

I/233606/2023

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

Email ID : environmentforestassam@gmail.com

ECF No.234112/483

Dated Dispur, the 28th July, 2023

From : Shri M. Hassan, ACS
Secretary to the Govt. of Assam,
Environment and Forest Department

To : The Registrar General,
National Green Tribunal (Principal Bench),
Faridkot House, Copernicus Marg,
New Delhi - 110001

Sub : Submission of 6 (six) monthly progress report in matter of Hon'ble NGT's
O.A. No. 606/2018.

Sir,

With reference to the subject cited above, I am directed to submit herewith 6 (six) monthly progress report on Solid, Liquid and Biomedical Waste Management in the matter of O.A. No. 606/2018 in compliance of Hon'ble NGTs Order dated 27th January, 2023 for favour of your kind information and necessary action.

Encl : As stated.

Yours faithfully,
Signed by Mahmood Hassan
Date: 28-07-2023 15:45:48
Secretary to the Govt. of Assam,
Environment and Forest Department

Copy with report to:

- (1) Secretary, Co-ordination to the Chief Secretary for kind appraisal of Chief Secretary, Assam, Dispur.
- (2) P.S. to Addl. Chief Secretary, Environment and Forest Department, Dispur.

(E-sign)
Secretary to the Govt. of Assam,
Environment and Forest Department



Pollution Control Board, Assam

(Department of Environment & Forests, Government of Assam)

অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ

(অসম চৰকাৰৰ বন আৰু পৰিৱেশ বিভাগ)

NABL Accredited Testing Laboratory : Certificate No. TC-11384



No. WB/T-266/20-21/131
1066

Dated Guwahati, the 27th of July, 2023

To,

The Commissioner and Secretary to the Govt. of Assam,
Environment and Forest Department,
Janata Bhawan, Dispur, Guwahati-6

Sub: Submission of six (6) monthly progress report in matter of Hon'ble NGT O.A.
606/2018 -reg.

Ref: Hon'ble NGT's order dtd 27-01-23 in matter of O.A. 606/2028.

Sir,

Please find enclosed herewith a six (6) monthly progress report on Solid, Liquid and Biomedical Waste management, compiled from the inputs received from Department of Housing and Urban Affairs (DoHUA) and Panchayat and Rural Development Department (P&RD).

It is for your kind information that the Hon'ble NGT vide its order dated 27-01-23 in matter of O.A. no. 606/2018 has directed the Chief Secretary, Assam for submission of six (6) monthly progress report to the Registrar General of Hon'ble NGT by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

You are, therefore, requested to kindly arrange to take necessary action for submission of the said report to the Hon'ble NGT.

Thanking you,

Encl: As above

Memo. WB/T-266/20-21/131-A

Copy to:

1. P.A to the Chairman, PCBA – for kind perusal of the Hon'ble Chairman.

Yours faithfully,

(Shantanu Kr. Dutta)
Member Secretary

Dated Guwahati, the 27th of July, 2023

(Shantanu Kr. Dutta)
Member Secretary

Sl no	Component	Direction/Observation of Hon'ble NGT in OA 606/2018	Action taken as on June,2023
	<p>Solid Waste management</p> <ul style="list-style-type: none"> Segregation & Door to Door Collection 	<ul style="list-style-type: none"> Segregation of the Solid Waste at source and its earliest processing nearest to the point of generation with defined destination is imperative. Adequate composting /vermicomposting/bio-methanation centres need to be set-up and upgraded nearest to the source of generation of wet solid waste. Waste generators can themselves be required to process the waste under guidance and handholding by the administration, with the assistance of identified empanelled service providers and such details may be posted on State's/Center's GeM portal. 	<p>PROGRESS IN URBAN AREAS</p> <p>Presently 94% wards are practicing D2D collection and 44% wards are doing source segregation.</p> <p>To improve the percentage of source segregation, the following steps are being taken:</p> <ol style="list-style-type: none"> Model Ward Initiative:The door to door collection and source segregation of waste campaign was started in all 104 ULBs of Assam in three phases. Total household covered during the campaign was 228000nos; 124 nos of Centralized compost pits created; 552 nos of SHGs and 91 nos. of NGOs were involved. 218 nos. of Auto Trippers with separate chambers (Green & Blue) distributed to ULBs on 3rd July, 2023 for Door to Door Collection at primary level. Engaged active NGOs like Midway Journey & Akshar Foundation to strengthen Dry Waste Collection from domestic households, commercial establishments, markets, schools, offices etc. Involved SHGs in Source Segregation and efficient Dry Waste Management. Further to ensure 100% source segregation in all the ULBs, an empaneled agency (Urban Management Centre) has been on boarded for: <ul style="list-style-type: none"> ➤ Intensive grass-root level campaign for SWM ➤ Institutionalization of informal waste-workers ➤ Linkages of private vendors for effective Dry Waste Management ➤ Integration of SHGs for IEC and BCC on Segregation at source. <p>Biomethanation plant:</p> <ol style="list-style-type: none"> 1 no. running at Chetribari,

			<p>Guwahati of Capacity 5.0 TPD. Output-800 unit of power and 450 kgs of manure.</p> <p>b) A 60 TPD Bio-Methanation Plant is proposed at Adabari in City Solid Waste Action Plan (CSWAP) under SBM 2.0</p> <p>Decentralized/Vermi/Window/Pit Composting:</p> <ul style="list-style-type: none"> ○ There are 55000 nos. of households' backyard composting with total intake capacity of 222 TPD. <p><u>PROGRESS IN RURAL AREAS</u></p> <ul style="list-style-type: none"> ● Orders have been placed for total 233 nos. of battery rickshaws and 5390 nos. of Tricycles to be distributed to Gaon Panchayats for collection and transportation of solid wastes. Out of which 155 nos. of battery rickshaws and 3935 nos. of Tricycles have been delivered already.
	<ul style="list-style-type: none"> ● Processing 	<ul style="list-style-type: none"> ● Execution of plan relating to management of municipal solid waste and augmentation of existing waste processing plants for remaining 752 TPD. ● Plastic waste and Construction & demolition processing plants are also to be set up. ● Bio-medical, hazardous and E-waste are not to be co-mingled and treated with solid waste. It may be worthwhile to take into consideration guidelines on the subject issued by the Ministry of Urban Development, Gol titled "Waste to Wealth" on 2.10.2017 under Swachh Bharat Mission. 	<p><u>FOR URBAN AREAS</u></p> <p>To mitigate the Gap of 752 TPD Municipal Solid Waste, the state has made a plan through funding from SBM 2.0 as well as from Sate Govt. funding In the 1st tranche of SBM 2.0 approval has been given by MoHUA for 42 ULBs for sum of Rs 6437.25 lakhsfor setting up of 526.5 TPD processing plants and it will reduce the gap in processing to 225.5 TPD. Further, subsequent to that the NARC has also given approval of Rs 5942.40 Lakhs for 53 nos. of ULBs under tranche II of SBM 2.0 for294.5 MLD. On completion of these projects under SBM 2.0 with additional funding the gap will be completely met. As on the date the tendering for 42 ULBs under SBM 2.0 is initiated and DPRs are under preparation and progress is regularly monitored in the level of Department as well as the Chief Secretary, Assam.</p>

			<p>The status of the ongoing and proposed waste processing units are shown below:</p> <p>Organic Waste Converter:</p> <p>a) 1 OWC of Capacity: 2.5 TPD at Bhangagarh, Guwahati is operational.</p> <p>b) 30 nos of OWC of capacity in total 247.53 TPD are made operational in 12 ULBs for processing of wet waste.</p> <p>c) 37 nos of OWC of capacity 0.5 TPD each, total capacity- 26 TPD are made operational in 39 ULBs for processing of wet waste.</p> <p>d) Another 3 nos of OWC of capacity 0.5 TPD each is under process of installation in 2 ULBs.</p> <p>Compost cum RDF Plant</p> <p>a) A 150 TPD compost cum RDF Plant at Belortol started by GMC. To be utilized in two shifts to handle 300 TPD waste.</p> <p>Modern RTS cum MRF:</p> <p>a) 4 nos. of MRF cum Refuse Transfer Station (RTS) is functioning in Guwahati at 1) Zoo Road, 2) Near GMCH Bhangagarh, 3) VIP Road, 4) Chatribari.</p> <p>b) 144 nos of outsourced manual MRF in 95 ULBs of total Capacity: 430 TPD for management/treatment of dry Waste is functional.</p> <p>c) 1 MRF of 10 TPD capacity at Adabari is under construction in CSR mode by HDFC Bank.</p> <p>d) 2 nos. 150 TPD waste handling capacity cum 100 TPD Material Recovery capacity each is proposed at (i) Adabari and (ii) Old Jail Campus, Guwahati.</p> <p>e) Another 75 TPD waste handling capacity cum 25 TPD Material Recovery capacity is proposed at Mathgharia.</p> <p>f) An RTS with capacity 25 TPD also</p>
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			<p>proposed near Purobi Diary, Panjabari.</p> <p>Construction & Demolition Plant:</p> <ul style="list-style-type: none"> ○ 100 TPD C&D waste processing plant is proposed in PPP mode and DPR is under finalization stage. <p>Bio-medical Waste Management:</p> <ul style="list-style-type: none"> ➤ In order ensure that the Biomedical waste is collected and disposed properly and to prevent mixing of BMW with municipal solid waste, Steps have been taken to enhance the bio-medical Waste treatment capacity in the State. ➤ An additional CBWTF has been made operational at Barpeta which will manage biomedical waste from Barpeta and other neighbouring districts. ➤ Work order has also been issued to another CBWTF at Dibrugarh district. Identification of land in other districts for establishment of CBWTF are also under process. <p>FOR RURAL AREAS:</p> <ul style="list-style-type: none"> • 1 central Material Collection Facilities (MCF) and 9 mini MCFs are proposed in each G.P. Construction of 308 nos. of MCFs and 1803 nos of Mini MCFs have been completed. construction of another 456 nos. of MCFs and 1154 nos. of Mini MCFs are under process. Composting pits are also provided in centralized MCFs or composting of bio-degradable wastes. • 2810 nos. of Community Management Sanitary Complex (CMSC) have been constructed and 1786 nos. of CMSC are under
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			construction.
	<u>Legacy Waste Management</u>	<ul style="list-style-type: none"> Remediation of legacy sites may be one time affair and such situations should not arise in future. Bio-remediation followed by bio-mining has to be executed in accordance with the Guidelines/SOP laid down by CPCB. Once, the remediation is executed and demonstrated at one site, repeated tendering may be avoided rather, on standardized rates, the execution of remediation can be done at other remaining sites. Such execution can also be done through Departmental efforts. Bio-remediation/bio-mining process to be executed as per CPCB guidelines. 	<p>43 nos of ULBs have reported presence of Legacy waste of 32.97 Lakh MT.</p> <p>The following steps are taken for Bio-remediation of legacy waste as per guidelines laid down by CPCB:</p> <p>a) Guwahati Municipal Corporation Legacy waste present:-1500000 MT Action taken:77140 MT of legacy waste has been processed till June,2023. 70% of the RDF has been sent to Dalmia cement factory.</p> <p>b) North Lakhimpur Municipal Board Legacy waste present:-39000 MT Action taken:Remediation of legacy Waste completed. 16 bighas of land reclaimed</p> <p>c) Tinsukia Municipal Board Legacy waste present:-50,000 MT Action taken:Remediation of legacy Waste with CSR fund from OIL India Ltd. is going on and around 60 % is remediated</p> <p>d) Jorhat Municipal Board Legacy waste present:-158870 MT Action taken:RFP to be floated.</p> <p>e) For remaining 39 ULBs Legacy waste present:-805736 MT Action taken:DPRs for remediation is prepared and submitted for approval of NESIDS, MDoNER.</p> <p>To further prevent accumulation of legacy waste in the ULBs, Sanitary landfills (standalone and cluster basis) in all the ULBs are proposed under SBM 2.0</p>
	Used Water Management (Liquid Waste Management)	<ul style="list-style-type: none"> The data presented by the Chief Secretary shows gap of about 435.35 MLD ingeneration and treatment of sewage. Appropriate treatment of such waste has to be undertaken ensuring that no fecal 	<p><u>Liquid Waste Management in Urban Areas</u></p> <p>To mitigate the Gap of 435.35 MLD Sewage Generation, the state has made a plan through funding from SBM 2.0, AMRUT as well as from Sate Govt. funding. In the 1st trance of SBM 2.0, approval</p>

		<p>contaminants are discharged into waterstreams/ponds/rivers.</p> <ul style="list-style-type: none"> • Geo-tagging of outfalls and its marking on GIS based maps with unique code and ensuring that these outfalls are intercepted and deviated for proper treatment. • Sewage be processed by cost-effective methods at least at several identified locations with least expenses. Decentralized and the prefabricated/modular treatment plants can be explored, apart from imposing condition of Zero Liquid discharge on industries, Group Housing Societies etc. • Sanctity and significance of natural storm water drains needs to be maintained. Storm water drains, if left unpolluted, can be source of drinking water for humans, birds, animals or aquatic life and discharge of sewage or even treated water which is not of standard of drinking water, seriously affects such drinking water resource adversely affecting their health. • Efforts for utilization of treated sewage such as by establishments like malls, industrial estates, automobile establishments, power plants, playgrounds, railways, bus stands, local bodies, universities etc. be made to save potable water for drinking. • The treated sewage can be utilized for industrial/agricultural/other non-drinking uses like washing railway wagons/yards, buses, roads, water sprinkling and several such models reportedly 	<p>has been given by MoHUA for 6 ULBs for sum of Rs 119.20 Cr for setting up of STPs of 38.5 MLD.</p> <p>Further, under tranche -II of SBM 2.0, NARC has also given approval of Rs34.6 Cr for 6 nos. of ULBs for 16.1 MLD. Further for setting up of STPs in another 29 ULBs under tranche-III of SBM 2.0, the CSAP is being prepared.</p> <p>The status of the ongoing and proposed STPs/FSTPs are shown below:</p> <p>Faecal Sludge Treatment Plant(FSTP):</p> <ol style="list-style-type: none"> 2 FSTP Projects at Goalpara MB (7 KLD) and Titabor MB(10 KLD) is completed and functioning. 6 Nos of FSTP at North Lakhimpur(10KLD) , Tinsukia(20 KLD), Dhemaji(5 KLD) , B. Chariali, Kokrajhar(10 KLD)& Golaghat(10 KLD) are under construction. 24 nos of FSTP(265 KLD) in 24 ULBs are at various stages of tendering. <p>Sewage Treatment Plant(STP)</p> <ol style="list-style-type: none"> Construction of 1 STP at Nagaon of 2 MLD is undergoing (75% work completed). 3 nos of STP is proposed in Guwahati at Silsakoo Beel (65MLD), Borsola Beel(62 MLD) and Paschim Borigaon(60 MLD) under JICA. Construction work of 2 MLD STP at Borsola Beel is taken up. Tender process completed. <p>FSTP cum STPs</p> <ol style="list-style-type: none"> DPR preparation for 2 MLD STP cum 10 KLD FSTP and 11 km sewerage network at Silchar and 7 MLD STP cum FSTP in Dibrugarh under AMRUT 2.0 is going on. Under SBM 2.0, 12 nos. of STP cum FSTP of 54.6 MLD are approved by MoHUA and DPRs are being prepared.
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		<p>exist. The State may contemplate with prospective plan to utilize treated sewage extensively rather than discharging into natural water courses which are very precious.</p> <ul style="list-style-type: none"> • Corporates may be involved to utilize treated sewage and render assistance in sewage and solid waste management utilizing Corporate Social Responsibility (CSR). • STPs need to have co-treatment facilities of septage rather than having isolated FSTPs. • SBM-U 2.0 provides co-treatment of faecal sludge at STPs with sewage for which exclusive funding provisions are made under ring-fenced accounts. • Responsibility of the State is to have comprehensive time bound plan with tied up resources to control pollution which is its absolute liability. 	<p>Desilting and cleaning of Water Bodies:</p> <p>a) Silsakoo Beel- Rejuvenation, Bioremediation and sustainable conservation works of Silsakoo Beel has been started to increase retention capacity of the beel to at least 3.7 million cubic meter to act as storm water basin, for ground water research zone and to have sponge city effect.</p> <p>b) Sorousula Beel: A CSR scheme amounting to Rs. 259.00 Lakh under ICICI bank has been taken up for improvement of water quality of Sorousula Beel through Bio-remediation measures</p> <p>c) Bahini River, Bharalu River, Mora Bharalu Channel, Lakhimijaan and Basistha rivers:</p> <ul style="list-style-type: none"> • Cleaning and de-silting of 05(five) major river channels: Bahini River, Bharalu River, Mora Bharalu Channel, Lakhimijaan and Basistha river are going on in war footing. More than 80% physical progress for cleaning & desilting have been achieved for almost for all rivers. • Super sucker is being used for desilting of drains at Dispur Rotary point, near Vishal Mega Mart, Hengrabari and at Fakruddin Ali Ahmed Road, Juripar. • Cleaning and De-silting of 143(one hundred forty-three) Drains are going on and remaining drains are being cleaned by engaging departmental or hired labour. <p><u>Liquid Waste Management in rural Areas</u></p> <ul style="list-style-type: none"> • 1701 nos. of Community Soak pits/Leach pits/Magic
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			<p>pits has been constructed.</p> <ul style="list-style-type: none"> • 5249 nos of drainage facilities and 4420 nos. of other Grey Water management systems have been established.
	IEC Activities & Monitoring	<ul style="list-style-type: none"> • Brain storming with available experts and other stake holders in the State at different levels, evolve models for both solid and sewage management which can be replicated, initiate special campaigns with community/media involvement in the larger interest of protecting environment and public health with determination for prompt action. • Community involvement not only for IEC activities but also for planning and execution of waste management activities. • Regular training programme shall be conducted for those involved in execution of waste management projects. • Status of sewage and solid waste management with respect to each city, town and village be placed on State's portal and be made part of District environment Plan. This is to be ensured in two months (Time Bound) 	<ul style="list-style-type: none"> • For regular monitoring the gap in sewage and solid waste in each ULBs, Department has created a Portal for timely updation and reporting of progress by the ULBs. • ULBs upload Yearly IEC Action plan in Swachhatam Portal for obtaining approval from SBM_U Assam. ULBs report the IEC activities in the IEC list in Swachhatam Portal for reporting and monitoring by SBM U Assam. • Special campaign on source segregation was run by SBM(U) in 1730 schools of Assam under the theme, "Hara Geela Sukha Neela". • In the month of February, 2023 special campaign was carried out covering schools of Assam to celebrate plastic free Saraswati Puja where bamboo glass and plates made of banana trees were used. • A special campaign under MoHUA, Gol was also run under the theme, Meri LIFE, mera Swachh Shehar" to collect unused items in various RRR (Reduce, reuse and recycle) centres and later distributed to the needy people. • Two NGOs actively working in the field of Solid Waste Management are being on boarded for strengthening IEC activities in ULBs of Assam.