

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001-2015, ISO 14001:2015, ISO 45001:2018 Certified Board)

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No.2022-23/GSPCB/Tech/9832

28/07/2023

To,
The Chairman,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
DELHI- 110 0032.

**SUB:- ANNUAL REPORT ON SOLID WASTE MANAGEMENT RULES 2016 FOR THE
YEAR 2022-2023**

PART A

1.	Name of the State/Union territory	:	GOA
2.	Name & address of the State Pollution Control	:	GOA STATE POLLUTION CONTROL BOARD
3.	Number of local bodies responsible for management of solid wastes in the State/Union territory under these rules	:	205 NOS.
4.	No. of authorisation application received	:	Nil
5.	A Summary Statement on progress made by local body in respect of solid waste management.	:	Attached as Annexure-I
6.	A Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal.	:	Attached as Annexure-II
7.	A Summary Statement on progress made by local bodies in respect of Schedule II.	:	Attached as Annexure-III

Date: 28/07/2023

Place: SALIGAO- GOA


MEMBER SECRETARY
GOA STATE POLLUTION CONTROL BOARD

PARTB

Sr. No.	Description	Nos.
1.	Towns/cities	
	(i) Total Number of towns/cities	14
	(ii) Total number of ULBs	14
	(iii) Number of Class I & class II cities/towns	
	(a) Nos. of Towns Class-I (more than 1,00,000 Population)	1
	(b) Nos. of Class-II Towns (50,000-99,000 Population)	0
2	Authorisation status (names/number)	
	(i) Number of Application received	00
	(ii) Number of Authorization granted	00
	(iii) Authorizations under scrutiny	00
3	SOLID WASTE Generation status	
	(i) Solid waste generation in the state (TPD)	193.02
	(ii) collected	193.02
	(iii) treated	186.02
	(iv) Landfilled/Dumpsite	6.00
4	Compliance to Schedule I of SW Rules (Number/names of towns/capacity)	
	(i) Good practices in cities/towns (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Cuncolim, Canacona, Curchorim-Cacora, Mapusa Sanguem & Valpoi)	12
	(ii) House to house collection (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Canacona, Cuncolim, Curchorim-Cacora, Sanguem, Mapusa, Margao, Mormugao & Valpoi, Sanguem)	14
	(iii) Segregation (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Canacona, Cuncolim, Curchorim-Cacora, Sanguem, Mapusa, & Valpoi)	12
	(iv) Storage (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Canacona, Cuncolim, Curchorim-Cacora, Sanguem, Mapusa, Margao, Mormugao & Valpoi)	14
	(v) Covered transportation (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Canacona, Cuncolim, Curchorim-Cacora, Sanguem, Mapusa, Margao, Mormugao & Valpoi)	14

5. (i) Processing of SW (Number /names of towns/capacity)

(i) Solid waste processing facilities setup:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization
01	Pernem	NA	0.5TPD	NA
02	Bicholim	NA	05 TPD	NA
03	Sankhali	NA	NA	NA
04	Mapusa	NA	05 TPD	NA
05	CCP Panaji	NA	05 TPD	NA
06	Valpoi	NA	NA	NA
07	Ponda	NA	1.5 TPD	NA
08	Mormugao	NA	05 TPD	NA
09	Margao	NA	05 TPD	NA
10	Curcholem - Cacora	NA	0.5 TPD	NA
11	Sanguem	NA	0.5 TPD	NA
12	Cuncolim	NA	0.5 TPD	NA
13	Quepem	NA	NA	NA
14	Canacona	NA	05 TPD	NA

(ii) Processing facility operational:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelltization
01	Bicholim	NA	YES	NA
02	Sankhali	NA	NA	NA
03	Mapusa	NA	YES	NA
04	Panaji	NA	YES	NA
05	Valpoi	NA	NA	NA
06	Ponda	NA	YES	NA
07	Mormugao	NA	NO	NA
08	Quepem	NA	YES	NA
09	Cuncolim	NA	YES	NA
10	Sanguem	NA	NO	NA
11	Margao	NA	YES	NA
12	Pernem	NA	YES	NA
13	Curcholem – Cacora	NA	YES	NA
14	Canacona	NA	NO	NA

(iii) Processing facility under installation/planned:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Peltization
i)	NIL	NIL	NIL	NIL

(iv) Waste-to-Energy Plants: (Number/names of towns/capacity) -----01

Sl. No.	Plant Location	Status of operation	Power generation (MW)	Remarks
i)	Hindustan Waste Treatment Plant Pvt. Ltd. at Saligao, Bardez Goa	In Operation	1.372	The area comes under Panchayat jurisdiction.

6	Disposal of solid waste (number/names of towns/capacity):		
	(i) Landfill sites identified(Ponda, Sanguem)		02
	(ii) Landfill constructed (Pernem, Bicholim, Sankhali, Quepem, Cuncolim, Valpoi, Margao)		07
	(iii) Landfill under construction:		NIL
	(iv) Landfill in operation: (Pernem. Bicholim)		02
	(v) Landfill exhausted		00
	(vi) Landfill capped		NIL
7	Solid Waste Dumpsites (number/names of towns/capacity):		
	(i) Total number of existing dumpsites (Pernem, Mapusa, Curchorem-Cacora, Margao, Mormugao)		05
	(ii) Old dump (Bicholim, Canacona & Cuncolim)		04
	(ii) Dumpsites reclaimed/capped		01
	(iii) Dumpsites converted to sanitary landfill		NIL

8 Monitoring at waste processing/Landfill sites:

Sl. No.	Name of facilities	Ambient Air	Ground water	Leachate Quality	Compost Quality	VOCs
i)	Pernem Municipal Council	-	-	-	-	-
ii)	Bicholim Municipal Council	-	-	-	-	-
iii)	Sankhali Municipal Council	-	-	-	-	-
iv)	Quepem Municipal Council	-	-	-	-	-
v)	Cuncoim Municipal Council	-	-	-	-	-
vi)	Canacona Municipal Council	-	-	-	-	-
vii)	Corporation of the City of Panaji	-	-	-	-	-
viii)	Valpoi Municipal Council	-	-	-	-	-
ix)	Ponda Municipal Council	-	-	-	-	-
x)	Sanguem Municipal Council	-	-	-	-	-
xi)	Margao Municipal Council	-	-	-	-	-
xii)	Curchoem- Cacora Municipal Council	-	-	-	-	-
xiii)	Mapusa Municipal Council	-	-	-	-	-
xiv)	Mormugao Municipal Council	-	-	-	-	-

9 Status of Action Plan prepared by Municipalities.

- (i) Total No. Of Municipalities-----14
- (iii) Number of Action Plan Submitted-----14

ANNEXURE I

IMPLEMENTATION SCHEDULE

Sr. No.	Name of Corporation/ Municipal Council/ Village Panchayat's	Setting up of waste processing, disposal facilities and material recovery facilities.	Monitoring the performance of waste processing and disposal facilities	Identification of landfill sites for future use and making site(s) ready for operation
1	Corporation of the City (CCP) of Panaji, Panaji – Goa.	<p>The Goa State Pollution Control Board has granted authorization to the CCP for material recovery facility & composting station at P.T. sheet no. 56 chalta no. 6 and for setting up & Operation of waste processing facility at the following locations:</p> <p>(i) Heera Petrol Pump Site. (ii) Panaji Municipal Market.</p> <p>CCP has set up decentralized composting units in Housing Societies as well as in Municipal market area and public gardens to treat the bio degradable waste. CCP has also set up decentralized Biomethanation Plants having cumulative design capacity of 5TPD.1 The Non-recyclable dry waste is baled and sent as a RDF to cement factories.</p>		Does not have Landfill site.
2	Pernem Municipal Council, Pernem – Goa.	<p>The Council treat the collected bio degradable waste through Biodigester of design Capacity 0.5 TPD. The council has set up material recovery facility. The Non-recyclable dry waste is baled and sent as a RDF to cement factories.</p>	YES	Construction of Landfill site is completed.
3	Bicholim Municipal Council, Bicholim – Goa.	<p>The Council treat the collected bio degradable waste through Biogas plant with design capacity of 05 TPD. The council has set up material recovery facility. The Non-recyclable dry waste is baled and sent as a RDF to cement factories.</p>	YES	Landfill site constructed.

4	Sanquelim Municipal Council, Sanquelim – Goa	The Council treat the collected bio degradable waste through windrows composting. The council has set up material recovery facility and has completed construction of landfill site. The Non recyclable dry waste is baled and sent as a RDF to cement factories.	YES	Landfill site constructed.
5	Valpoi Municipal Council, Valpoi – Goa.	The Council treat the collected bio degradable waste through windrows composting and also through bio gas plant. The council has set up material recovery facility and has completed construction of landfill site. The Non recyclable dry waste is baled and sent as a RDF to cement factories.	YES	Landfill site constructed.
6	Ponda Municipal Council, Ponda – Goa.	The Council treat the collected bio degradable waste through Biogas plant with design capacity of 1.5 TPD, the council has set up material recovery facility and also installed a waste incinerator at sy.no. 45/1, Keriyan-Khandepar, Ponda-Goa. The Non recyclable waste is baled and sent as a RDF to cement factories.	YES	Not yet set up.
7	Mapusa Municipal Council	The Council has set up decentralized composting units within the city and a centralized unit at Assagao Plateau. The Council has also installed bio gas plant of design capacity 5TPD. The council has set up material recovery facility. The Non recyclable dry waste is baled and sent as a RDF to cement factories.	-	Not yet set up.
8	Mormugao Municipal Council, Mormugao – Goa.	The Council has installed 05-ton capacity bio-gas plant for treatment of bio degradable waste. The council has set up material recovery facility. The Non-recyclable dry waste is baled and sent to GWMC Saligao	YES	Not yet set up.
9	Margao Municipal	The Council has installed 05 TPD capacity bio-gas		Landfill is not in use.

	Council, Margao – Goa.	plant for treatment of bio degradable waste and also carries out windrows composting, however, proper procedure for Windrow Composting is not followed. The council has set up material recovery facility and has completed construction of landfill site. The Non-recyclable dry waste is baled and sent as a RDF to cement factories.	YES	
10	Quepem Municipal Council, Quepem – Goa.	The Council send the collected bio degradable waste to Goa Waste Management Co-operation (GWMC) Cacora. The council has set up material recovery facility and has completed construction of landfill site. The Non-recyclable dry waste is baled and sent to GWMC.	YES	Construction of Landfill site is completed. Site not used.
11	Curchorem-Cacora Municipal Council, Curchorem – Goa.	The Council send the collected bio degradable waste to Goa Waste Management Co-operation (GWMC) Cacora. The Council has set up 0.5 TPD Bio methanation Plant in the market to treat the wet waste produced by the market. The council has set up material recovery facility and has completed construction of landfill site. The Non-recyclable dry waste is baled and sent to GWMC.	YES	Not yet set up.
12	Cuncolim Municipal Council, Cuncolim – Goa.	The Council treat the collected bio degradable waste through windrows composting and through 0.5TPD biogas plant, the council has set up material recovery facility, also installed a waste incinerator and has completed construction of landfill site. The Non-recyclable dry waste is baled and sent as a RDF to cement factories.	YES	Construction of Landfill site is completed. Site not used.
13	Sanguem Municipal Council, Sanguem – Goa.	The Council sends its segregated waste directly to Goa Waste Management Cooperation (GWMC) Plant Cacora. The MRF & Bio Methanation Plant is non functional .	-	Site identified and land acquisition in process.
14	Canacona Municipal Council	The Council has installed 5 TPD capacity bio-gas plant for treatment of bio degradable waste. The Council has set up decentralized composting facility. The council has set up material recovery	YES	Not yet set up.

		facility. The Non recyclable dry waste is baled and sent as a RDF to cement factories.		
15	Village Panchayat's	The Goa State has 191 village Panchayat's most of the village Panchayats collects dry waste and the same is stored in temporary/permanent MRF sheds for onward disposal through Goa Waste Management Corporation	-	Not Applicable.

ANNEXURE-II

MANAGEMENT OF SOLID WASTES

Sr.No	Name of Municipal Council/Corporation	Collection of Solid waste	Segregation of Solid Wastes	Transportation of Solid wastes	Disposal of Solid wastes
1	Corporation of City of Panaji	Complied	Complied	Complied	Complied
2	Pernem Municipal Council	Complied	Partly complied	Complied	Complied
3	Bicholim Municipal Council	Complied	Complied	Complied	Complied
4	Sanquelim Municipal Council	Complied	Complied	Complied	Complied
5	Valpoi Municipal Council	Complied	Complied	Complied	Complied
6	Ponda Municipal Council	Complied	Complied	Complied	Complied
7	Mapusa Municipal Council	Complied	Partly complied	Complied	Complied
8	Mormugao Municipal Council	Complied	Partly Complied	Complied	Partly Complied
9	Margao Municipal Council	Complied	Partly Complied	Complied	Partly Complied
10	Quepem Municipal Council	Complied	Complied	Complied	Complied

11	Curchorem-Cacora Municipal Council	Complied	Partly Complied	Complied	Complied
12	Cuncolim Municipal Council	Complied	Partly Complied	Complied	Partly Complied
13	Sanguem Municipal Council	Complied	Complied	Complied	Partly complied
14	Canacona Municipal Council	Complied	Partly Complied	Complied	Partly Complied
15	All Village Panchayat's *				

*Only dry waste collected by 191 Village Panchayat's is sent to baling stations established by Goa Waste Management Corporation (GWMC) wherein it is baled and sent for co-incineration in cement kilns.

ANNEXURE III

STANDARDS FOR COMPOSTING, TREATED LEACHATES AND INCINERATION

Sr.No.	Name of Municipal Council/Corporation	Establishment of Composting Plant
1	Corporation of City of Panaji	Has established decentralized composting stations & Biogas plants
2	Pernem Municipal Council	Has established Biogas plant
3	Bicholim Municipal Council	Has established Biogas plant
4	Sanquelim Municipal Council	Has established mechanized composting plant
5	Valpoi Municipal Council	Has established a composting plant
6	Ponda Municipal Council	Has established Biogas plant
7	Mapusa Municipal Council	Has established Biogas plant
8	Mormugao Municipal Council	Has established Biogas plant
9	Margao Municipal Council	Has established Biogas plant

10	Quepem Municipal Council	Has established composting stations
11	Curchorem-Cacora Municipal Council	Has established decentralized composting units
12	Cuncolim Municipal Council	Has established Biogas plant of 0.5TPD & balance wet waste composting is carried out using windrows method
13	Sanguem Municipal Council	Has established Biogas plant
14	Canacona Municipal Council	Has established composting stations and Biogas plant