure IV.
ii.	There is no disclosure regarding the status of sewage management for each ULB individually. The next report should specify where the sewage is presently being disposed of, i.e., into streams, lakes, ponds, etc.	In addition, an Action Plan for implementation of Faecal Sludge Treatment Plants (FSTPs) with a capacity of 210 KLD amounting to Rs. 5967.69 Lakhs (Phase I) in 13 ULBs, along with the proposed timeline, is being implemented by the Public Health Engineering Department (PHED) under the National River Conservation Plan of the National River Conservation Directorate, Ministry of Jal Shakti, and is targeted for completion by 30 th November 2026. The department is in the process of revising Phase II of FSTP Project for submission and approval. At present, faecal sludge management in Nagaland is predominantly through septic tanks connected to soak pits. Details are enclosed in the Annexure V. Both Action Plans clearly specify the designated locations and systems for sewage disposal.
iii.	The performance of the 25.43 MLD oxidation pond at Dimapur, which is receiving 12.6 MLD, has not been disclosed. The next report should also indicate the approach adopted by the State with respect to connectivity of households to community sewage treatment facilities, or reliance on individual septic tanks and soak pits.	The STP (Technology - Waste Stabilization Pond) and Oxidation pond mentioned in the Court Order dated 22.08.2025 (4. B.) is the same. The State has only 1 STP in Shozukhu, Dimapur with capacity of 25.43 MLD. <ul style="list-style-type: none"> • Toilet Waste (Black Water) in Dimapur is managed through on-site sanitation systems, primarily septic tanks with soak pits. • The greywater from bathrooms and kitchens, is discharged into soak pits and some into surface drains and ultimately finding its way into nearby water bodies. • However, through interventions such as Interception and Diversion (I&D) structures, these drains are intercepted and diverted to a Sewage Treatment Plant (STP) for treatment. In Nagaland, there is no underground sewer network system. However, the state receives heavy rainfall for 6 to 7 months annually thereby diluting the sewage to an extent which has catered to the sewage management naturally. Therefore, household connectivity to a sewer system is not immediately necessary at the moment. Details are enclosed in the Annexure V.
4(C)	RING FENCED ACCOUNT	

i.	There is no dedicated ring-fenced account, as was required by the direction of the Tribunal. Compliance in this regard should be disclosed in the next report.	The Government has granted approval for the opening of the ring-fenced account, and detailed operational modalities are in the process of being worked out to facilitate its effective implementation. Enclosed in the Annexure VI.
ii.	State to disclose the utility of the purchase of AEROBIO bacteria and its performance evaluation in improving the functioning of septic tanks.	<p>It was implemented in 39 ULBs covering 1,21,288 HHs and 5,89,653 people. 33333 Units of Aerobio were distributed. Enclosed as Annexure VII. It is recommended for on-site treatment of Faecal Sludge.</p> <p>AEROBIO solution is used as an on-site treatment for faecal sludge as it eliminates odour, completely remove methane gas as well as eliminate harmful bacteria causing disease. The technology has been researched and developed by W.J. Décor which was conducted covering all geographical areas of the country covering sub-zero temperature to the hottest regions of the country. Research work on effectiveness of Aerobio Bacteria was also conducted by Professor Punyasloke Bhadury and Group of Leader of ITMETG, IISER, Kolkotta. As per West Bengal Pollution Control Board, the solution show significant reduction in faecal coliform in ponds, STP & septic tanks and is proven to be effective and sustainable solution for faecal contamination and has potential for rejuvenation of rivers and reduction of trapped methane in solid waste dumpsite.</p>
5	“Atleast three cities and three towns in the State and atleast three Villages in every District of the State may be identified within two weeks and earnest and demonstrable endeavour be made to make them fully compliant in respect of environmental norms within six months. The said direction needs to be complied with in respect of all 39 ULBs.	<p>The Rural Development Department implemented in 33 villages (3 in each 11 districts) in 2019 and various initiatives were undertaken on solid and liquid waste management including sensitization, soak pits for individual, compost pits for community and plastic waste disposal infrastructure. It is enclosed as annexure VIII.</p> <p>All the 39 ULBs are working toward total compliance of the Waste Management Rules in the day-to-day waste management of municipal and Town Council limits. Besides the ULBs own initiatives in waste management, the Central Sponsored Schemes such as Swachh Bharat Mission-Urban 2.0 and the 15th Finance Commission Grants and State funded initiatives are also been implemented. Enclosed in Annexure IX.</p>

ACTION PLAN ON SOLID WASTE MANAGEMENT**Annexure-I**

Sl.No	Name of ULB	COMPONENTS		Total Capacity (TPD)	Remark
		MRF (TPD)	COMPOST PIT (TPD)		
1	Dimapur Municipal Council	30	42	72	Project to commence by April 2026
2	East Dimapur	2	4	6	
3	Kohima Municipal Council	30	40	70	
4	Chiephobozou	1	1	2	Work in Progress
5	Tuensang (TC)	5	9	14	Project to commence by April 2026
6	Longkhim	1	1	2	
7	Mokokchung (MC)	2	4	6	
8	Tuli (TC)	2	2	4	
9	Changtongya (TC)	2	2	4	Work in Progress
10	Mangkolemba	1	1	2	Project to commence by April 2026
11	Wokha (TC)	5	8	13	
12	Bhandari	1	2	3	
13	Mon (TC)	4	6	10	
14	Naginimora (TC)	2	2	4	
15	Tobu	1	2	3	
16	Aboi	1	2	3	
17	Tizit	1	2	3	
18	Chumoukedima (TC)	2	6	8	
19	Medziphema (TC)	2	2	4	Work in Progress
20	Zunheboto (TC)	4	5	9	
21	Aghunato	1	1	2	

22	Atoizu	1	1	2	Project to commence by April 2026
23	Satakha	1	2	3	
24	Kiphire (TC)	2	5	7	
25	Seyouchung	1	1	2	
26	Pungro	1	2	3	
27	Phek (TC)	2	4	6	
28	Pfutsero (TC)	2	3	5	
29	Chozuba	1	1	2	
30	Longleng (TC)	2	2	4	
31	Tamalu	1	1	2	
32	Tseminyu (TC)	2	2	4	
33	Peren (TC)	2	2	4	Project to commence by April 2026
34	Jalukie (TC)	2	4	6	
35	Tening	1	1	2	
36	Niuland	1	1	2	
37	Shamator	1	1	2	
38	Noklak	1	2	3	
39	Meluri	1	2	3	
	Total	125	181	306	
<p><i>Note: DPR Prepared & presented at SLTC on 10/02/2026, awaiting NARC Approval. National Advisory and Review Committee (NARC) under Swachh Bharat Mission(Urban) is the over all monitoring and supervision of SBM (Urban).</i></p>					

DETAILS OF DOOR TO DOOR COLLECTION & SEGREGATION 39 ULB WISE
ANNEXURE II

Sl. No	Name of the ULB	Quantity of MSW Generated TPD	% of segregated waste	% of Door-to-Door collection
1	Dimapur Municipal Council	74.6	74	100
2	East Dimapur	4	24	50
3	Kohima Municipal Council	67	17.97	100
4	Chiephobozou	0.5	43	11
5	Tuensang (TC)	13.85	13	100
6	Longkhim	0.1	47	0
7	Mokokchung (MC)	13.5	28	100
8	Tuli (TC)	3	64	18
9	Changtongya (TC)	3	50	100
10	Mangkolemba	0.4	35	0
11	Wokha (TC)	13	100	100
12	Bhandari	1	50	0
13	Mon (TC)	2.52	36	36
14	Naginimora (TC)	3	45	0
15	Tobu	0.5	39	0
16	Aboi	5	48	0
17	Tizit	2.17	49	0
18	Chumoukedima (TC)	10	100	100
19	Medziphema (TC)	3	45	100
20	Zunheboto (TC)	1.5	100	100
21	Aghunato	0.345	10	0
22	Atoizu	10	47	0
23	Satakha	2.4	21	11
24	Kiphire (TC)	4.5	100	100
25	Seyouchung	0.2	45	0

26	Pungro	0.4	29	0
27	Phek (TC)	3.3	82	100
28	Pfutsero (TC)	4	38	100
29	Chozuba	1.3	50	100
30	Longleng (TC)	3	100	64
31	Tamlu	0.1	49	0
32	Tseminyu (TC)	2.17	42	100
33	Peren (TC)	1.79	62	89
34	Jalukie (TC)	3.01	27	100
35	Tening	0.92	47	0
36	Niuland	0.15	50	0
37	Shamator	1	18	0
38	Noklak	1.14	49	0
39	Meluri	1.82	33	0
		263.185	49%	45.61%

Dumpsite Remediation (Legacy Waste) (Solid Waste Management) under SBM 2.0

Annexure III

SN	ULB	Quantity of Waste at Dumpsite (Tons)	Cost per Ton for Dumpsite Remediation			Remarks
			(INR Lakhs)			
			Central assistance under SBM 2.0 90%	State Assistance (10%)	Total Project Cost	
1	Dimapur Municipal Council	161110	787.6	98.5	886.1	In progress to be completed by March 2026
2	Kohima Municipal Council	40253	196.8	24.6	221.4	In progress to be completed by April 2026
3	Tuensang (TC)	66456	324.9	40.6	365.5	Work Initiated to be completed by Oct 2026
4	Mokokchung (MC)	12338	60.3	7.5	67.9	Work Initiated to be completed by Oct 2026
5	Wokha (TC)	5940	29.0	3.6	32.7	Work Initiated to be completed by Oct 2026
6	Mon (TC)	50000	244.4	30.6	275.0	Work Initiated to be completed by Oct 2026
7	Chumoukedima (TC)	22849	111.7	14.0	125.7	In progress to be completed by May 2026
8	Zunheboto (TC)	13000	63.6	7.9	71.5	Work Initiated to be completed by Oct 2026
9	Kiphire (TC)	10000	48.9	6.1	55.0	Work Initiated to be completed by Oct 2026
10	Phek (TC)	11000	53.8	6.7	60.5	Work Initiated to be completed by Oct 2026
11	Pfutsero (TC)	6000	29.3	3.7	33.0	Work Initiated to be completed by Oct 2026
12	Peren (TC)	10000	48.9	6.1	55.0	Work Initiated to be completed by Oct 2026
	Total	408946	1999.3	249.9	2249.2	

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GOVERNMENT OF NAGALAND
DIRECTORATE OF URBAN DEVELOPMENT
SWACHH BHARAT MISSION (URBAN)
NAGALAND: KOHIMA

25

Dated: Kohima, the 13th October, 2025

SANCTION RELEASE ORDER

No: UD/SBM2/1/SWM/2021/ : Sanction is hereby accorded to an amount not exceeding ₹ 1,55,00,000/- (Rupees one crore fifty-five lakhs only) being the amount released for "Initiation of Legacy waste remediation". The amount is transferred to the following 9 (nine) ULBs PFMS Child Account through NL257-NL Swachh bharat mission, solid waste management (SWM) under Swachh Bharat Mission - Urban, Nagaland.

Sanction details of Funds:

Sl. No	Name of ULBs	Total Amount	Remarks
1	Mokokchung MC	₹ 20,00,000/-	Initiation of Legacy waste remediation
2	Tuensang TC	₹ 20,00,000/-	Initiation of Legacy waste remediation
3	Mon TC	₹ 20,00,000/-	Initiation of Legacy waste remediation
4	Wokha TC	₹ 15,00,000/-	Initiation of Legacy waste remediation
5	Phek TC	₹ 20,00,000/-	Initiation of Legacy waste remediation
6	Zunheboto TC	₹ 15,00,000/-	Initiation of Legacy waste remediation
7	Pfutsero TC	₹ 15,00,000/-	Initiation of Legacy waste remediation
8	Kiphire TC	₹ 15,00,000/-	Initiation of Legacy waste remediation
9	Peren TC	₹ 15,00,000/-	Initiation of Legacy waste remediation
Total		₹ 1,55,00,000/-	
<i>Rupees One Crore. fifty-five lakhs only</i>			


(KEZHOCHOLE RHETSO)
State Mission Director- SBM-U 2.0
Urban Development Department
Nagaland: Kohima
Dated: Kohima, the 13th October, 2025

No: UD/SBM2/1/SWM/2021/

Copy to :

1. The Commissioner and Secretary Urban Development & DMA for kind information.
2. The Director UD, for kind information.
3. All concerned ULBs for information and necessary action.
4. Office Copy

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(KEZHOCHOLE RHETSO)
State Mission Director- SRM-IJ 2.0

**GOVERNMENT OF NAGALAND
URBAN DEVELOPMENT DEPARTMENT
SWACHH BHARAT MISSION (URBAN)
NAGALAND: KOHIMA**

Dated: Kohima, the 29th November, 2024

WORK ORDER

No: UD/SBM-2/26/SWM-LW/2024 : In pursuance to the Administrative approval dated 27th November 2024 and upon successful bid against tender No: UD/SBM-2/26/SWM-LW/2024 -II, dated 30th October 2024, *M/S N.R Enterprises* is hereby awarded with the work – *“Bioremediation of an estimated Volume of 1,61,110 MT legacy waste, resource recovery & reject disposal with 100% reclamation of the dumpsite of Dimapur Municipal Council at Burma Camp, Dimapur, Nagaland,”* for contract value of Rs 550/- per MT against the estimated Legacy waste volume of 1,61,110 MT at the total remediation cost of *Rs 8,59,52,185/- (Rupees Eight Crores fifty –Nine Lakhs Fifty Two Thousand One Hundred and Eight -Five only)*

The terms and conditions are as follows:

1. All project must be completed as per the bid document timeline from the date of issue of this order.
2. All materials have to be arranged by the contractor from his own resource and their own risk and cost.
3. All coordination with the concerned ULB is to be done by the contractor as per bid document.
4. Payment shall be as per the payment terms of the bid document.

(KEZHOCHOLE RHETSO)
Mission Director- SBM-U
Urban Development Department
Nagaland: Kohima

Dated: Kohima, the 29th November, 2024.

No: UD/SBM-2/26/SWM-LW/2024

Copy to:

1. The PS to Advisor UD and MA for kind information to Hon'ble Advisor
2. The Commissioner & Secretary, UD & MA for kind information.
3. The Director, UD, for kind information
4. The Secretary, Nagaland Pollution Control Board, for kind information.
5. The CEO's of concerned ULB's for kind information and necessary action.
6. M/s N.R Enterprises for kind information and necessary action.
7. Office Copy

(KEZHOCHOLE RHETSO)
Mission Director- SBM-U
Urban Development Department

**GOVERNMENT OF NAGALAND
URBAN DEVELOPMENT DEPARTMENT
SWACHH BHARAT MISSION (URBAN)
NAGALAND: KOHIMA**

Dated: Kohima, the 29th November, 2024

WORK ORDER

No: UD/SBM-2/26/SWM-LW/2024 : In pursuance to the Administrative approval dated 27th November 2024 and upon successful bid against tender No: UD/SBM-2/26/SWM-LW/2024 -I, dated 30th October 2024, *M/S N.R Enterprises* is hereby awarded with the work – *“Bioremediation of an estimated Volume of 40,253 MT legacy waste, resource recovery & reject disposal with 100% reclamation of the dumpsite of Kohima Municipal Council at Dzürüzou, Kohima, Nagaland,”* for contract value of Rs 550/- per MT against the estimated Legacy waste volume of 40,253 MT at the total remediation cost of *Rs 2,14,75,043/- (Rupees Two crores fourteen lakhs seventy-five thousand and forty-three only)*.

The terms and conditions are as follows:

1. All project must be completed as per the bid document timeline from the date of issue of this order.
2. All materials have to be arranged by the contractor from his own resource and their own risk and cost.
3. All coordination with the concerned ULB is to be done by the contractor as per bid document.
4. Payment shall be as per the payment terms of the bid document.

(KEZHOCHOLE RHETSO)

Mission Director- SBM-U
Urban Development Department
Nagaland: Kohima

No: UD/SBM-2/26/SWM-LW/2024

Dated: Kohima, the 29th November, 2024

Copy to:

1. The PS to Advisor UD and MA for kind information to Hon'ble Advisor.
2. The Commissioner & Secretary, UD & MA for kind information.
3. The Director, UD, for kind information
4. The Secretary, Nagaland Pollution Control Board, for kind information.
5. The ~~CEO~~'s of concerned ULB's for kind information and necessary action.
6. ~~M/s N.R Enterprises~~ for kind information and necessary action.
7. Office Copy

(KEZHOCHOLE RHETSO)

Mission Director- SBM-U
Urban Development Department

GOVERNMENT OF NAGALAND
URBAN DEVELOPMENT DEPARTMENT
SWACHH BHARAT MISSION (URBAN)
NAGALAND: KOHIMA

Dated: Kohima, the 29th November, 2024

WORK ORDER

No: UD/SBM-2/26/SWM-LW/2024 : In pursuance to the Administrative approval dated 27th November 2024 and upon successful bid against tender No: UD/SBM-2/26/SWM-LW/2024 -III, dated 30th October 2024, *M/S N.R Enterprises* is hereby awarded with the work – “*Bioremediation of an estimated volume of 22,849 MT legacy waste, resource recovery & reject disposal with 100% reclamation of the dumpsite of Chumukedima Town Council, near Shokhuvi Bridge, Chumukedima A, Nagaland,*” for contract value of Rs 550/- per MT against the estimated Legacy waste volume of 22,849 MT at the total remediation cost of *Rs 1,21,89,950/- (Rupees One Crore Twenty -One Lakhs Eighty Nine Thousand Nine hundred and Fifty only)*.

The terms and conditions are as follows:

1. All project must be completed as per the bid document timeline from the date of issue of this order.
2. All materials have to be arranged by the contractor from his own resource and their own risk and cost.
3. All coordination with the concerned ULB is to be done by the contractor as per bid document.
4. Payment shall be as per the payment terms of the bid document.

(KEZHOCHE RHETSO)

Mission Director- SBM-U
Urban Development Department
Nagaland: Kohima

Dated: Kohima, the 29th November, 2024

No: UD/SBM-2/26/SWM-LW/2024

Copy to:

1. The PS to Advisor UD and MA for kind information to Hon'ble Advisor.
2. The Commissioner & Secretary, UD & MA for kind information.
3. The Director, UD, for kind information
4. The Secretary Nagaland Pollution Control Board, for kind information.
5. The EO's of concerned ULB's for kind information and necessary action.
6. *M/s N.R Enterprises* for kind information and necessary action.
7. Office Copy

(KEZHOCHE RHETSO)

Mission Director- SBM-U
Urban Development Department

517
GOVERNMENT OF NAGALAND
OFFICE OF THE EXECUTIVE ENGINEER-I
URBAN ENGINEERING WING
KOHIMA : NAGALAND

No.UEW/EE-I/SBM-2/SWM/2024-25/

Dated Kohima the Mar. 2025

To,

M/s. VEVOLHU SWURO
 Regd. No. NPWD Class-1/456
 Kohima : Nagaland

Sub: **Work Order for Solid Waste management at Chiephobozou Town Nagaland.**

Dear Sir:

With reference to the subject cited above and on approval by the Addl. Chief Engineer Urban Engineering Wing, Nagaland, I am directed to issue the Work Order for the work "**Solid Waste Management at Chiephobozou Town**" for the Contract value of **Rs. 24,99,000/- (Rupees Twenty Four Lakhs Ninety Nine Thousand)** only under the following terms & conditions.

1. All the project must be completed within 12 (Twelve) Months from the date of issue of this order.
2. Defect liability period is for 6 (Six) months from the date of completion. Any damage/ defects detected shall be corrected by the contractor at their own without which security money will be forfeited and the same will be made good by the Engineer-in-Charge.
3. All the materials have to be arranged by the contractor from his own resource and materials brought to work site must be physically approved by the Executive Engineer/ Asst. Engineer of this Division
4. G.S.T, Forest royalty and all other taxes/ deductions shall be deducted from the contract work value as per the prevailing rate of the state Govt.
5. No enhancement of rate will be considered.
6. Payment shall be made as per availability of fund.

Please attend this Office within 15 (fifteen) days from the date of issue of this Work Order to sign the Agreement Form-2 before commencing the works.

Yours faithfully

(Er. KENEIZEZO)

Executive Engineer-I
 Urban Engineering Wing
 Kohima, Nagaland

Dated Kohima the Mar. 2025

No.UEW/EE-I/SBM-2/SWM/2024-25/ 149

Copy to:

1. The Sr. PS to Hon'ble Advisor UD&MA Govt. of Nagaland for information to the Hon'ble Advisor for kind information.
2. The Director Urban Development Govt. Of Nagaland for kind information.
3. The Addl. Chief Engineer UEW, Nagaland: Kohima for kind information.
4. The State Mission Director Sawachh Bharat Misson-Urban Nagaland, for kind information.
5. The S.D.O / Junior Engineer, in Charge for information and necessary action.
6. The D.A.O for information.
7. Office copy.

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517

Executive Engineer-I
 Urban Engineering Wing
 Kohima, Nagaland

**GOVERNMENT OF NAGALAND
OFFICE OF THE EXECUTIVE ENGINEER-III
URBAN ENGINEERING WING
KOHIMA : NAGALAND**

o. EE-III/UEW/SBM/2024-25

Dated: Kohima, the 07th Mar' 2025.

o,

Vevolhu Swuro
Regd. No. NPWD Class-I/456
Kohima : Nagaland

Sub: Work order for "Construction of Solid waste management (SWM) at Changtongya town, Mokokchung" under SBM-Urban 2.0

Dear Sir:

With reference to the subject cited above and on approval by the Additional Chief Engineer, Urban Engineering Wing, Nagaland, I am directed to issue the Work Order to your firm for the work "Construction of Solid waste management (SWM) at Changtongya town, Mokokchung" for the Contract value of Rs. 45,68,000/- (Rupees Forty Five Lakhs Sixty Eight Thousand) only as per tendered estimated cost which is based on NPWD SOR 2021 under the following terms & conditions.

1. The project must be completed within 12 (Twelve) Months from the date of issue of this order.
2. Defect liability period is for 6 (Six) months from the date of completion. Any damage/ defects detected shall be corrected by the contractor at their own without which security money will be forfeited and the same will be made good by the Engineer-in-Charge.
3. All the materials have to be arranged by the contractor from his own resource and materials brought to work site must be physically approved by the Executive Engineer/ Asst. Engineer of this Division
4. G.S.T, Forest royalty and all other taxes/ deductions shall be deducted from the contract work value as per the prevailing rate of the state Govt.
5. No enhancement of rate will be considered.
6. Payment shall be made as per availability of fund.

Please attend this Office within 15 (fifteen) days from the date of issue of this Work Order to sign the Agreement Form-2 before commencing the works.

Yours faithfully,

(Er. CHUMBENO SHIDIO)
Executive Engineer-III
Urban Engineering Wing
Kohima, Nagaland

No. EE-III/UEW/SBM/2024-25 / 40

Dated: Kohima, the 07th Mar' 2025.

Copy to:

1. The Sr.PS to Hon'ble Advisor UD&MA Nagaland for kind information to Hon'ble Advisor
2. The Commissioner & Secretary UD & MA Nagaland for kind information
3. The Director, Urban Development Nagaland, Kohima for kind information.
4. The Mission Director, SBM-Urban 2.0 Urban Development Nagaland, Kohima for kind information
5. The Addl.Chief Engineer, UEW, Nagaland, Kohima for kind information.
6. The UDO/AUDO, Urban Development Mokokchung for kind information.
7. The S.D.O / Junior Engineer/DAO, UEW in Charge for information and necessary action.
8. Office copy.

Recd.
Df

Mokokchung
C. Ghosh

Executive Engineer-III
Urban Engineering Wing
Kohima, Nagaland

519
GOVERNMENT OF NAGALAND
OFFICE OF THE EXECUTIVE ENGINEER-I
URBAN ENGINEERING WING
KOHIMA : NAGALAND

No.UEW/EE-I/SBM-2/SWM/2024-25/

Dated Kohima the Mar. 2025

To,

M/s. VEVOLHU SWURO
 Regd. No. NPWD Class-I/456
 Kohima : Nagaland

Sub: Work Order for Solid Waste management at Tseminyu Town Nagaland.

Dear Sir:

With reference to the subject cited above and on approval by the Addl. Chief Engineer Urban Engineering Wing, Nagaland, I am directed to issue the Work Order for the work "Solid Waste Management at Tseminyu Town" for the Contract value of Rs. 60,45,000/- (Rupees Sixty Lakhs Forty Five Thousand) only under the following terms & conditions.

1. All the project must be completed within 12 (Twelve) Months from the date of issue of this order.
2. Defect liability period is for 6 (Six) months from the date of completion. Any damage/ defects detected shall be corrected by the contractor at their own without which security money will be forfeited and the same will be made good by the Engineer-in-Charge.
3. All the materials have to be arranged by the contractor from his own resource and materials brought to work site must be physically approved by the Executive Engineer/ Asst. Engineer of this Division
4. G.S.T, Forest royalty and all other taxes/ deductions shall be deducted from the contract work value as per the prevailing rate of the state Govt.
5. No enhancement of rate will be considered.
6. Payment shall be made as per availability of fund.

Please attend this Office within 15 (fifteen) days from the date of issue of this Work Order to sign the Agreement Form-2 before commencing the works.

Yours faithfully,

(Er. KENEIZEZO)

Executive Engineer-I
 Urban Engineering Wing
 Kohima, Nagaland

Dated Kohima the 6th Mar. 2025

No.UEW/EE-I/SBM-2/SWM/2024-25/ 150

Copy to:

1. The Sr. PS to Hon'ble Advisor UD&MA Govt. of Nagaland for information to the Hon'ble Advisor for kind information.
2. The, Director Urban Development Govt. Of Nagaland for kind information.
3. The Addl. Chief Engineer UEW, Nagaland; Kohima for kind information.
4. The State Mission Director Sawachh Bharat Misson-Urban Nagaland, for kind information.
5. The S.D.O / Junior Engineer, in Charge for information and necessary action.
6. The D.A.O for information.
7. Office copy.

Executive Engineer-I
 Urban Engineering Wing
 Kohima, Nagaland

520

GOVERNMENT OF NAGALAND
OFFICE OF THE EXECUTIVE ENGINEER-II
URBAN ENGINEERING WING
KOHIMA : NAGALAND

No. EE-II/UEW/SBM-2/SWM-MEDZI/2024-25
To,

Vevolhu Swuro
Regd. No. NPWD Class-I/456
Kohima : Nagaland

Dated: Kohima, the 07th Mar' 2025.

Sub: Work order for "Development of Solid waste Management Facility at Medziphema"

Dear Sir:

With reference to the subject cited above and on approval by the Additional Chief Engineer, Urban Engineering Wing, Nagaland, I am directed to issue the Work Order to your firm for the work "Development of Solid Waste Management Facility at Medziphema" for the Contract value of **Rs. 4431867/- (Rupees Forty four Lakhs thirty one Thousand Eight hundred and sixty seven)** only as per tendered estimated cost which is based on NPWD SOR 2021 under the following terms & conditions.

1. The project must be completed within 12 (Twelve) Months from the date of issue of this order.
2. Defect liability period is for 6 (Six) months from the date of completion. Any damage/ defects detected shall be corrected by the contractor at their own without which security money will be forfeited and the same will be made good by the Engineer-in-Charge.
3. All the materials have to be arranged by the contractor from his own resource and materials brought to work site must be physically approved by the Executive Engineer/ Asst. Engineer of this Division
4. G.S.T, Forest royalty and all other taxes/ deductions shall be deducted from the contract work value as per the prevailing rate of the state Govt.
5. No enhancement of rate will be considered.
6. Payment shall be made as per availability of fund.

Please attend this Office within 15 (fifteen) days from the date of issue of this Work Order to sign the Agreement Form-2 before commencing the works.

Yours faithfully,

(Er. THERUOVITUO PIENYU)
Executive Engineer-II
Urban Engineering Wing
Kohima, Nagaland

No. EE-II/UEW/SBM-2/SWM-MEDZI/2024-25/405

Dated: Kohima, the 07th Mar' 2025.

Copy to:

1. The Sr.PS to Hon'ble Advisor UD&MA Nagaland for kind information to Hon'ble Advisor
2. The Commissioner & Secretary UD & MA Nagaland for kind information
3. The Director, Urban Development Nagaland, Kohima for kind information.
4. The Addl. Chief Engineer, UEW, Nagaland, Kohima for kind information.
5. The UDC/ANDO, Urban Development Chumukedima for kind information.
6. The Mission Director, SwaBharat Mission Nagaland, Kohima for kind information.
7. The S. E. Junior Engineer, in Charge for information and necessary action.
8. The B. E. UEW for information.
9. Office copy.

Urban Development Department
Nagaland : Kohima

Receipt No. 2958

Date 7/03/25

Initial P:11

Acho

Medo

C. J. J. 21/5/25

Executive Engineer-II
Urban Engineering Wing
Kohima, Nagaland

520

LIQUID WASTE MANAGEMENT ACTION PLAN – 39 ULB WISE

ANNEXURE IV

WASTE WATER MANAGEMENT ACTION PLAN

No & Name of ULB		Technology	Capacity in MLD	Project Cost (Cr)	Completion Timeline	Specify Disposal sites i,e streams, lakes, ponds etc	Remarks
1	Kohima MC	I&D	10.43	22.00	Mar-26	Natural Rivers and streams	Tendering stage
2	Chiephobozou TC	STP with I &D	0.7	4.83	Mar-26		Preparing for tender
3	TseminyuTC	STP with I &D	0.7	2.90	Mar-26		Preparing for tender
4	Dimapur MC	FSTP	0.15	64.00	Mar-26		Under progress
5	East Dimapur TC	STP with I &D	1.5	4.34	Mar-26		Preparing for tender
6	Nuiland TC	FSTP	0.006	0.53	Mar-26		Awaiting NARC approval for additional funding
7	Chumoukedima TC	STP with I &D	3	7.49	Mar-26		Preparing for tender
8	Medziphema TC	STP with I &D	1	3.64	Mar-26		Preparing for tender
9	PerenTC	FSTP	0.006	0.55	Mar-26		Awaiting NARC approval for additional funding
10	Tening TC	FSTP	0.006	0.56	Mar-26		Awaiting NARC approval for additional funding
11	Jalukie TC	STP with I &D	1	3.56	Mar-26		Preparing for tender
12	Wokha TC	STP with I &D	4	10.24	Mar-26		Preparing for tender
13	Bhandari TC	STP with I &D	0.7	3.23	Mar-26		Preparing for tender
14	Mokokchung MC	STP	4	11.03	Feb-27		In progress
15	Tuli TC	STP with I &D	1	3.82	Feb-27		Preparing for tender
16	Changtongya TC	STP with I &D	1	3.83	Feb-27		Awaiting NARC approval for additional funding

17	Mangkolemba TC	FSTP	0.006	0.57	Feb-27		Awaiting NARC approval for additional funding
18	Tuensang TC	STP with I &D	4	10.64	Feb-27		Preparing for tender
19	Longkhim TC	STP with I &D	0.7	5.25	Feb-27		Preparing for tender
20	Longleng TC	STP with I &D	1	3.55	Feb-27		Preparing for tender
21	Tamlu TC	FSTP	0.006	0.62	Feb-27		Awaiting NARC approval for additional funding
22	Shamator TC	FSTP	0.006	0.72	Feb-27		Awaiting NARC approval for additional funding
23	Noklak TC	STP with I &D	1	4.11	Feb-27		Preparing for tender
24	Mon TC	STP with I &D	3	7.88	Feb-27		Preparing for tender
25	Aboi TC	STP with I &D	0.7	3.29	Feb-27		Preparing for tender
26	Naginimora TC	STP with I &D	1	3.74	Feb-27		Preparing for tender
27	Tizit TC	STP with I &D	0.7	3.24	Feb-27		Preparing for tender
28	Tobu	FSTP	0.006	0.67	Feb-27		Awaiting NARC approval for additional funding
29	Zunheboto TC	STP with I &D	3	8.15	Feb-27		Awaiting NARC approval for additional funding
30	Aghunato TC	FSTP	0.006	0.68	Feb-27		Awaiting NARC approval for additional funding
31	Atoizu TC	STP with I &D	0.7	5.18	Feb-27	Natural Rivers and streams	Awaiting NARC approval for additional funding
32	Satakha TC	FSTP	0.006	0.66	Feb-27		Awaiting NARC approval for additional funding

33	PhekTC	STP with I &D	1.5	4.85	Feb-27	Preparing for tender
34	Pfutsero TC	STP with I &D	1.5	4.97	Feb-27	Preparing for tender
35	Chozuba TC	FSTP	0.006	0.66	Feb-27	Awaiting NARC approval for additional funding
36	Meluri TC	FSTP	0.006	0.68	Feb-27	Awaiting NARC approval for additional funding
37	Kiphire TC	STP with I &D	2	6.35	Feb-27	Preparing for tender
38	Pungro TC	FSTP	0.006	0.8	Feb-27	Awaiting NARC approval for additional funding
39	Seyochung TC	FSTP	0.006	0.79	Feb-27	Awaiting NARC approval for additional funding
		Total	50.058	224.60		

Faecal sludge Treatment Plant (FSTP) – 13 ULBs

ANNEXURE V

Project/Scheme Name: Phase I of FSTP in 13 ULB

Donor: National River Conservation Plan under National River Conservation

Directorate, Ministry of Jal Shakti

Sl. No	Name of ULB	Capacity (KLD)	Project Cost (Rs. In Lakhs)	Completion Timeline	Specify disposal sites i.e., Streams, lakes, ponds etc.	Remarks
1	Chumoukedima	50 KLD	952.18	30/11/2026	"Stream"	In the process of revising Phase II of FSTP Project for submission and approval
2	Kiphire	10 KLD	402.21			
3	Chiephobozou	10 KLD	336.57			
4	Tuli	10 KLD	337.79			
5	Aboi	10 KLD	336.89			
6	Jalukie	10 KLD	336.57			
7	Pfutsero	10 KLD	376.24			
8	Noklak	10 KLD	378.43			
9	Tuensang	50 KLD	1046.34			
10	Longkhim	10 KLD	378.43			
11	Bhandari	10 KLD	350.16			
12	Zunheboto	10 KLD	367.94			
13	Atoizu	10 KLD	367.94		Under FSTP, septic tanks are directly desludged with Cess pools and transported to FSTPs and treated).	
	Total	210 KLD	5967.69			

Note: Currently, in the state of Nagaland, faecal sludge is managed predominantly through Septic tanks attached with soak pits.

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GOVERNMENT OF NAGALAND
OFFICE OF THE CHIEF ENGINEER, PHED
NAGALAND : KOHIMA

37

NO. CE/PHE/NGT-2019/2019-20(PT-II)/ 95 Dated Kohima the, 26th February 2026

To,

The Joint Secretary
Chief Secretary's Office
Nagaland, Kohima

Sub: Submission of Clarification/Responses to Observations on Compliance Status as per the Hon'ble National Tribunal Order dated 22.08.2025 in O.A. No. 606 of 2018.

Sir,

With reference to the subject cited above, I am directed to submit herewith the compiled set of clarifications/responses pertaining to the observations made on the compliance status in relation to the aforementioned Order of the Hon'ble National Green Tribunal, enclosed as per the prescribed format for favour of your kind information and necessary action.

Enclosed: As Stated

Yours faithfully,


(Er. GWATILO TEP)

Addl. Chief Engineer & Mission Director, SBM (G)
Office of the Chief Engineer, PHED
Nagaland: Kohima

NO. CE/PHE/NGT-2019/2019-20(PT-II)/ 95 Dated Kohima the, 26th February 2026

Copy to:

1. The Commissioner & Secretary, UDD & MA, Nagaland for information
2. The Secretary to the Govt of Nagaland, PHED for information.
3. The Secretary to the Govt of Nagaland, EF & CC for information.
4. The Chairman, Nagaland Pollution Control Board for information.
5. Office Copy.

JS (CSO)

PMY


Addl. Chief Engineer & Mission Director, SBM (G)
Office of the Chief Engineer, PHED
Nagaland: Kohima

525

526

HON'BLE NGT O.A. 606 of 2018

In the matter relating to Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues

SEWAGE MANAGEMENT IN THE STATE

(A) Name of ULB	(B) Sewage Status Estimation and Measurement	(c) Sewage conveyance/sewers		
	*Total sewage Generation per day (in MLD) (1)	Targeted Household to be connected to sewers (2)	Households connected (3)	Time targets to complete connectivity (gap in connectivity) (4)
Dimapur	17.4 MLD			<ul style="list-style-type: none"> Toilet Waste (Black Water) in Dimapur is managed through on-site sanitation systems, primarily septic tanks with soak pits. The greywater from bathrooms and kitchens, is discharged into soak pits and some into surface drains and ultimately finding its way into nearby water bodies. However, through interventions such as Interception and Diversion (I&D) structures, these drains are intercepted and diverted to a Sewage Treatment Plant (STP) for treatment. In Nagaland, there is no underground sewer network system. However, the state receives heavy rainfall for 6 to 7 months annually thereby diluting the sewage to an extent which has catered to the sewage management naturally. Therefore, household connectivity to a sewer system is not immediately necessary at the moment.

*Basis of estimation (based on 80% of LPCD water supply/or measured)

(D) Drains					
Sewage and sullage flowing in open drains (Storm water drains/concretised drains/unlined/katcha drains) (No. of drains) (5)	Flow in each drain (MLD) (6)	Quality/Char acteristics of effluent (7)	Quantity of industrial effluent discharged in drain (MLD) (8)	Final point of discharge of drain (9)	Time bound action plan to prevent sewage discharge into drain (10)
Sugar Mill Nullah	4.4	The wastewater exhibits high organic load, indicating significant organic pollution.	Nil	Intercepted at its confluence with the Dhansiri River and diverted to the Sewage Treatment Plant (STP)	<ul style="list-style-type: none"> Toilet wastewater (blackwater) is contained within on-site sanitation systems, primarily household septic tanks. Drainage water Intercepted and Diverted to STP for treatment.
Hospital Nullah	6.7		Nil		
Lengri Nullah	6.3		Nil		

526

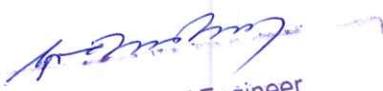
(E) Sewage treatment and Utilities							
Installed Treatment capacities of existing STPs (MLD) (11)	Utilisation capacity of existing STPs (MLD) (12)	Gap in sewage generation and treatment (MLD) (13)	Time bound plan to set up and operationalize STPs (14)	Performance of STPs with reference to Standards (15)	Final point of discharge of treated effluent (16)	Level of utilization of Treated sewage (17)	Sludge generation and its management (18)
25.43 MLD	Currently Damaged	17.4 MLD	Was operational; currently damaged during monsoon 2025. Will operationalize when repair funds are provided by District Disaster Management Authority.	Within the Prescribed limits	Water Bodies	3.2 MLD	STP was commissioned in 2023; hence, the first desludging, scheduled after five years, is yet to be undertaken.

Remark:

2. During the monsoon the following items were damaged and the STP is currently not functional:

- No of I & D works totally damaged- 2 (Two) nos.
- No of Pump-sets damaged- 3 (Three) nos.
- Others STP assets damaged.
 - 1-Solar panel installed at STP laboratory (capacity:3 kVA) completely damaged.
 - A portion of the boundary wall around the STP, approximately 150 m, has been damaged.
- Sewer line damaged: 300 m.

A detailed cost estimate for refurbishment of Sewage Pumping Stations and I&D works infrastructures damaged during monsoon has been submitted to the Deputy Commissioner & Chairman DDMA (Dimapur Disaster Management Authority) for special assistance.

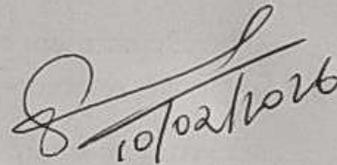

Addl. Chief Engineer
& Mission Director, SBM(G)
PHED, Nagaland : Kohima

FINANCE DEPARTMENT

The matter has been examined, and concurrence of the Finance Department is hereby conveyed for opening of a ring-fenced bank account dedicated to Municipal Solid Waste Management, in compliance with the order of the Hon'ble National Green Tribunal in O.A. No. 606/2018.

The Department is further advised to furnish the operational guidelines for management of the said account, along with a detailed report on the information gathered from the Government of Meghalaya regarding operation of the ring-fenced account for Municipal Solid Waste Management, for necessary action.

(by order of Finance Commissioner)



(NEISERÜ MIACHIEO)

Deputy Secretary to the Govt of Nagaland

U.O No. 587 Date 10/2/26
Nagaland Civil Secretariat
Finance Deptt. Budget & Monitoring Cell
Nagaland : Kohima

Introduction: **AEROBIO** is an aerobic microbial formulation consisting of microbes which are indigenous to India and exhibit metabolic capability to thrive in variety of micro-niches including sewage, human faeces and untreated municipal sewage. The microbes are obligate aerobic species, fastidious and are typically gram positive and gram negative representatives. These microbes have doubling time spanning from 10-30 minutes and can metabolize wide forms of complex molecules. The microbes exhibit capability to with stand highest temperature of ~43°C and lowest temperature closer to sub zero. If the surrounding niche does not freeze then this microbial formulation in itself can exhibit metabolic capabilities at temperatures below 0°C.

Regardless of the nature of substrate that makes up the micro-niches the end products of metabolism include water as well as carbon-dioxide. The pH of the water is neutral to sub-neutral and can be recycled for several purposes including gardening and social forestry. It is important equally to highlight that there is no generation of methane as end product following application of **AEROBIO**

Following the application of **AEROBIO** formulation in various micro niches, the values of key chemical and biological parameters in end products such as total solids, total dissolved solids, total volatile solids, chemical oxygen demand and faecal coliform are within the range of CAMTECH and CPCB. It is important also to highlight that the indigenous microbes that make up this formulation are harmless, non-pathogenic to all forms of life and does not lead to succession and replacement of local microbial communities in the site of application. The formulation constituents exhibit resting stages and can grow rapidly when pulses of substrates that make up the microbes become readily available.

AEROBIO can very effectively breakdown human faeces within a very short time and converts all the masses into carbon dioxide and water. The water is completely odorless and non-toxic exhibiting sub-neutral to Ph neutral water

The key features of '**AEROBIO**' include environmentally friendly intervention for most-effective management of solid waste including human faecal waste in septic tanks or pits, Faecal Sludge treatment plants (FSTPs) and improve significantly groundwater quality by getting rid of faecal coliform.

Most importantly, being aerobic in action, '**AEROBIO**' does not release methane, a potent greenhouse gas linked to anthropogenic climate change and also contributes to the National

Missions of Government of India as well as the Sustainable Development Goals (SDG) of the United Nations.

AEROBIO is an indigenous formulation consisting of novel bacteria consortia which is totally harmless and eco-friendly bacteria and can completely break down human faeces and make the environment foul odour free. It can metabolize complex forms of substrates that constitute the faeces aerobically. It can also work across a range of temperature and there is no production of methane gas. It does not alter the biological communities and are non-pathogenic.

The technology has been researched and developed by W.J. Décor which was conducted covering all geographical areas of the country covering sub-zero temperature to the hottest regions of the country. Research work on effectiveness of Aerobio Bacteria was also conducted by Professor Punyasloke Bhadury and Group of Leader of ITMETG, IISER, Kolkotta.

Advantages

1. Elimination of Odour
2. Complete removal of methane gas emission from human waste water.
3. Harmful disease causing bacteria are eliminated
4. Sludge are reduced
5. Water can be reused and recycle for multiple uses
6. Eliminate the need for periodical sewage tank cleaning
7. Control over ground water contamination
8. Neutralizes all the organic nutrients, ammonia and nitrogen present in human faeces.
9. Does not require an STP or a Waste Management Plant but is an onsite treatment thereby reducing operational and maintenance cost.
10. Can be used in Households, institutes, bio toilets as well as STP for decontamination and breaking down of human fecal matter is non-toxic clean water for reuse.

The Aerobio production unit at Thilixu, Dimapur is also in conformity with the Environment Management System. **(Certificate Enclosed)**

Effluent Test : Effluent after treatment with Aerobio was tested by Indian Institute of Science Education and Research Kolkota

During 2020 distributed 33,333 units to 26 ULBs under 14th FC covering 1, 14,310 HH (20% of HH in Phase-I) **(Lists of ULBs enclosed)**

During 2023-24, 29661 ltrs was distributed to all the 39 ULBs **(List of ULBs enclosed)**

During distribution, ULB conducted sensitization for use of Aerobio

Feedback received from ULBs

1. Mokokchung Municipal Council: Used in Mokokchung human faecal sludge collection tank in old dumpsite and is satisfactory
2. KMC : Due to hilly terrain, all Household cannot be access by cesspool cleaner. Hence, Aerobio bacteria(Septic Tank solution) is found to be effective as an onsite treatment of septic tank.
3. DMC: No negative feedback from the users.
4. Longleng: positive feedback distributed with proper sensitization
5. Users have found to be effective and satisfactory

Recommendations: Aerobio Bacteria is recommended for on site treatment of Faecal Sludge for the following reasons

1. In absence of STP/ FSTP in all ULBS, AEROBIO is an effective solution for onsite treatment as it eliminates odour, completely remove methane gas as well as eliminate harmful bacteria causing disease.
 2. It is effective solution for reducing sludge. Hence the amount of faecal waste being transported to FSTP/STP are also reduced.
 3. Since the present practice in most of the ULBs at present is emptying the sludge into natural streams and Nullahs, most of the water bodies, streams and nullahs gets polluted. Hence, use of Aerobio bacteria for treatment of waste water as on onsite treatment can reduce pollution of water bodies.
 4. It is recommended for those household which are not accessible by road or not covered by cesspool.
 5. Recommended for high footfall areas, hotels, market, institutions etc
 6. Reduce maintenance and operational cost of any FSTP or STP.
 7. AEROBIO is found to be effective in bioremediation for treatment of legacy waste.
-
-

DISTRIBUTION OF AEROBIO IN ALL ULBS FOR SEPTAGE WASTE MANAGEMENT

SL. No	NAME OF ULB	CLASS of Town	POPULATION Census 2011	No. Of H/H	AEROBIO (units)	No of Cartons
1	Dimapur MC	I	1,22,834	27,165	7200	600
2	Kohima MC	II	99,039	22,312	5520	460
3	Mokokchung MC	III	35,913	8,327	2100	175
4	Tuensang TC	III	36,774	6,960	2100	175
5	Wokha TC	III	35,004	6,273	2100	175
6	Mon TC	III	26,328	4,407	1440	120
7	Chumukedima TC	III	25,885	5,129	1440	120
8	Zunheboto TC	III	22,633	3,974	1440	120
9	Kiphire TC	IV	16,487	3,109	900	75
10	Phek TC	IV	14,204	2,874	900	75
11	East Dimapur TC	IV	10,803	2,190	720	60
12	Pfutsero TC	IV	10,371	2,183	720	60
13	Medziphema TC	V	8,738	1,751	540	45
14	Jalukie TC	V	8,706	1,833	540	45
15	Naginimora TC	V	8,116	1,749	540	45
16	Tuli TC	V	7,864	1,904	540	45
17	Noklak TC	V	7,674	1,384	540	45
18	Longleng TC	V	7,613	1,690	540	45
19	Changtongya TC	V	7,532	1,503	540	45
20	Aboi TC	V	6,498	1,188	360	30
21	Bhandari TC	V	6,482	1,248	360	30
22	Tseminyu TC	V	6,315	1,069	360	30
23	Tizit TC	V	6,161	1,072	360	30
24	Meluri TC	V	5,191	1,154	360	30
25	Peren TC	V	5,084	1,027	360	30
26	Tobu TC	V	5,076	835	360	30
27	Satakha TC	VI	4,964	847	0	0
28	Pungro TC	VI	4,744	854	0	0
29	Shamator TC	VI	4,257	734	0	0
30	Mangkolemba TC	VI	3,713	879	0	0
31	Chozuba TC	VI	3,543	721	0	0
32	Aghunato TC	VI	2,883	530	0	0
33	Tening TC	VI	2,525	448	0	0
34	Longkhim TC	VI	2,240	444	0	0
35	Atoizu TC	VI	2,219	371	0	0
36	Chiephobozou TC	VI	1,841	400	0	0
37	Tamlu TC	VI	1,401	336	0	0
38	Niuland TC	VI	1,158	238	0	0
39	Seyochung TC	VI	840	176	0	0
	Reserve				453	37.75
	TOTAL		5,89,653	1,21,288	33333	2777.75

(A.CHENITHUNGLOTHA)
Addl. Director & HOD,
Municipal Affairs,
Nagaland: Kohima

ISO 9001:2015

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Certificate of Registration

This is to Certify that
Quality Management System of

AEROBIO PRODUCTION UNIT

H/NO-409, THILIXU ATOSA, DIMAPUR ZOO ROAD, DIMAPUR (NAGALAND)

has been assessed and found to conform to the requirements of

ISO 9001:2015

for the following scope :

MANUFACTURER OF AEROBIO (AREOBIC BACTERIA).

Certificate No	: 20IQFR49	Issuance Date	: 07/10/2020
Initial Registration Date	: 07/10/2020		
Date of Expiry	: 06/10/2023		
1st Surve. Due	: 07/09/2021	2nd Surve. Due	: 07/09/2022

Director



ACCREDITED
Management Systems
Certification Body
MSCB-119



AQC MIDDLE EAST FZE.

Head Office: E1-1401 E Amber Gem Tower, Sheikh Khalifa Bin Zayed Road, 2, Ajman, UAE. e-mail: info@aqcworld.com

Key Location: 403, Madhuban Building, 55, Nehru Place, New Delhi-110019, India.

*Validity of the Certificate is subject to successful completion of surveillance audit on or before of due date. (In case surveillance audit is not allowed to be conducted, this certificate shall be suspended/withdrawn.)

Certificate Verification: Please Re-check the validity of certificate at <http://www.aqcworld.com/activeclients.aspx> or www.aqcworld.com at Active Clients.

Certificate is the property of AQC Middle East FZE and shall be returned immediately when demanded

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भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान कोलकाता
(भारत सरकार के मानव संसाधन विकास मंत्रालय द्वारा स्थापित एक स्वायत्ततावादी संस्थान)
INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH KOLKATA
(An autonomous Institute established by Ministry of Human Resource Development, Government of India)

Dated: May 9, 2019

Effluent Test Report

Sample: Effluent after treatment with Aerobio, marketed by W.J. Decor was provided for testing. The received sample was in liquid form and had a light yellow colour.

Physicochemical parameters:

Dissolved oxygen (as recorded by DO 6+, Eutech Instrument Pvt. Ltd, Singapore in laboratory): 7.7 mg/L

pH (as recorded by pH 5+, Eutech Instrument Pvt. Ltd, Singapore in laboratory): 6.7
All tests were performed in triplicates

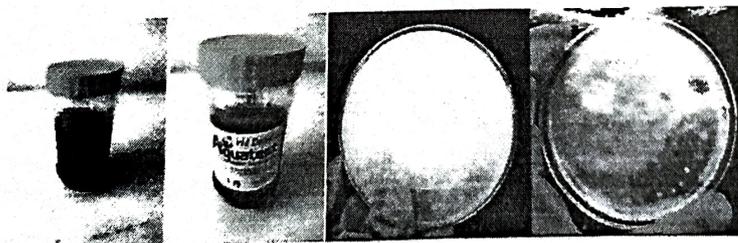
Interpretation:

The dissolved oxygen values indicate well aerated water sample and did not show any signs of anoxia. The pH value indicates very weak acidity with values tending more towards neutral. Both these parameters indicates the effluent could be safe for environment.

Biological properties:

Test: Presence of coliforms

Results: The test medium turned yellow indicating the presence of coliform. Growth on Luria Bertani agar plate indicates the presence of only type of bacterium in very low cell abundance.



Test results as seen after growth of bacterial cells from Aerobio treated effluent after 3 weeks.

Interpretation: Low bacterial cell numbers indicate the ecofriendly properties of the Aerobio.

Punyasloke Bhadury

Certified:
Professor Punyasloke Bhadury
Head, CCES,
Indian Institute of Science Education and Research Kolkata

मोहनपुर - 741 246, भारत, दूरभाष: +91 33 6451 3284, फैक्स: +91-(0)33-23347425
Mohanpur - 741 246, INDIA, Phone: +91 33 6451 3284, Fax: +91-(0)33-23347425

TO WHOM IT MAY CONCERN

The research and development work for the microbial formulation of WJ Decor has been undertaken and completed in my laboratory. These are aerobic bacteria which can remediate human faeces and thus may prove to be important for maintaining the hygiene of our environment. The bacterial formulation does not exhibit toxicity and the released effluent remains at a pH range of 6.9-7.5.

I wish him success with commercialization of the product such that it can be used for widescale benefit of the society and can help bring sustainable solutions in tackling human waste disposal problems around the globe.

Punyasloke Bhadury
04/2/2018.

Punyasloke Bhadury, Ph. D.
Associate Professor
Department of Biological Sciences
Indian Institute of Science Education and Research
Kolkata
Ministry of HRD, Govt of India
Email: pbhadury@iiserkol.ac.in



भारत सरकार
Government of India

क्रमांक
No. 1712677

व्यापार चिन्ह रजिस्ट्री
Trade Marks Registry
व्यापार चिन्ह अधिनियम, 1999
Trade Marks Act, 1999

व्यापार चिन्ह के रजिस्ट्रीकरण का प्रमाणपत्र, धारा 23 (2), नियम 56 (1)
Certificate of Registration of Trade Mark, Section 23 (2), Rule 56 (1)

ज. संख्या / J. No. 1804

दिनांक / Date 20/05/2017

व्यापार चिन्ह संख्या / Trade Mark No. 3553601

यह प्रमाणित किया जाता है कि जिस प्रकार चिन्ह की समावृत्ति इसके साथ संलग्न है, वह नाम से रजिस्ट्रीकृत हो चुका है।
के बारे में दिनांक
Certified that Trade Mark / a representation is annexed hereto, has been registered in the name(s) of:-
WATNIKSUNG JAMR, TRADING AS: W. J. DECOR, Midland Road, Near ICICI Bank, Dimapur-797112, Nagaland, India., Sole
Proprietorship Firm, (Single Firm)

In Class 11 Under No. 3553601 as of the date 20 May 2017 in respect of
Total Tank, Apparatus for lighting, heating, steam generating, cooking, refrigerating, drying, ventilating, water supply and sanitary purposes

Trade Mark as annexed

मेरे दिशा में आज के मास के वे दिन को इस पर मुद्रा लगायी गई
Sealed at my direction, this 04th day of December, 2017



OKrupli

व्यापार चिन्ह रजिस्ट्रार
Registrar of Trademarks

व्यापार चिन्ह रजिस्ट्री
Trade Marks Registry MUMBAI

रजिस्ट्रेशन का प्रमाण 10 वर्ष के लिए है और प्रत्येक 10 वर्ष की अवधि के अंत में 10 वर्ष की अवधि के अंत में नवीनीकृत किया जा सकता है।
Registration is for 10 years from the date of application and may then be renewed for a period of 10 years and also at the expiration of each period of 10 years.

यह प्रमाणपत्र केवल कानूनी प्रक्रिया के लिए या विदेश में रजिस्ट्रेशन प्राप्त करने के लिए नहीं है।
This certificate is not for use in legal proceedings or for obtaining Registration abroad.

टिप्पणी - इस व्यापार चिन्ह के स्वामित्व में कोई परिवर्तन होने पर, या कारोबार के मुख्य स्थान के पते में या भारत में कारोबार के लिए पते में परिवर्तन होने पर परिवर्तन के लिए संबंधित तुरंत निवेदन करना चाहिए।
Note: Upon any change of ownership of this Trademark, or change in address of the principal place of business or address for service in India a request should AT ONCE be made to register the change.

PROFOMA INVOICE					
 <p>AEROBIO PRODUCTION UNIT HOUSE NO 409, M/S THILIXU ,ZOOLOGICAL PARK ROAD ,DIMAPUR ,NAGALAND GSTIN NO :13AEGPJ7997832D PHONE NUMBER:8837403817 Email:jamir2012vati@gmail.com</p>				Date : 21.07.2023	
				Invoice no: 001/2023	
<p>BUYER, Municipal Department Government of Nagaland</p>				Our Bankers Details :	
				ACCOUNT NAME : AEROBIO PRODUCTION UNIT	
				A/C NO: 78730200000190	
				IFSC CODE -BARBOVJDIMA BRANCH : DIMAPUR	
SL No.	PRODUCT DESCRIPTION	HSNC CODE	QUANTITY (litre)	RATE	AMOUNT(IN Rs)
1	Aerobio (Municipal waste Solution)	382520	29,661	1500.00	4,44,91,500.00
TOTAL					4,44,91,500.00
				Add: CGST (9%)	40,04,235.00
				Add: SGST (9%)	40,04,235.00
GRAND TOTAL					5,24,99,970.00
Amount(In words)		Five Crore Twenty Four Lakhs Ninety Nine Thousand Nine Hundred Seventy only.			
CUSTOMER'S SEAL & SIGNATURE			<p>FOR, AEROBIO PRODUCTION UNIT Proprietor <i>[Signature]</i> Aerobio Production Unit Thilixu Atosa, Dimapur</p>		

Copy to:

- 1) Additional director Municipal department, Government of Nagaland.
- 2) Joint Director and DDO Municipal department of Nagaland





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ASSAM POLLUTION CONTROL BOARD
(Department of Environment, Forest & Climate Change, Govt. of Assam)

অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
(অসম চৰকাৰৰ বন, পৰিৱেশ আৰু জলবায়ু পৰিৱৰ্তন বিভাগ)
NABL Accredited Testing Laboratory : Certificate No. TC-11384



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Dated: 17-11-2025

Subject: Request for Validation of Methane Emission Analysis at Belortol Swacchta Khetra, Boragaon, Guwahati, Assam from Government-Recognised Laboratory
Ref: Your letter vide no: GESPL/25-26/GMC/004

Sir,

With reference to the above subject and letter, the Assam Pollution Control Board (APCB) has received your final report on methane gas emission levels following the treatment process undertaken by your organisation.

To ensure regulatory compliance and to maintain consistency with standard quality assurance protocols, you are requested to validate the reported methane emission results through a **government-recognised / NABL-accredited laboratory**. After obtaining the validated report, kindly share a copy with the Board for further examination and record.

You are requested to submit the validated results at the earliest.

For any clarification, you may contact the undersigned.

Thanking you,

Yours faithfully,

Namrata Kundu
17/11/2025
Namrata Kundu
Technical Expert
Assam Pollution Control Board
Bamunimaidam, Guwahati-781021

Copy to:

1. PA to the Chairman, Pollution Control Board, Assam, for kind appraisal of the Hon'ble Chairman.

Head Office : Bamunimaidam, Guwahati - 781021, Assam : India.

Phone : 0361-2550258; Website : www.pcbassam.org; E-mail : membersecretary@pcbassam.org
Regional Offices at : Dibrugarh, Golaghat, Sibsagar, Tezpur, Guwahati, Kamrup, Bongaigaon, Nagaon, Silchar, Tinsukia & South Bank



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान कोलकाता
 भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान कोलकाता
INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH KOLKATA
 (An autonomous Institute established by Ministry of Education, Government of India)

Date: 14th December, 2023.

Dr. Rajesh Kumar, IPS
 Member Secretary,
 West Bengal Pollution Control Board (WBPCB),
 LA, Sector-III,
 Salt Lake, Kolkata-700098.

Dear Dr. Kumar,

Attached is the compiled report for the project 'Evaluation of a novel microbial consortia for effective management of fecal management....septic tank and sewage treatment plant' (Memo No 3298/2022-ST/STP/1/C.Lab dt 25.11.2022).

The novel microbial consortium was evaluated across a number of systems for several months and the consortium consistently showed marked reduction of fecal coliform in septic tank while adhering to regulatory framework. The results of the sewage treatment plant are also promising and may require further validation. Overall, the microbial consortium has exhibited metabolic capabilities to consistently control the fecal coliform and can prove to be useful for effective waste management.

This is for your kind perusal.

Thanking you

Sincerely,

Punyasloke Bhadury

Professor Punyasloke Bhadury, PhD
 Centre for Climate and Environmental Studies (CCES)
 IISER Kolkata

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान कोलकाता
 Indian Institute of Science Education and Research Kolkata
 (Dept. of Higher Education, Under MHRD, Govt. of India)
 मोहनपुर/Mohanpur-741245, Kolkata India

Technical background of **Aerobio**

Aerobio is an aerobic microbial formulation consisting of microbes which are indigenous to India and exhibit metabolic capability to thrive in variety of micro-niches including sewage, human faeces and untreated municipal sewage. The microbes are obligate aerobic species, fastidious and are typically gram positive and gram negative representatives. These microbes have doubling time spanning from 10-30 minutes and can metabolize wide forms of complex molecules. The microbes exhibit capability to with stand highest temperature of $\sim 43^{\circ}\text{C}$ and lowest temperature closer to sub zero. If the surrounding niche does not freeze then this microbial formulation in itself can exhibit metabolic capabilities at temperatures below 0°C .

Regardless of the nature of substrate that makes up the micro-niches the end products of metabolism include water as well as carbon-dioxide. The pH of the water is neutral to sub-neutral and can be recycled for several purposes including gardening and social forestry. It is important equally to highlight that there is no generation of methane as end product following application of **Aerobio**.

Following the application of **Aerobio** formulation in various micro niches, the values of key chemical and biological parameters in end products such as total solids, total dissolved solids, total volatile solids, chemical oxygen demand and faecal coliform are within the range of CAMTECH and CPCB. It is important

also to highlight that the indigenous microbes that make up this formulation are harmless, non-pathogenic to all forms of life and does not lead to succession and replacement of local microbial communities in the site of application. The formulation constituents exhibit resting stages and can grow rapidly when pulses of substrates that make up the microbes become readily available.

AEROBIO’ can very effectively breakdown human faeces within a very short time and converts all the masses into carbon dioxide and water. The water is completely odorless and non-toxic exhibiting sub-neutral to Ph neutral water

The key features of ‘**AEROBIO**’ include environmentally friendly intervention for most-effective management of solid waste including human faecal waste in septic tanks or pits, Faecal Sludge treatment plants (FSTPs) and improve significantly groundwater quality by getting rid of faecal coliform.

Most importantly, being aerobic in action, ‘**AEROBIO**’ does not release methane, a potent greenhouse gas linked to anthropogenic climate change and also contributes to the National Missions of Government of India as well as the Sustainable Development Goals (SDG) of the United Nations.



WEST BENGAL POLLUTION CONTROL BOARD
(Department of Environment, Government of West Bengal)
Paribesh Bhawan, 10A, Block - LA, Sector III, Bidhannagar
Kolkata - 700 106, Ph.: 2335-9088/8861/7428, Fax: 2335-2813
Website: www.wbpcb.gov.in, Email: net.wbpcb-wb@bangla.gov.in

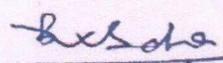
To Whom It May Concern

The application of **Microbial Consortia** from **Aerobio.wjdecor** is a pioneering initiative adopted by the West Bengal State Pollution Control Board. It has demonstrated remarkable results, including the degradation of sludge and the eradication of Total Coliform and Faecal Coliform at their sources, such as septic tanks, sewage treatment plants, and solid waste dump sites.

The use of Microbial Consortia, irrespective of temperature in hilly regions, has shown a significant reduction in faecal coliform in ponds, sewage treatment plants, and septic tanks. It has proven to be an effective and sustainable solution for mitigating faecal contamination.

This innovative and sustainable approach holds immense potential for the rejuvenation of rivers, the reduction of trapped methane in solid waste dump sites, and the overall well-being of the communities.

We wish them all the success.


27/12/2014
Chief Scientist, WBPCB

Dr. Ram Krishna Saha
Chief Scientist
W. B. Pollution Control Board
Deptt. of Environment, Govt. of W.B.

Evaluation of a novel microbial consortia for effective management of Faecal Coliform and Biological Oxygen Demand (BOD) levels in Pond, Septic tank and Sewage Treatment Plant (STP) – a case study

Introduction:

Govt. of India is struggling hard to reduce Coliform bacteria since – 1985 for cleaning Polluted River, Sewage Treatment Plant & Ponds.

- Faecal Coliform is a big challenge before government in preventing water pollution in terms of bathing standard and drinking water standard as per Gazette Notification of 2000, Government of India
- The first Ganga action Plan (GAP-I) failed to intercept and divert the waste water in the sewage treatment plant.
- Ganga Action Plan (GAP-II) was launched in stages between 1993 and 1996 which identified various sources of polluting factors.
- Finally in the year 2008 National Ganga River Basin Authority was empowered for planning, implementing and Monitoring of River with the formation of Namami Gange.
- West Bengal Pollution Control Board has recently taken an approach of an experiment with IISER Kolkata's recommendation to use the Microbial Consortium for the reduction of Faecal Coliform.

Management of waste generated across plethora of forms is a global problem and pose challenge to address waste sustainably. The world generates approximately 2.1 billion tons of waste every year exhibiting large scale heterogeneity in terms of composition. Faecal sludge and wastewater compositions can vary greatly across countries and scenarios as well as driven by wide range of factors including differences in user practices, water usage and consumption, climate, population density, area limitations and accessibility. Therefore, success of technologies to treat faecal sludge and wastewater need to integrate these factors more comprehensively while taking into consideration local and regional scenarios. In particular, faecal coliform bacteria present in sludge and wastewater pose serious health and environmental challenges including contamination of groundwater. The treatment of faecal sludge needs to be effectively processed through sustainable, cost-effective and cheap technologies in order to ensure that the parameters as set by regulatory frameworks such as levels for biological oxygen demand (BOD), faecal coliform load (e.g. MPN count as suggested by regulatory bodies), nitrogen and total suspended solids (TSS) are adhered. The treated faecal sludge can then be subsequently discharged or can be disposed of as part of land disposal approaches.

Objective:

The management of Faecal coliform in water bodies has been undertaken for three types of water bodies as follows:

- Pond water
- STP (Sewage treatment plant)
- Septic tank

Angurika Choudhury

Indian Institute of Science Education and Research
Kolkata
Department of Applied Chemistry, Unit 1, IISER, Kolkata
751005, India

Methodology:i) A case study for application of Microbial Consortium in pond water:

Firefighting reservoir of the office premises considered for application of microbial consortium to arrest the obnoxious odour and reduction of Total Coliform and faecal Coliform. The recommended dose as per Prof. Bhadury, IISER Kolkata were applied. Before application of Microbial Consortium, water samples were collected for analysis for Physico – Chemical attribute of water like colour, odour, pH, DO, BOD, COD, TC and FC. First charging done in the month of January, 2023 and second charging done in the month of March, 2023. After application of recommended dose of microbial consortium water samples were collected at an interval of 15 days (first sample) and 2 months (second samples) for analysis of Physico – Chemical and microbial population Total Coliform and Faecal Coliform detail data is depicted in table below which reveals there is a drastic reduction in the microbial population that is in TC (from 13,33,333 to 2600 MPN/100ml) and FC (from 916000 to 1400 MPN/100ml) and this reduction of microbial population after the application of microbial consortia is 99% and above. Also, the reduction of odour (pungent smell) reduced almost nil. Hence the restoration of the reservoir water of WBPCB using the microbial consortium seems to be highly successful:

Status of Charging	Date	Physico – Chemical Parameter						
		pH	Conductivity (us/cm)	DO (mg/l)	BOD (mg/l)	COD (mg/l)	TC (MPN/100ml)	FC (MPN/100ml)
Before Charging	08.12.2022	7.41	456	7.06	2.07	15	13,33,333	9,16,000
After Charging	11.01.2023 (1 st)	7.30	446	7.70	3.00	9.00	9200	2400
	16.03.2023 (2 nd)	7.43	476	4.1	1.87	8.10	2600	1400

Status of Charging	Date	Total Coliform (MPN/100ml)	Percent reduction	Faecal Coliform (MPN/100ml)	Percent reduction
Before Charging	08.12.2022	13,33,333	-----	9,16,000	-----
After Charging	11.01.2023 (1 st)	9200	99.31%	2400	99.738%
	16.03.2023 (2 nd)	2600	99.805%	1400	99.847%

ii) A case study of STP (Sewage Treatment Plant):

Two STP's Gayeshpur and Naihati are identified for application of microbial consortium. Monitoring of the STP's continued from 07.12.2022 to 5.09.2023. based on the capacity of STP, the doses of microbial consortium are decided and the observations were taken. The summary of the observations indicates reduction in coliform count which is quite encouraging. However, the study is in progress.

Dr. Animesh Bhadury
 Director, Centre for Applied Microbiology and Research, IISER Kolkata
 (Dept. of Applied Microbiology, Under the Dept. of Microbiology)
 IISER Kolkata, Bidhan Nagar, West Bengal, India

iii) A case study of Septic tank:

Two septic tanks inside the premises of Kanchrapara Railway Complex were consider for validation of unique microbial consortia for Faecal sludge management in the septic tank of housing complex with a focus on achieving regulatory standard for faecal coliform load.

- Septic tank (1) is located in the Hostel Block of the Railways Complex and continuously used by 30-70 individuals on a daily basis.
- Septic tank (2) is located inside the Kanchrapara workshop and continuously used by a high number of working staffs across three shift (500-700 individuals per shift).

Based on the use of staff members the doses of microbial consortia were recommended and applied accordingly to study the microbial population before and after application.

The ST1 septic tank was initially monitored and then charged on 14th December, 2022; subsequently monitored on 29th December (2022), 12th January (2023), 13th March (2023) and 17th April (2023). It is important to mention that the capacity of users in the hostel block that housed ST1 had higher residents during the period between 29th December, 2022 and 12th January, 2023 due to ongoing sports activities. Therefore, the usage of bathrooms connected to ST1 had unusually higher loadings. On the other hand, ST2 was initially monitored and then charged on 24th January (2023); subsequently monitored on 13th March (2023), and 17th April (2023). In the following sections, data pertaining to total suspended solids (TSS), total coliform and fecal E. coli have been highlighted as these are critical regulatory parameters for tracking effective management of fecal sludge. The total suspended solids (TSS) in ST1 and ST2 showed distinct trends before, after addition of the unique microbial formulation and across subsequent time points (Figure 1). For example, in one of the chambers of ST1 [ST1(c)], the TSS was 70 mg/L on 14th December (2022); subsequently recorded as 35 mg/L in the same chamber on 17th April (2023). Similarly, for 12th January (2023), the TSS values in ST1(a), ST1(b) and ST1(c) were 145, 110 and 115 mg/L respectively despite extraordinary usage of bathrooms due to ongoing sports activity and resulting high loading. The data clearly reflects the ability of the unique microbial formulation to potentially metabolize TSS and thus bring down the concentration even within the three chambers on a particular date and overall, across the monitored dates. Similarly, in case of ST2 which has an intense three shifts usage and a number of bathrooms connected to this septic tank, microbial formulation continued to exhibit potential metabolic activity and at time points TSS was below the detection limit.

Poojashree Bhadani

Dr. Poojashree Bhadani
 Indian Institute of Science Education and Research, Kanchrapara
 Dept. of Higher Education, Under Ministry of HRD, Govt. of India
 Kanchrapara, Odisha-751024, India

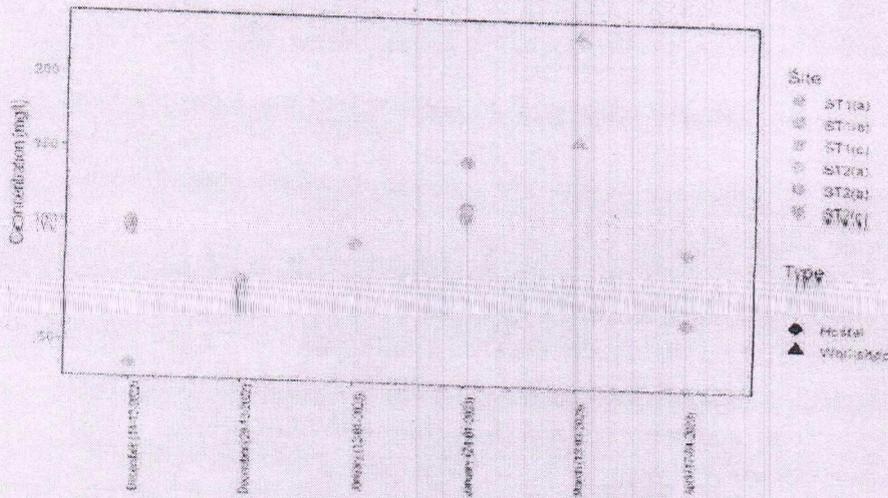


Figure 1: Trends of TSS (mg/L) recorded in ST1 and ST2 septic tanks of Kanchrapara Railway Workshop.

One of the critical factors in fecal sludge management is the need to monitor and control total coliform including abundance of fecal coliform bacteria. In ST1, total coliform showed values of >2400 per 100 mL in all the three chambers on 14th December (2022) (Figure 2). The total coliform values also confirmed high abundance of fecal coliform bacteria. Following the addition of unique microbial formulation, the values of total coliform showed observable decrease such as on 12th January (2023) with values of 240 per 100 mL [ST1(a)], 240 per 100 mL [ST1(b)] and 23 per 100 mL [ST1(c)]. Ironically, there was no signal of fecal coliform (discussed separately) in third chamber of ST1 on 12th January (2023) despite very high usage in bathrooms and high loadings. The observed total coliform trends in the chambers of ST1 continued to hold even on 13th March (2023). The observed decreasing total coliform trends and in particular fecal coliform in ST1 for almost three months reflected the unique attribute of microbial formulation in controlling their abundance possibly by outcompeting available nutrients or by release of chemical signals that resulted in reflected trends.

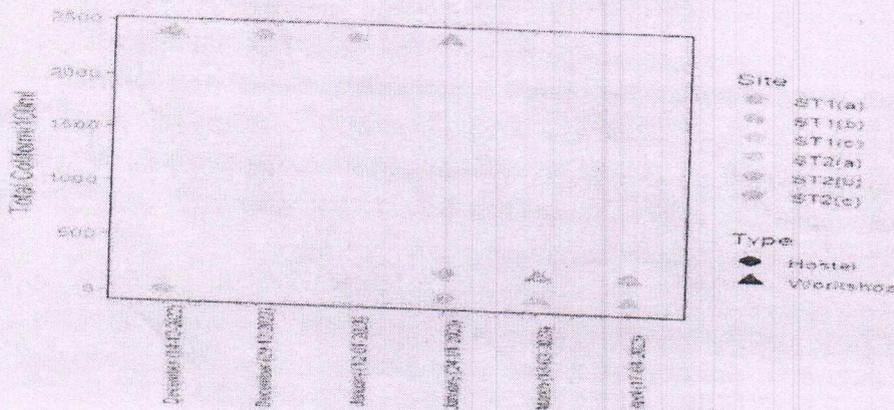


Figure 2: Total coliform abundance and trends in both the septic tanks of Kanchrapara Railway Workshop.

Prayalok Chaudhary

With effect from the date of...
 (Date of report completion) (Date of issue)
 (Date of report completion) (Date of issue)

In case of ST2, the total coliform before the addition of unique microbial formulation in each chamber was found to be very high with evidence of the abundance of fecal coliform (Figure 2). This is not surprising given the continuous three shifts use by employees within the Kanchrapara Workshop. Following the addition of unique microbial formulation, the effect of the same was clearly evident in the chambers of ST2. For example, on 13th March (2023), total coliform in ST2(a), ST2(b) and ST2(c) were 23, 240 and 240 respectively. There was no observable evidence of fecal coliform in the three chambers of ST2 reflecting the synchronicity of the unique microbial formulation to initially contain and then directly decrease the abundance of coliforms. The trend also continued until the end of monitoring period for ST2. Similar trend for fecal *E. coli* abundance was also observed as part of the evaluation across ST1 and ST2. For example, in ST1 and ST2, the observed decreased in total coliform abundance also coincided with decrease in fecal *E. coli* abundance as observed in ST1(c) and ST2 (c) (Figure 3). Moreover, during major parts of the monitoring period and across chambers of both septic tanks fecal *E.coli* could not be detected. The observation was also strongly supported by the overall coliform abundance data across the chambers for both the septic tanks. This trend is assuring and reflects the wider operational capability of the unique microbial formulation to tackle fecal coliform bacteria very effectively. It is also important to equally highlight that such trend continued in many of the sampling points even though the dosing was done only once while the operational loads in both septic tanks were continuously higher. This reflects the functional capability of the microbial formulation to effectively outcompete and kill the fecal coliform in terms of resources or by biochemical signalling. Moreover, such observations also matched with changing profiles of other key parameters including TSS, nitrogen and chemical oxygen demand. Given septic tanks have low dissolved oxygen pool, the formulation worked effectively irrespective of this dynamic attribute during the evaluation period.

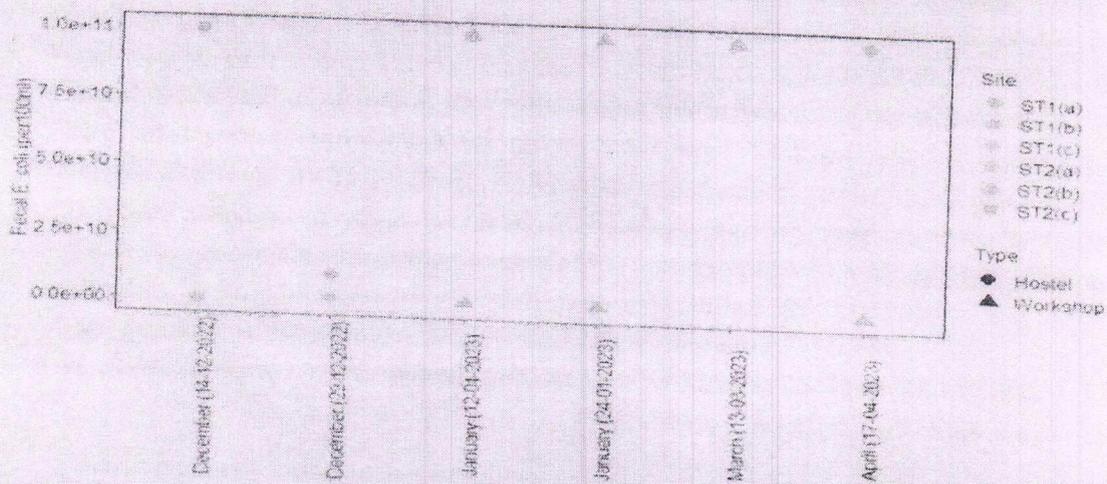


Figure 3: Fecal *E. coli* abundance and trends in both septic tanks of Kanchrapara Railway Workshop

While there are a number of other parameters, where positive effects following the addition of unique microbial formulation were evident in both the septic tanks. These observable positive effects continued during the evaluation period. For example, levels of nitrogen showed clear and distinct decreasing trends in both ST1 and ST2 (Figure 4).

Panyache Chodary

Dr. Panyache Chodary, Assistant Professor, Department of Microbiology, Government College of Arts and Science, Palani, Tamil Nadu, India.

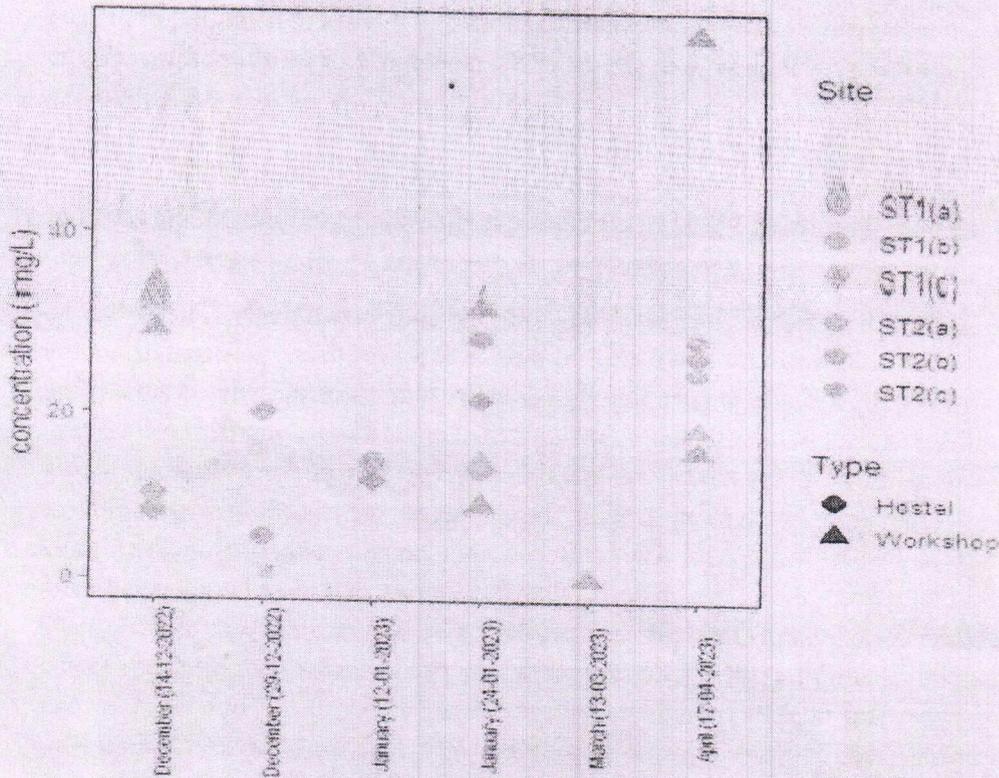


Figure 4: Profile of nitrogen pool in both septic tanks of Kanchrapara Railway Workshop

Recommendation:

The evaluation of the unique microbial formulation revealed clear functional abilities to control total coliform and most importantly bring down the abundance of fecal coliform such as *E. coli* to zero or negligible level. It was also clearly evident that the management of total and fecal coliform abundances in the evaluated septic tanks continued to hold for more than three months (at least 12 weeks) after single dosing of this unique microbial formulation. Besides, for many of the regulatory parameters, the values were within the framework including for total suspended solids and nitrogen. This clearly reflected the abilities of the unique microbial formulation also to bring down the other parameters, in parallel to coliforms. It is also important to highlight that the foul smell in majority of the chambers of both septic tanks were completely gone within 3-4 weeks following the addition of unique microbial formulation. Overall, the evaluated unique microbial formulation could clearly offer cost-effective, cheap and sustainable way to manage fecal sludge as well as improve the quality of groundwater or freshwater environments.

If this formulation is used in large scale in different Municipalities and Panchayat extensively it will be a pioneering and transformative initiative for the Govt of West Bengal in a cost-effective manner by introduction of the Microbial Consortia once a year for sludge management. This way, Bengal will be able to show the new path to the entire country how to lower the Fecal Coliform in low-cost manner.

Punjabdev Chakraborty

সিদ্ধান্তে উপস্থিত হন এবং প্রস্তাবিত কর্মসূচি
 ইন্ডিয়ান ইনস্টিটিউট অফ স্টাডিজ, এডুকেশন অ্যান্ড রিসার্চ সোসাইটি
 ডি.সি. অফ হাইগার এডুকেশন, উত্তর মেদনী, কলকাতা
 ৭০০০৩২/মেদনীর-৭১১৩৩, কলকাতা



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान कोलकाता
 भारत सरकार के तहत गठित स्वायत्त संस्थान द्वारा स्थापित एक आणविक संस्थान
INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH KOLKATA
 (An autonomous Institute established by Ministry of Education, Government of India)

Date: 14th December, 2023.

Dr. Rajesh Kumar, IPS
 Member Secretary,
 West Bengal Pollution Control Board (WBPCB),
 LA, Sector-III,
 Salt Lake, Kolkata-700098.

Dear Dr. Kumar,

Attached is the compiled report for the project 'Evaluation of a novel microbial consortia for effective management of fecal management....septic tank and sewage treatment plant' (Memo No 3298/2022-ST/STP/1/C.Lab dt 25.11.2022.

The novel microbial consortium was evaluated across a number of systems for several months and the consortium consistently showed marked reduction of fecal coliform in septic tank while adhering to regulatory framework. The results of the sewage treatment plant are also promising and may require further validation. Overall, the microbial consortium has exhibited metabolic capabilities to consistently control the fecal coliform and can prove to be useful for effective waste management.

This is for your kind perusal.

Thanking you

Sincerely,

Punyasloke Bhadury

Professor Punyasloke Bhadury, PhD
 Centre for Climate and Environmental Studies (CCES)
 IISER Kolkata

भारतीय विज्ञान शिक्षा और अनुसंधान संस्थान कोलकाता
 Indian Institute of Science Education and Research Kolkata
 (Dept. of Higher Education, Under MHRD, Govt. of India)
 मोहनपुर/Mohanpur-741246, भारत/India

Compliance Report on the direction and rules issued by the National Green Tribunal.

In pursuance to directions of Hon'ble National Green Tribunal Principal Bench, New Delhi Order dated 05.03.2019 , the Government of Nagaland notified the following 33 villages (Given in Table 1) in respective district of Nagaland as Model villages for compliant of "Solid Waste Management Rules 2016 " vide letter No. **UDD/7-GEN/173-SW/2010** dated Kohima ,the 15th April 2019.

Sl. No	Name of District	Name of villages
1	Kohima	Kohima Jotsoma Khonoma
2	Dimapur	Thahekhu Padampakhuri Ruzaphema
3	Mokokchung	Mokokchung village Ungma Mopongchuket
4	Mon	Mon village Chui Longwa
5	Wokha	Wokha village Longsa Lakhuti
6	Tuensang	Tuensang village Noklak village Chessore village
7	Kiphire	Anatongre Chomi Seyochung village
8	Longleng	Yachem Tamlu village Pongo
9	Peren	Benreu Tening B Jalukie
10	Zunheboto	Asukhomi Lazami Surumi
11	Phek	Phek village Meluri village Kikruma

Table 1: List of 33 villages for the implementation of solid waste management.

Further on, a State level monitoring committee meeting was held on 4th August, 2021 under the chairmanship of Chief Secretary, and thereby the state of Nagaland made its decision to comply with the directions and rules for the implementation of solid waste management rules, 2016, Plastic waste management rules, 2016, Biomedical Waste

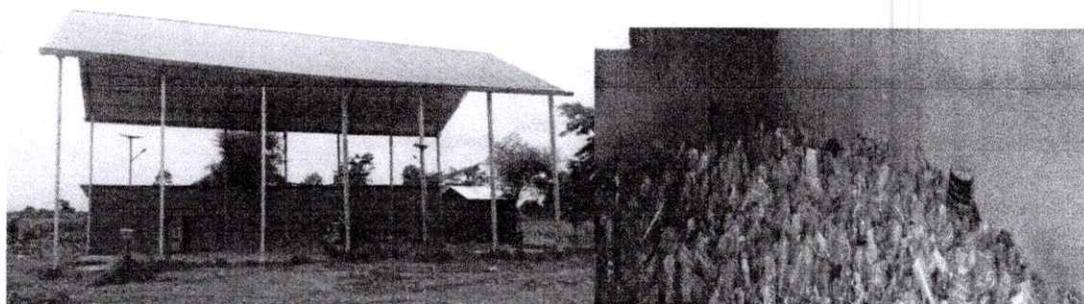
Management Rules, 2016, and also to review The implementation of various directions/orders issued by the National Green Tribunal.

Implementation by the state was materialized in all the selected 33 model villages by the Rural development department through different approaches which includes Infrastructural, IEC, Training and Purchase of disposal bins.

-Activities undertaken:

1. **Infrastructural:**

Solid waste management infrastructure such as–Material Recovery Facility (MRF), Construction of Soak Pit for community, Construction of Soak channel for community, Construction of compost Pits structure for community and Construction of Toilets.



2. **IEC:**

Public information Board and posters set up in all villages, Sensitization Videos created and circulated to all villages.



3. **Training:**

Sensitization on elimination of Single use Plastics and Solid Waste Management for PDs, BDOs, Directorate Staffs, and VLOs & SHGs of all the selected villages.

Official directives were given to the Rural Development Department for clubbing People's Plan campaign, together with awareness campaign/trainings on solid waste management vide letter **NO.RD/SWM-56/2018 dated 21/09/2019** (Letter attached).

A one day training on Solid waste Management under Sustainable Development Goals was conducted for BDOs and VDB Secretaries for all the 33 notified villages at SIRD on 22nd Nov 2019 vide letter **NO.DRD/SWM-4/2019-20 dated 06/11/2019** (Letter attached)

4. Purchase of Disposal Bins & Locally made disposal structures

Purchase of segregated Bins (Blue & Green dustbins) and waste disposal structures.



GOVERNMENT OF NAGALAND
RURAL DEVELOPMENT DEPARTMENT
NAGALAND : KOHIMA

NO.RD/SWM-56/2018

Dated Kohima, the 21st September 2019

To
The Director,
Rural Development
Nagaland, Kohima

Sub:- Implementation of Solid Waste Management during 2019-20

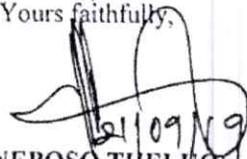
Sir,

I am directed to refer to letter No. DRD/SWM-2/2019-20 dated 22-08-2019 on the subject cited above and to request you to implement Solid Waste Management during 2019-20 in the 33 selected villages in the State as per instructions given below:

1. Awareness Campaign or trainings on Solid Waste Management be clubbed together with trainings on People Plan Campaign on GPDP 2019
2. SWM is a permissible under MGNREGA (7.1.3. xv). The Sub-Committee on preparation of Action Plan for Solid Waste Management in Village Panchayats/Villages in its meeting held on 25/09/2018 decided to earmark 2% of MGNREGS fund in the Labour Budget for the year 2019-20 for SWM activities (copy of the Meeting minutes enclosed). In line with this decision, 2% of the fund allocated to the respective VDBs under MGNREGS may be utilized for IEC materials, wall writing or flexi-banners and for purchase of waste bins during the current financial year.
3. Exposure visits within the state and outside the state may be taken up only after fund position improves.

Encl:- As stated above

Yours faithfully,



(NEPOSO THELUO)

Secretary to the Govt. of Nagaland

GOVERNMENT OF NAGALAND
DIRECTORATE OF RURAL DEVELOPMENT
NAGALAND: KOHIMA

H/15-13^c

NO.DRD/SWM-4/2019-20

Dated Kohima the 6th Nov 2019.

To,
The Project Director,
DRDAs Kohima, Dimapur, Mokokchung, Longleng, Zunheboto, Wokha
Tuensang, Mon, Phek, Kiphire and Peren.

*Training
SIRD*

Sub: One day Training on Solid Waste Management under Sustainable Development Goals at SIRD on 22nd Nov 2019

Madam/Sir,

Inviting a reference to the subject cited above, I am to bring to your notice that One Day Training will be held on 22nd Nov 2019 at SIRD on Solid Waste Management under Sustainable Development Goals at 11 a.m. for the notified villages.

In this regard, you are requested to inform the BDO's and VDB Secretary of the 33 notified villages to attend the said training. The list of the notified villages is enclosed for your ready reference.

It may be mentioned that accommodation and food for the VDB secretary will be arranged in SIRD hostel. Dr.Juthsutho Phoiji, Senior Faculty, SIRD (phone-9077645195/9615850914, email: phoji2016@gmail.com) will coordinate the program

Enclosed: As stated above.

Yours faithfully,

(THUNGJAMO ODYUO)
Addl. Director /Nodal Officer SWM
Rural Development,
Nagaland, Kohima.

NO.DRD/SWM-4/2019-20 / 11

Dated Kohima the Nov 2019.

Copy to:

1. The Principal Secretary, Government of Nagaland RD for information.
2. Office Copy

AS
22/11/19

Say
we need to set aside
imvengung fund from
MYNRESA since they have
planned activities
found
22/11/19

(THUNGJAMO ODYUO)
Addl Director/Nodal Officer SWM
Rural Development,
Nagaland, Kohima

JS/11/19

NIKUN
25/11/19

25/11/19

-Success Story on Solid waste Management

With implementation of Solid waste management in the villages, positive impacts was evident. A short success story of Tobu village under Tobu Block, Mon district was shared vide letter No. RD/TOBU/MGNEGA/2019-20, dated 25/08/2019

The following positive impacts were witnessed after the implementation of the Solid Waste Management in Tobu village.

1 . Awareness and sensitization of the villagers to non-bio degradable and hazardous wastes:

The people in the villages were so naive and ignorant that they were not aware of what is bio- degradable and what is non bio-degradable. So, it began from that level in the villages and they were being educated about the harms that are being done to the environment and to their health ultimately by different types of wastes. Illustrations and demonstrations of the bio-degradable, non bio-degradable, hazardous and bio-medical waste management were being provided to them for strict compliance, and for segregating of the wastes at source by keeping different dustbins at home and disposing them off accordingly

2. Collection of Plastic/non bio-degradable wastes in one place:

It was found that thevillagers use plastics to make fire in their kitchens or burn them in their premises. So suchpractices were discouraged. It was then observed that the villagers were using the concretedustbins to dispose the plastic wastes and other non bio degradable wastes.

3. Proper Disposal of waste:

Prior to the implementation of the Solid Waste Management,Village premises were littered with different kinds of wastes likesweet wrapper, biscuit packages, plastic bags, plastic bottles, worn chappals and shoes, etc. But, as the villagers were instructed to use the concrete dustbins, there is proper disposal of such wastes in one place within their locality.

4. Preservation of the purity of Environment

Though wastes generated in the village may be in small quantity compared to the urban areas, but as the non bio-degradable andhazardous waste are not scattered around and disposed in the open spaces, the harmfulimpacts on the ecology are prevented.

5. Improvement in the sanitation:

It is obvious that systematic practices of waste disposal will result in the improvement of the sanitation of the village and the surroundings. The current clean road and premises of the villageare the evidences that besides the improvement of the sanitation, it has also produce scenic and pleasant view of the houses and the roads in the villages. Clean environment will definitely lead to more healthy and productive way of living.

**GOVERNMENT OF NAGALAND
OFFICE OF THE BLOCK DEVELOPMENT OFFICER
R.D. BLOCK TOBU
MON : NAGALAND**

NO. RD/TOBU/MGNREGA/2019-20

Dated: 25th October 2019 Tobu

**SUCCESS STORY OF MGNREGA WORK IMPLEMENTED IN MON DISTRICT
UNDER TOBU R.D. BLOCK AT TOBU VILLAGE**

NAME OF GP/VDB : TOBU VILLAGE
 NAME OF BLOCK : TOBU
 NAME OF WORK : Solid Waste Management
 UNIT (in Metres) : 8 Units
 Financial Year : 2018-19
 Wage Component : Rs.7,56,675/-(Wages @ Rs. 177/-)
 Material Component : Rs. 5,04,450/-
 Work Order : NO.RD/T/MGNREGA-1/2018-19 Dated Tobu 19th January 2019
 Mandays : 4275
 Wage: Material ::60:40 Ratio
 Work start date : 21/01/2019
 Work Completion date : 25/01/2019

Tobu village is located more than 130 KMs away from the district HQ and it has households more than 800 and has a population of more than 6000. The concept of solid waste management in the rural areas is not well developed or perceived as the villagers are not aware of the impacts that the hazardous wastes have on the environment and their health. Moreover, there is less accumulation of such wastes in the villages due to their simple lifestyles and low dependency on the modern industrial products. But, with the improvement in the living standard and increase in income, it cannot be taken for granted that the rural areas will always remain free from different types of hazardous wastes. In fact, it is more urgent to take pre-emptive and proactive steps to preserve the ecological purity than to take remedial actions later after the surroundings are inflicted with harmful wastes.

OBJECTIVES

The Solid Waste Management under MGNREGA 2018-19 was taken up with the following objectives:

1. As this was the first time such scheme was being taken step up, it is likely that desired result may not be achieved instantly, it was rather intended to disseminate more information and knowledge about the proper Management of non bio-degradable and hazardous waste.
2. With systematic and proper disposal of hazardous wastes, environment can be conserved from degradation and unwanted pollutions.
3. Management of different types of wastes and disposing them accordingly will improve the sanitation of the village and create a clean and healthy environment for living.

II. POSITIVE IMPACTS

The following positive impacts could be witnessed after the implementation of the Solid Waste Management:

1. **Awareness and sensitization of the villagers to non-bio degradable and hazardous wastes:**
The people in the villages are so naive and ignorant that they are not aware of what is bio-degradable and what is non bio-degradable. So, it began from that level in the villages and they are being educated about the harms that are being done to the environment and to their health ultimately by different types of wastes. Illustrations and demonstrations of the bio-degradable, non bio-degradable, hazardous and bio-medical waste management are being provided to them for strict compliance, and for segregating of the wastes at source by keeping different dustbins at home and disposing them off accordingly.
2. **Collection of Plastic/non bio-degradable wastes in one place:** It was found that the villagers use plastics to make fire in their kitchens or burn them in their premises so such practices were discouraged. So, it was observed that the villagers were using the concrete dustbins to dispose the plastic wastes and other non bio degradable wastes.
3. **Proper Disposal of waste:** Prior to the implementation of the Solid Waste Management Scheme under MGNREGA, village premises were littered with different kinds of wastes like sweet covers, biscuit packages, plastic bags, plastic bottles, worn chappals and shoes, etc. But now, as the villagers have been instructed to use the concrete dustbins, there is proper disposal of such wastes in one place within their locality.
4. **Preservation of the purity of Environment:** Though wastes generated in the village may be in small quantity compared to the urban areas, but as the non bio-degradable and

hazardous waste are not scattered around and disposed in the open spaces, the harmful impacts on the ecology are prevented.

5. **Improvement in the sanitation:** It is obvious that such systematic practices of waste disposal will result in the improvement of the sanitation of the village and the surroundings. The clean road and the premises in the photographs submitted are the evidences that besides the improvement of the sanitation it has also produce scenic and pleasant view of the houses and the roads in the villages. Clean environment will definitely lead to more healthy and productive way of living.

III. **CHALLENGES**

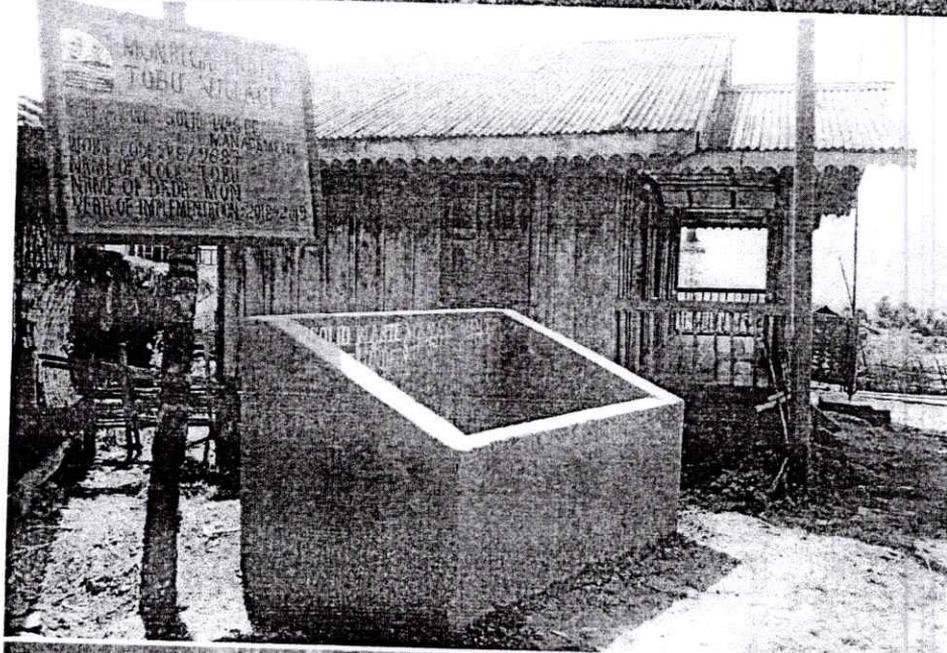
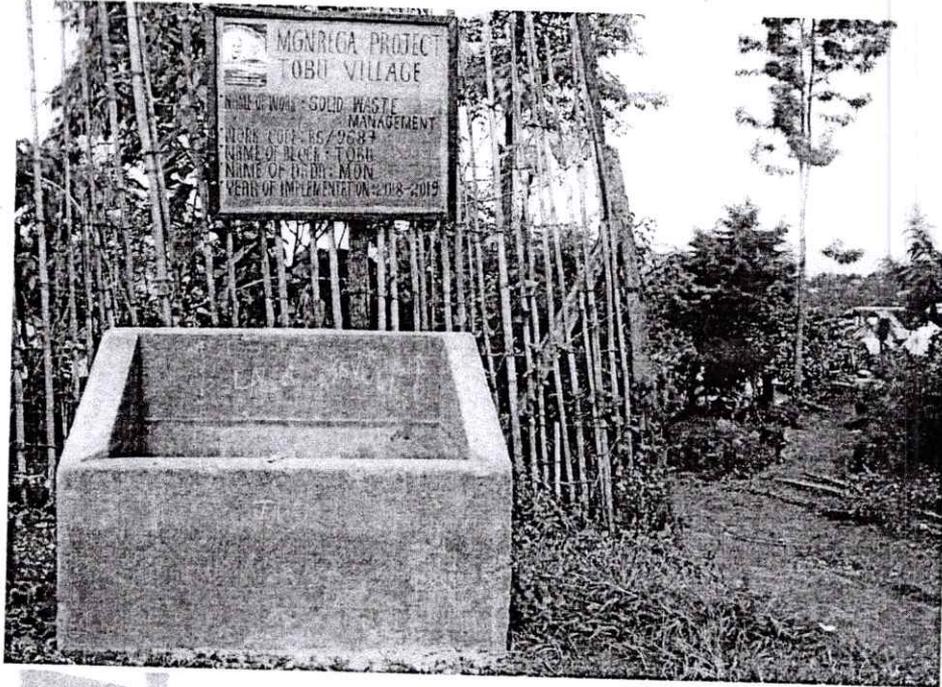
The Scheme could not be implemented as per Solid Waste Management Rules 2016 due to the paucity of funds and the need to construct dustbins at different locations of the village. So, the villagers are encouraged to dispose the bio-degradable waste by constructing their own composting pits. The dustbins constructed are used only for non bio-degradable and hazardous waste. However, the construction of Material Recovery Facility (MRF) and different dustbins for types of waste will be taken up in the subsequent releases of funds, though there is no or meagre hazardous wastes generated in the village besides the plastic waste. The Government must also come out with clear region specific instructions on where to dispose the non-biodegradable and other hazardous waste collected from the village. We need to continuously insist on the villagers to be compliance with the Waste Management Rules and educate them in more details to convince them that it becomes a way of life for them.

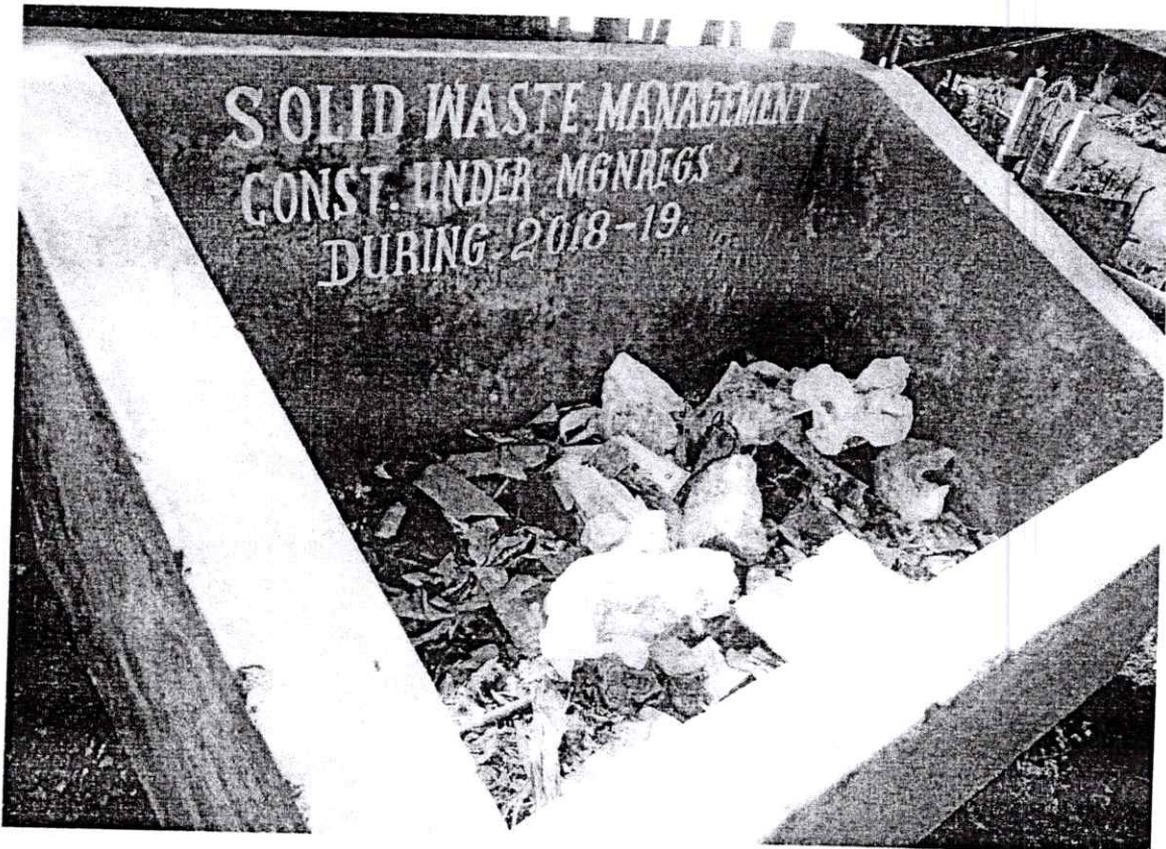
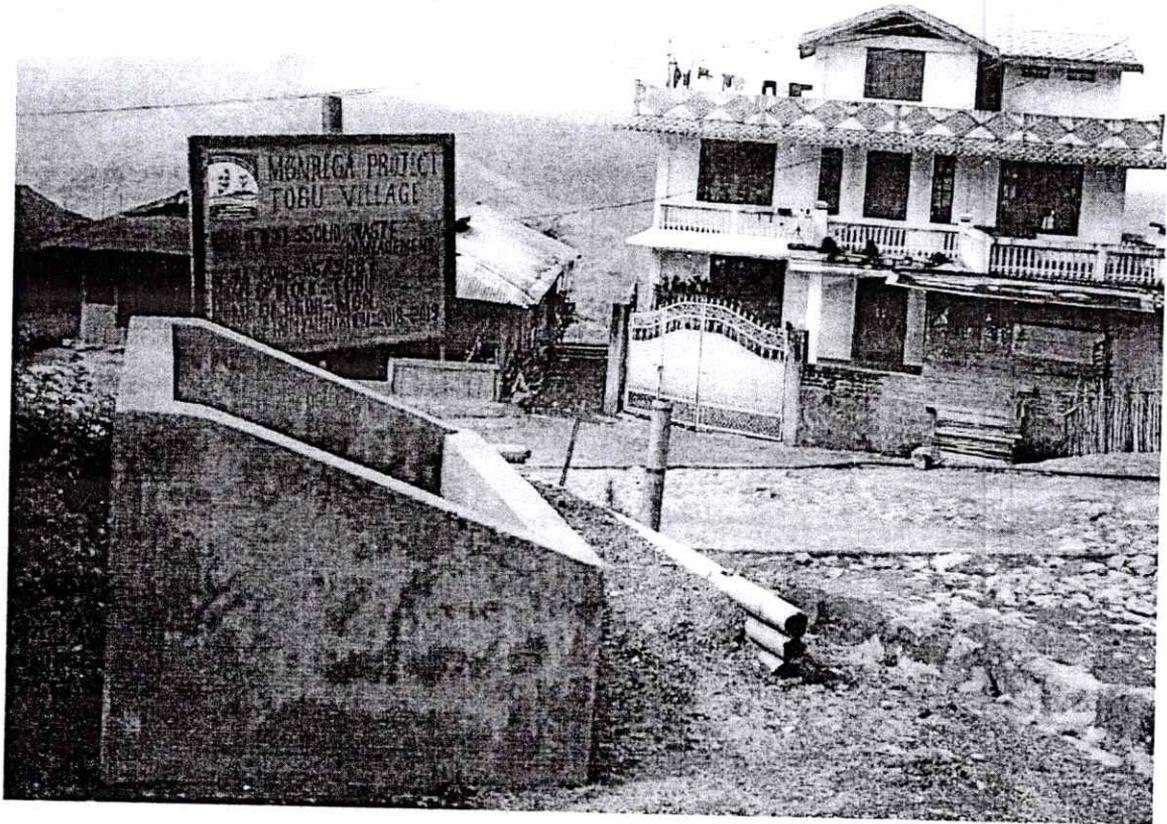
Thus, besides giving employment to the Job Card Holders, the above positive changes witnessed in the lives of the villagers can be attributed to the successful implementation of the said scheme under MGNREGA.



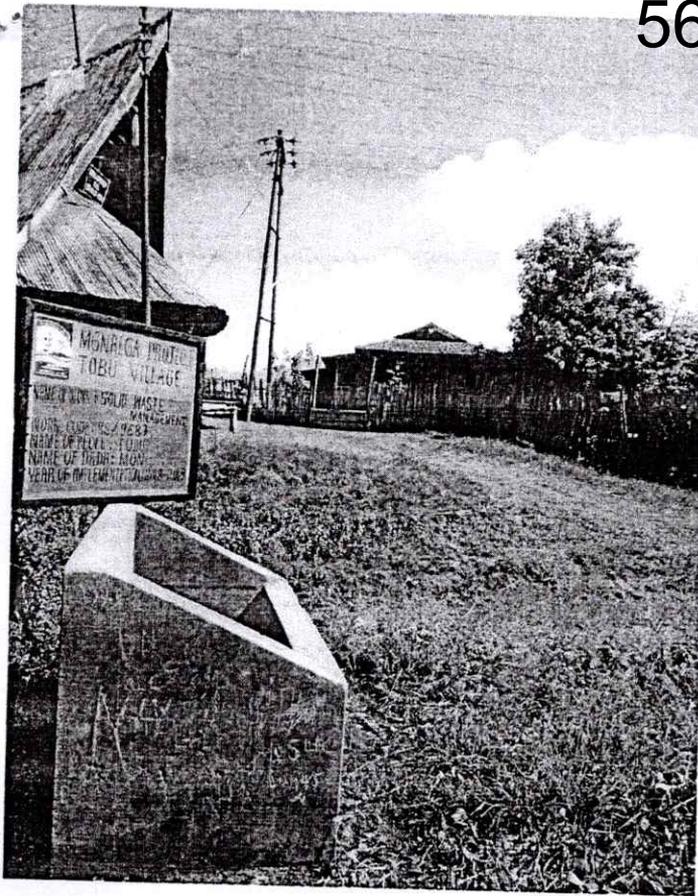
(W MOBA KONYAK)

Block Development Officer cum
Programme Officer (MGNREGA) RD Block Tobu





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ACTION TAKEN & SOLID WASTE MANAGEMENT IEC ACTIVITIES BY ULBS**ANNEXURE IX**

All 39 ULBs of Nagaland are working toward total compliance of the Waste Management Rules in the day to day waste management of municipal and Town Council limits. Besides the ULBs own initiatives in waste management, the Central Sponsored Schemes such as Swachh Bharat Mission-Urban 2.0 and the 15th Finance Commission Grants and State funded initiatives are also been implemented.

Sl No	Category	Action Initiated
1	To improve door to door collection	<ol style="list-style-type: none"> 81 sanitation vehicles were provided to the ULBs during FY 2025-26 under UD & MA. Regular IEC/ sensitization programmes held by State and ULB Level. State level capacity Building activity conducted on 14th Oct. 2025 for all 39 ULBs. To intensify sensitization programme, 3 (three) wards under Mokokchung and Kohima Municipal is identified. Proposal for funding is under submission to the Govt. through Municipal Affairs.
2	Solid Waste Management Infrastructure provided	<ol style="list-style-type: none"> 38 ULBs are equipped with emergency manual MRF shed / Community Compost Pits as mobilization, while proper MRF facilities under SBM-U 2.0 are under implementation. Multi Plastic Shredder Machines provided to 7 ULBs. Digital Weigh machines provided to all 39 ULBs for waste measurement under SBM-U 2.0. Construction of 4 MRF, 4 Compost pits and 4 inert pits is in progress under SBM-U (Details at Action Plan Annexure).
3	Liquid Waste Management Infrastructure provided	<ol style="list-style-type: none"> ULBs are undertaking various sanitation works under tied component of 15th FC Basic Grants. Under AMRUT and SBM Missions 8 (eight) Cesspools were provided to 8 ULBs. 150 kld FSPT is under construction to be completed by March 2026. (List of ongoing and Pipeline Projects enclosed as Annexure)

SOLID WASTE MANAGEMENT IEC ACTIVITIES BY ULBs



Swachhata Hi Seva (SHS), Peren



Cleanliness Drives, Chozuba

COMMISSIONING OF WASTE MANAGEMENT VEHICLES 2025-2026



Swachhata Hi Seva (SHS), Kohima

Swachhata Hi Seva (SHS), Jalukie



Cleanliness drives, Chozuba

Cleanliness drives, Jalukie



Flagging of six cesspools by Hon'ble Advisor, UD & MA



Flagging of six cesspools by Hon'ble Advisor, UD & MA



ONGOING PROJECTS UNDER SOLID WASTE MANAGEMENT COMPONENT



Ongoing MRF/Compost/Inert pit at Tseminyu



Ongoing Bioremediation at Kohima



On going Bioremediation at Dimapur



On going Bioremediation at Dimapur



On going Bioremediation at Chumoukedima



On going Bioremediation at Chumoukedima



RECOVERED RDF BALED FOR TRANSPORTATION TO CEMENT PLANT.



Participants at the STP & FSTP DPR preparation workshop



Person to person IEC at Dimapur Super Market 2025

WASTE WATER MANAGEMENT PROJECTS UNDER SBM-U2.0



Proposed 3D site layout of Mokokchung STP



Site marking with Commissioner Secretary & SBM-U officials



Interception and Diversion Work in Progress



OA 606/2018, Compliance of Municipal Solid Waste Management Rules,2016.

1 message

amit singh <semasingh.office@gmail.com>
To: judicial-ngt@gov.in

Wed, 11 Mar, 2026 at 10:14 am

Dear Sir, /Madam

Kindly Find attached scanned copy Report being e- filed on behalf of State of Nagaland, which is being served in advance copy as proof of service.

Thanking you.
Best Regards,
Ms.K.Enatoli Sema

(Clerk)
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