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Govt of Bihar
Urban Development and Housing Department

Letter No.-12 / न0वि0 / स्व0नि0 / न्या0-21 / 2022

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Date: 28/02/2023

From,

Additional Secretary-Cum- Mission Director,
Swachh Bharat Mission (U),
Urban Development and Housing Department.

To,

Registrar General
Principal Bench
National Green Tribunal (NGT)
Faridkot House, Copernicus Marg, New Delhi

Subject- **Submission of report regarding compliance of O.A. No.- 606/2018
In re: compliance of Municipal Solid Waste Management Rules
2016 and other environmental issues.**

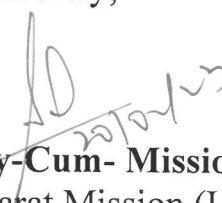
Sir,

With reference to the above subject line, we are hereby submitting the report regarding compliance of O.A. No.- 606/2018 In re: compliance of Municipal Solid Waste Management Rules 2016 and other environmental issues for your kind consideration and perusal.

Therefore, it is requested that kindly present the report before the Hon'ble tribunal.

Encl: As above.

Sincerely,


Additional Secretary-Cum- Mission Director,
Swachh Bharat Mission (U),
Urban Development and Housing Department.

REPORT OF THE NGT COMPLIANCE, BIHAR

IN THE MATTER OF: -

ORIGINAL APPLICATION NO. 606/2018

**Compliance of Municipal Solid Waste Management Rules,
2016 and other Environmental Issues**

Date of Hearing- 16/02/23

Before NGT Principal Bench New Delhi**O A No- 606/2018**

In Re-compliance of Solid Waste Management Rules, 2016 and Other Environmental issues. (Arising out of direction of the Hon'ble Supreme Court in W. P. No. 888/1996 and W. P. No. 375/2012

Order 30/11/21- Hon'ble Supreme Court order (2.9.14) in writ petition No 888/1996, Almitra H. Patel vs. Union of India & Others with regards to Solid Waste Management & Order dated 22.02.17 in W.P No. 375/2012, Paryavaran Suraksha vs. Union of India to Liquid Waste Management.

Other Related Issues-

- Pollution of 351 river stretches
- 122 non-attainment cities in terms of air quality
- 100 Polluted Industrial clusters
- Illegal Sand Mining

But the proceeding limits in the present matter to two issues:

- Solid Waste Management
- Sewage Management

REPORT ON COMPLIANCE OF ORDER OF HON'BLE NATIONAL GREEN TRIBUNAL PASSED IN O.A. NO. 606/2018 IN THE MATTER OF "COMPLIANCE OF MUNICIPAL SOLID WASTE MANAGEMENT RULES, 2016"

(Updated Compliance Report in continuation of earlier report dated 25.10.2021)

I. Background

Hon'ble National Green Tribunal vide order dated 10.01.2020 in OA 606/2018 reviewed the Compliance of *Municipal Solid Waste Management Rules, 2016* in the State of Bihar. The review of compliance shall be in terms of the following-

Order

Order No 3. : Direction of the tribunal include constitution of a four-member special task force in every district having- one each nominated by District Magistrate, Superintendent of Police, State Pollution Control Board and District level Legal Services Authority for awareness about SWM Rules, 2016.

Compliance

Special Task force has been formed vide letter no 378 (E), Forest, Environment and Climate Change Department, dated 05/04/2019 regarding awareness about the Solid Waste Management Rules 2016, (**Annex 1**)

Order No 5.: Setting up of Environmental cell

Compliance

- a) Environment Monitoring Cell has been formed under the Chief Secretary, Bihar at the state level and under the District Magistrate at District level. (**Annex. 2a**)
- b) Agency is hired for the selection of Environmental Officers, initially 52 Environmental officers were selected but only 39 were shortlisted after the document verification for the final appointment. 27 Environment officer out of 39 have joined the ULBs.
- c) Appointment process has initiated by the State Govt. for Assistant Public Sanitary and Waste Management office (286 No.) at the ULBs. Exam has been conducted through the Bihar Public Service Commission (**Annex. 2b**)

Order No 11 (Sub Order 3): Solid Waste Management

I. Number of ULBs

II. Over all waste management status

- a. Quantity of MSW generated (TPD)
- b. Quantity of MSW Collected (TPD)
- c. Quantity of MSW Transported (TPD)
- d. Quantity of MSW Processed (TPD)
- e. Quantity of MSW disposed in secured land fill site (TPD)
- f. Gap in Solid waste Management (TPD)

III. Waste Collection

- a. ULBs in which waste door to door collection is implemented
- b. ULBs in which segregation of waste is implemented
- c. ULBs in which transportation of segregated of waste is implemented

IV. Waste Processing**a. Material Recovery Facilities**

- (i) Total Capacity
- (ii) Number of MRFs
- (iii) Number of ULBs covered

b. Recycling

- (i) Total Capacity
- (ii) Number of Recycling Plant
- (iii) Number of ULBs covered

c. Composting

- (i) Total Capacity
- (ii) Number of Composting Plants
- (iii) Number of ULBs covered

d. Bio methanation

- (i) Total Capacity
- (ii) Number of Bio methanation plants
- (iii) Number of ULBs covered

e. Refuse Derived Fuel (RDF)

- (i) Total Capacity
- (ii) Number of RDF Plants
- (iii) Number of ULBs covered

f. Waste to Energy plant

- (i) Total Capacity
- (ii) Number of Waste to Energy Plants
- (iii) Number of ULBs covered

V. Waste Disposal

- a. Landfill
 - (i) Total Capacity
 - (ii) Number of Landfill sites
 - (iii) Number of ULBs covered

VI. Legacy Waste Management

- a. Number of dumpsites
- b. Quantity of waste dumped at dumpsites
- c. Number of dumpsites cleared
- d. Number of dumpsites in which biomining has commenced
- e. Time frame for clearing all dumpsites

VII. Other Information

- a. Information regarding development of model towns/cities/villages
- b. Creation of Environmental cell
- c. Standardization of rates for procurement of services/equipment (to do away with the tendering process) required for solid waste management.

Compliance-

Sl. No	Component	Achievement (As per MIS Report- Dec,2022)
1	Total Number of ULBs	141
2	Total Number of Ward	3398
3	Collection of Waste	3398 Wards
4	Total waste Generation	5467 TPD
5	Total Processing of Waste	1780 TPD
6	Total Waste Processing in %	33%
7	Gap in Solid waste Management (TPD)	3687 TPD
8	Functional Material Recovery Facility (MRF) in ULBS	35 (51 Units)
9	Functional Compost Plant in ULBS	87 (181 Units)

Table 1 Overview of quarterly report on SWM

Sl No	Item/Issues	Compliance Status (as per NGT letter)	Current Status	Present status/ Reasons for Non-Compliance
I	Number of ULBs	Submitted	141 ULBs	Total no. of ULBs is 141. Dumra ULB is merged with Sitamarhi Nagar Nigam vide notification no. 4410 dated 28-12-2020.
II	Overall waste management status			(Annex 3)
(a)	Quantity of MSW Generated (TPD)	Submitted	5467 TPD	Quantity of Total Waste Generation, Collection, and Transportation is 5467 TPD
(b)	Quantity of MSW Collected (TPD)	Submitted	5467 TPD	
(c)	Quantity of MSW Transported (TPD)	Submitted	5467 TPD	
(d)	Quantity of MSW processed (TPD)	Submitted	1780 TPD	<ul style="list-style-type: none"> • 33 % of waste is being processed with the help of 51 units of MRF and 181 units of compost plant, • Different type of IEC activities and Campaign is being conducted to mobilize community for source segregation, meeting with SHGs, Miking, Rally, Nukkad Natak, painting and Quiz Competitions.
(e)	Quantity of MSW disposed in secured land fill site (TPD)	Submitted	0	<ul style="list-style-type: none"> • 3687 TPD waste is disposed to dumpsite. Also, State has initiated tender for getting Environmental Clearance to develop Secure Landfill Sites for 32 ULBs.
(f)	Gap in Solid waste Management (TPD)	Submitted	3687 TPD	<ul style="list-style-type: none"> • 51 MRF is functional in 35 ULBs • 181 Compost Plant is functional in 87 ULBs • A cluster-based Integrated Solid Waste Management (ISWM) strategy is proposed for 161 ULBs across 24 clusters. This is now approved by the empowered committee of IDA and shared with Department of Economic Affairs, GoI for further actions. • The ISWM facility will involve door-to-door collection, transportation, processing of waste, Waste to Energy and disposal facility in a Sanitary landfill (SLF).

SI No	Item/Issues	Compliance Status (as per NGT letter)	Current Status	Present status/ Reasons for Non-Compliance
				For Dry Waste, Material Recovery facility (MRF) and Refused derived Fuel (RDF) plant is being proposed. For Wet Waste, Bio-methanation and windrow composting has been proposed. A 15 MW Waste to Energy plant is proposed for Patna Cluster. Scientific Landfill Facilities will be developed on cluster basis remaining 100 ULBs will have standalone approach.
III	Waste collection			
(a)	ULBs in which waste door to door collection is implemented	Submitted	141 ULBs	Collection, Segregation and Transportation of waste is implemented in 141 ULBs.
(b)	ULBs in which segregation of waste is implemented	Submitted	141 ULBs	
(c)	ULBs in which transportation of waste is implemented	Submitted	141 ULBs	
IV	Waste Processing			
IV (a)	Material Recovery Facility			(Annex 4)
(i)	Total Capacity (TPD)	Not submitted	814 TPD	51 MRF with a capacity of 814 TPD is functional in 35 ULBs. This report has been submitted through Quarterly Report "Oct-22 to Dec- 22" vide letter no 151, Dated 13/01/23. Moreover, under Integrated Solid Waste Management MRFs is proposed in all the ULBs under cluster approach.
(ii)	Number of MRFs	Submitted	51	
(iii)	Number of ULBs covered	Submitted	35	
IV (b)	Recycling			
(i)	Total Capacity (TPD)	Not submitted	5 TPD	1 Plant (Patna) for Plastic waste Management has been established with the support of UNDP
(ii)	Number of Recycling plants	Not submitted	1	

SI No	Item/Issues	Compliance Status (as per NGT letter)	Current Status	Present status/ Reasons for Non-Compliance
(iii)	Number of ULBs covered	Not submitted	1	RDFs produced in some of the ULBs are used in cement factories and road construction companies for the reuse of combustible items and some of them have tied up with the local Recyclers (Kabariwala). Recyclable items are being sold to the recyclers for generating revenue and recycling of materials.
IV (c)	Composting (Annex 5)			
(i)	Total Capacity (TPD)	Not Submitted	2387 TPD	Submitted through quarterly report Oct to Dec 22, vide letter no 151, Dated 13/01/23(Annex 5a)
(ii)	Number of Composting plants	Submitted	181	The gap in processing of waste is being planned to be achieved by 2023.
(iii)	Number of ULBs covered	Submitted	87	
IV (d)	Bio methanation (Annex 6)			
(i)	Total Capacity (TPD)	Not Submitted	1 TPD	Bihyan Nagar Panchayat has established a Bio methanation plant capacity of 1 TPD.
(ii)	Number of Bio methanation plants	Submitted	1 Unit	
(iii)	Number of ULBs covered	Not Submitted	1 ULB	
IV (e)	Refused Derived Fuel (RDF) Plant			
(i)	Total Capacity (TPD)	Not Submitted		Refused Derived Fuel (RDF) plant is being proposed under Integrated Solid Waste Management Plan.
(ii)	Number of RDF plants	Not Submitted		
(iii)	Number of ULBs covered	Not Submitted		
IV (f)	Waste to Energy Plants			
(i)	Total Capacity (TPD)	Not Submitted		A 15 MW plant is proposed for Patna Cluster
(ii)	Number of Waste to Energy plant	Not Submitted		One plant of waste to energy is proposed for Patna Cluster under Integrated Solid Waste Management Plan

SI No	Item/Issues	Compliance Status (as per NGT letter)	Current Status	Present status/ Reasons for Non-Compliance
(iii)	Number of ULBs covered	Not Submitted		A Waste to Energy project is proposed under the Integrated Solid Waste Management for Patna Cluster which has 11 nearby ULBs as its member ULBs.
V	Waste Disposal			
(a)	Landfill			(Annex 7)
(i)	Total Capacity (TPD)	Not Submitted		Tender is floated at the state level for the hiring of Agency/Organization/ Company for getting Environmental Clearance from the SEIAA for the development of 32 landfill sites. SLF Proposed at Cluster Level under Integrated Solid Waste Management.
(ii)	Number of Landfill sites	Not Submitted	32	
(iii)	Number of ULBs covered	Not Submitted	32	
VI	Legacy waste Management			(Annex 8)
(a)	Number of Dumpsites	Submitted	26	<ul style="list-style-type: none"> • 26 dumpsites with 11,74,471 tons of waste is identified having waste of more than 1000 tons. • Muzaffarpur has cleared the dumpsite while Patna, Munger, and Gaya Nagar Nigam have commenced the Biomining process.
(b)	Quantity of waste dumped at dumpsites (Tons)	Submitted	11,74,471 Ton	
(c)	Number of Dumpsites cleared	Submitted	1 (Muzaffarpur)	
(d)	Number of dumpsites in which biomining has commenced	Submitted	3 (Patna, Munger and Gaya Nagar Nigam)	

SI No	Item/Issues	Compliance Status (as per NGT letter)	Current Status	Present status/ Reasons for Non-Compliance
(e)	Time frame for clearing all dumpsites	Not submitted		23 ULBs which have more than 1000 Tons of legacy waste submitted their action plan on Swachhtam Portal (SBM Portal) with the timeline. Action plan is placed in the State-Level Technical Committee (SLTC) and is approved. All the ULBs have been instructed to do survey, estimation of quantity and immediate stabilization/reduction of volume by Biomining and windrows formation and following other SOPs as per the CPCB Guidelines for remediation of legacy waste. By the mid of year 2023, the dumpsite with larger quantity of legacy waste lying in the bigger cities are proposed to complete the biomining.
VII Other information				
(a)	Information regarding development of model towns/cities/villages	Submitted	6 Town (Rajgir, Bodhgaya, Munger, Muzaffarpur, Supaul and Bihar Sharif)	Six (6) Town (Muzaffarpur, Munger, Bihar Sharif, Supaul, Rajgir, and Bodhgaya) have been selected as Model Town for guiding to others regarding effective management of Solid Waste (Annex 9)
(b)	Creation of Environmental cell	Submitted	Completed	Agency is hired for the selection of Environmental Officer, initially, 52 Environmental officers were selected but after the document verification, only 39 were shortlisted for the final appointment. 27 Environment officers out of 39 have joined the ULBs (Annex 10)
(c)	Standardization of rates for procurement of services/equipment (to do away with the tendering process) required for solid waste management	Not submitted	N/A	A direction has been issued to all ULBs for using of GeM portal for any procurement related to SWM

4. Bio Mining of Legacy Waste Status

- Quantity of waste at Dumpsite in tones
- Is fresh waste still being dumped at dumpsite
- Quantity of waste being dumped (TPD)
- Has remediation of Legacy waste been done/under consideration

Table 2: Overview of Bio Mining status submitted

S No.	State	No of ULB/Dumpsite	Quantity of waste at Dumpsite in tones	Is fresh waste still being dumped at dumpsite (Yes/No)	If yes, the Quantity of waste being dumped (TPD)	Has remediation of Legacy waste been done (Y/N/Under consideration)
1	Bihar	26 ULBs have been identified having more than 1000 Tons of legacy waste	11,74,471 Tons	Yes		<ul style="list-style-type: none"> Muzaffarpur Municipal Corporation has remediated the legacy waste at their dumpsites while Patna, Munger and Gaya Municipal Corporations have commenced the Biomining. 12.25 lakh tons of waste have been remediated while remaining will be done as per the timeline by MoHUA 23 ULBs having legacy waste more than 1000 tons have submitted their action plan on Swachhtam Portal (SBM Portal) with the timeline. Action plan have been placed in the State Level Technical Committee (SLTC) for their approval. By the mid of the year 2023, the dumpsite with larger quantity of legacy waste lying in the bigger cities will complete the biomining (Annex 11)

5. Solid waste management of Million Plus Cities status

Table No 3- Overview of city wise information on SWM of Million Plus Cities

(Annex 12)

S No	State	City	MSW Generated (TPD)	Quantity of MSW Processed (TPD)	Quantity of MSW disposed in secured landfill site (TPD)	Gap in Solid waste Mgt (TPD)
1	Bihar	Patna Municipal Corporation	959 TPD	700 TPD	0	259 TPD Patna Municipal Corporation is having 8 units of functional MRF having capacity of 300 TPD and 29 Functional Compost Plant with Capacity of 450 TPD.

To minimize the gap in the processing facility, Patna cluster has proposed Compost, Bio methanation RDF, and Automated MRF with 15 MW Waste to Energy plant

Sewage Infrastructure-

Sewage Generation

6- Detail of Existing Sewage Infrastructure-

Table 1-

Sl No	State	Sewage Generation (in MLD)	Existing STP (Capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present (in MLD)
1	Bihar	1100 MLD (Approx.) from urban areas.	07 STPs - Total Capacity 224.5 MLD	73.83 MLD	(1100 MLD - 224.5 MLD) = 875.5 MLD
			Beur STP -43 MLD	Beur STP -13.38 MLD	
			Karmalichak STP-37 MLD	Karmalichak STP-26.67MLD	
			Saidpur STP -60 MLD	Saidpur STP -19.48 MLD	
			Pahari STP -60 MLD	Pahari STP -5 MLD,	
			Barh I&D and STP-11MLD,	Barh I&D and STP-3MLD,	
			Sonepur I&D and STP-3.5MLD,	Sonepur I&D and STP-1 MLD,	
			Sultanganj I&D and STP-10MLD,	Sultanganj I&D and STP-5.3MLD,	

Note: Ganga & Ganga Tributaries

Existing Sewage Generation & Installed Treatment Capacity

- Estimated Sewage Generation in the Main Stem of River Ganga is 632.568 MLD (Revised) for 23 Ganga Towns – 28 STPs.
- STPs have been sanctioned by NMCG for 17 Towns for 698 MLD capacities.
- Earlier 230 MLD existing 6 STPs were reported, which are as under
 - Beur STP – Old 35 MLD, New 43 MLD,
 - Karmalichak – New 37 MLD
 - Saidpur - Old 45 MLD, New 60 MLD,
 - Sultanganj – New 10 MLD
- Construction of 7 new STPs having 224.5 MLD capacities has been completed. Their associated sewerage networks will be commissioned in Feb 2023. Thereafter these STPs will be utilized at their full capacities. At present only 73.83 MLD is being utilized, i.e; 33%. Utilization capacity is dropped from 100 MLD to 73.83 MLD because of the difunctional of old STPs at Beur and Saidpur. 73.83 MLD is being utilized from new construction STPs.
- Currently, 1 STP (9 MLD) is completed and under T/R. Work on 12 STPs (352.5 MLD) is in progress. 9 STPs (157 MLD) will be completed in the year 2023 & 3 STPs (195 MLD) will be completed by Dec 2024.
- The estimated Sewage Generation for Urban areas is 1100 MLD. The present utilization of 7 STPs is 73.83 MLD. Hence present gap is 1026.17 MLD.

Sewage Generation and Installed Treatment Capacity for Tributaries of River Ganga.

- Estimated Sewage Generation in Tributaries of River Ganga is 287.05 MLD for 16 Towns – 24 STPs.
- STPs have been sanctioned for 4 Towns – 12 STPs (99.1 MLD) capacities. DPR for 12 towns – 12 STPs (187.5 MLD) sent to NMCG for approval.
- STPs under construction for 2 Towns – 6 STPs (66 MLD) and under the Tender stage of 2 towns-6 STPs (33.1 MLD)

Sewage Scheme for Most Polluted Rivers-

- 4 towns (Raxaul, Narkatiyaganj, Ramnagar & Jogbani) have been selected for the construction of STPs - 32.25 MLD
- STPs for 2 towns under the tender stage and 2 towns under DPR preparation.

Sewage Scheme for Most Important Towns

- 4 towns (Gaya, Arra, Bettiah and Katihar) have been selected for construction of STPs - expected 220 MLD
- DPR is under preparation.

Sewage Scheme under different funding

- 4 towns (Rajgir, Bodhgaya, Madhubani. Bihar Sharif & Muzaffarpur) have been selected for construction of STPs - 113 MLD
- STP at Rajgir is completed and the rest is under different stages of construction.
- Consultant selection is under process for preparing DPR for 11 towns to be covered with I&D and STP.

- FSTPs taken up in Bihar- DPR for 3 towns proposed to be covered with 68KLD capacity are
- sent to NMCG for approval. 76 towns are planned to cover with 1287kld capacity of FSTPs.

Issues raised in NGT Order in OA-606/2018, dated 30.11.2021

- Estimated Sewage Generation for Urban areas is 1100 MLD. The present utilization of 7 STPs is 73.83 MLD. Hence present gap is 1026.17 MLD
- FSTPs taken up in Bihar- **DPR for 3 towns** proposed to be covered with 68KLD capacity are sent to NMCG for approval. 76 towns are planned to cover with 1287kld capacity of FSTPs.
- **Reuse of treated wastewater-**
 - DPR is under preparation for utilization of treated wastewater for 9 STPs.
 - 3 DPRs are under sanctioning from GoB.
 - IOCL to utilize treated wastewater of Begusarai STP and land is already given for the establishment of the tertiary treatment plant.
 - For Barh STP, the finalization of MOU is under process with NTPC Barh.
 - For Kahalgaon STP, a feasibility report is under preparation for utilizing treated wastewater by NTPC Kahalgaon
 -

Treatment of 206 drains by Bioremediation

Annex-13

- Treatment of 206 drains of 71 towns started for which three agreements are executed. The test of treated water will be done by SPCB before payment to the agencies' (List of drains attached)