STATUS REPORT OF COMPLIANCE AND IMMEDIATE FUTURE PLANS OF DADRA & NAGAR HAVELI

Submitted to
Hon'ble National Green Tribunal
Principal Bench
New Delhi

July, 2019

UT ADMINSTRATION OF DADRA & NAGAR HAVELI

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S. No	Particulars
A	UT Level Advisory Body vide Notification No. TPS/105(19)/SWMR-2016/2017/1319 dated 21.11.2017
B	Dadra and Nagar Haveli Silvassa Municipal Council Solid Waste (Handling & Management) Bye Laws, 2018 notified vide Notification No. DNH/SMC/BYE LAWS/18/2017 dated 28.03.2018
C	Dadra & Nagar Haveli Solid Waste Management Policy, 2018 notified vide Notification No. SMC/CO/GNL/State Policy/ 263/2018-19/53 dated 11/09/2018
D	State Level Committee of the UT of Dadra & Nagar Haveli for the implementation of the Solid Waste Management Rules, 2016 is constituted vide No. PCC/DDD/NGT-606(2018)(DNH)/2018-19/51 dated 29/04/2019 for the compliance of the Hon'ble National Green Tribunal (Principal Bench), New Delhi Order dated 16.01.2019 in O.A. 606/2018.
E	Annual Report for the year 2018-19 in Form –V of the Solid Waste Management Rules, 2016 had been submitted to the Central Pollution Control Board, New Delhi vide letter No. PCC/DDD/SWM/DNH/18-19/481 dated 31/07/2019.
F	Minutes of the various meeting which were conducted by the District Collector/ Magistrates, Dadra & Nagar Haveli on fortnightly to review the status of Solid Waste Management.
G	Silvassa Municipal Council vide its Order dated 13/12/2018 had notified the provisions for the management, handling and disposal of Construction and Demolition waste generated in the UT of Dadra & Nagar Haveli.
H	The UT Administration of Dadra & Nagar Haveli has imposed a blanket ban over the use, sale and storage of all kinds of plastic bags in the U.T. of DD & DNH.
I	UT Administration has constituted UT Level Advisory Body for Dadra Nagar Haveli vide No. PCC/DDD/Plastic (W,M&H) Rules,2011/11-12/663 dated 11/01/2012.
J	Annual Report for the year 2018-19 of the Plastic Waste Management Rules, 2016 had been submitted to the Central Pollution Control Board, New Delhi vide letter No. PCC/DDD/PW/PART-IV/19-20/432 dated 17/07/2019.
K	Action Plan for compliance of Bio Medical Waste Management

	Rules, 2016 which includes inventory for the year 2018-19 was prepared and submitted to the CPCB vide letter No. PCC/DMN/NGT/710/2017/18-19/34 dated 15/04/2019.
L	Annual Report for the year 2018-19 of the Biomedical Waste Management Rules, 2016 had been submitted to the Central Pollution Control Board, New Delhi vide letter No. PCC/DDD/BMW/19-20/433 dated 17/07/2019.
M	State level Advisory Committee under the Bio Medical Waste Management Rules, 2016 is constituted for the UT of Dadra & Nagar Haveli vide No. ADM/DS/HEALTH/BMW2016/2019/393 dated 31/07/2019.
N	Department of Health and Family Welfare, U.T of Dadra & Nagar Haveli has submitted report on Bio Medical Waste Management in Dadra & Nagar Haveli.
O	Annual inventory on hazardous & other waste generation and its management in the UT of Daman & Diu and Dadra & Nagar Haveli for the year 2017-18 had been submitted to the CPCB vide letter No. PCC/DDD/HW-2016/CPCB/16-17/423 dated 12/07/2019
P	Minutes of the various meetings of the State Level Committee held under the Chairmanship of Advisor to Administrator
Q	River Rejuvenation Committee (RRC) constituted under the chairmanship of Director, Municipal Administration, Daman &Diu vide notification no.PCC/NGT-673/2018/18-19 dated 08/01/2019
R	Minutes of the 4th meeting of the Task Team for ensuring compliance to Hon'ble NGT (PB), New Delhi order dated 20.09.2018 and 19.12.2018 in OA No 673/2018 in the Matter of News Item Published in 'THE HINDU' Titled "More river stretches are now critically polluted: CPCB" held during 28.3.2019.
S	Revised Action Plan for Rejuvenation of polluted stretch of the Damanganga River submitted to the CPCB after approval of the River Rejuvenation Committee for the UT of DD & DNH.

I. Introduction

The Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi vide order dated 11.04.2019 in Original Application No. 606/2018 in the matter related to compliance of Municipal Solid Waste Management Rules, 2016, directed the Chief Secretaries/Advisor to Administrators of all States and UTs to review the progress on all the below issues.

i. Steps for compliance of Rules 22 and 24 of SWM Rules be now taken within six weeks to the extent not yet taken. Similar steps be taken with regard to Bio-Medical Waste Management Rules and Plastic Waste Management Rules.

ii. All the towns and Village Panchayats of the UTs may be made fully compliant in respect of environmental norms within one year.

iii. A quarterly report be furnished by the Advisor to Administrator, every three months. First such report shall be furnished by July 15, 2019.

iv. The Chief Secretary may personally monitor the progress, atleast once in a month, with all the District Magistrates.

v. The District Magistrates or other Officers may be imparted requisite training.

vi. The District Magistrates may monitor the status of compliance of environmental norms, atleast once in two weeks.

vii. Performance audit of functioning of all regulatory bodies may be got conducted and remedial measures be taken, within six months.

viii. The Administrator/Advisor may remain present in person before the Tribunal with the status of compliance in respect of various issues mentioned in para 20 as well as any other issues discussed in the above order on 22.10.2019.

Accordingly, State Level Committee under the Chairmanship of Advisor to the Administrator, Daman and Diu and Dadra Nagar Haveli has been constituted vide Notification No. PCC/DDD/NGT-606(2018)(DNH)/2018-19/51 dated 29.04.2019. Advisor to Administrator reviewed all the issues related to compliance of Waste Management Rules. The status report and the immediate future Plan for UT of Dadra & Nagar Haveli is prepared and finalised. The report deals with compliances and immediate actions under SWM, Plastic Waste Management, Bio Medical Waste Management, E- Waste Management, Hazardous Waste Management, Sewage Treatment and Sewerage Networking, Damanganga River Rejuvenation Plan, Ambient Air Quality Monitoring and others.

II. Status of compliance of SWM Rule, 2016, Plastic Waste Management Rules, 2016 and Bio-Medical Waste Management Rules, 2016 in their respective areas.

A. Solid Waste Management Rules, 2016

For effective implementation of the Solid Waste Management Rules, 2016 UT Administration of Dadra & Nagar Haveli had notified the following.

a) UT Level Advisory Body vide Notification No. TPS/105(19)/SWMR-2016/2017/1319 dated 21.11.2017 (**Annexure A**).

b) Dadra and Nagar Haveli Silvassa Municipal Council Solid Waste (Handling & Management) Bye Laws, 2018 notified vide Notification No. DNH/SMC/BYE LAWS/18/2017 dated 28.03.2018 (**Annexure B**).

c) Dadra & Nagar Haveli Solid Waste Management Policy, 2018 notified vide Notification No. SMC/CO/GNL/State Policy/ 263/2018-19/53 dated 11/09/2018 (**Annexure C**).

d) State Level Committee of the UT of Dadra & Nagar Haveli for the implementation of the Solid Waste Management Rules, 2016is constituted vide No. PCC/DDD/NGT-606(2018)(DNH)/2018-19/51 dated 29/04/2019 for the compliance of the Hon'ble National Green Tribunal (Principal Bench), New DelhiOrder dated 16.01.2019 in O.A. 606/2018 (**Annexure D**).

e) Annual Report for the year 2018-19 in Form –V of the Solid Waste Management Rules, 2016 had been submitted to the Central Pollution Control Board, New Delhi vide letter No. PCC/DDD/SWM/DNH/18-19/481 dated 31/07/2019(**Annexure E**).

f) Various meeting were conducted by the District Collector/Magistrates, Dadra & Nagar Haveli on fortnightly to review the status of Solid Waste Management for the compliance of the directions of the Hon'ble NGT (PB), New Delhi (**Annexure F**).

Other steps initiated by the UT Administration of Dadra & Nagar Havelifor effective implementation of the Solid Waste Management Rules, 2016:

a. Presently local bodies had stopped dumping waste at old dumping sites at Khadoli (DNH). About 2,00,120 Ton of legacy waste is in the existing old dumping site/ unsecured landfill sites at Khadoli (UT of Dadra & Nagar Haveli) and it is expected to be cleared by 2020.

b. 5.27 Hector of land at Kharadpada in the UT of Dadra & Nagar Haveli had been identified to establish scientific landfill site of capacity 112 TPDwhich will be equipped with the material recovery facility (MRF) and waste processing facility. The said new scientific landfill site is provided with the CCTVs for continuous monitoring. Development of scientific landfill site at Kharadpada will be completed by June, 2020.

c. Silvassa Municipal Council vide its Order dated 13/12/2018 had notified the provisions for the management, handling and disposal of Construction and Demolition waste generated in the UT of Dadra & Nagar Haveli (**Annexure G**).

d. Silvassa is having plastic recycling industries which utilise plastics, PET bottles scraps and waste polyester yarns as raw materials to manufacture recycled plastic granules and fibres.

e. All the bulk waste generators (Hotels and Restaurants) have been identified and it has been made compulsory for them to process their own waste. 60% Hotels/Restaurants are complying and processing the wastes.

f. The remaining small hotels/restaurants are persuaded to process their waste.

g. User fee from different stakeholders is being levied along with property tax and a resolution to this effect has already been passed in the Silvassa Municipal Council.

1. Status of SWM in Dadra & Nagar Haveli

a) Silvassa Municipal Council (SMC) Area:

- There are 15 wards in Silvassa Municipal Council and has a population of 98,265 people. Door to Door collection, segregation, processing and disposal of solid wastes is being carried out regularly and effectively in SMC areas the details are in Table 1 as under.

Table 1: Waste Management in SMC Area

Sr. No.	Data for Solid Waste Management	Existing Status	Remark
1.	Quantity of legacy waste in existing old dumping/ landfill sites.	2 Lakh MT (at old dumping site Khadoli)	---
2.	Total Quantity of Waste Generation/ Ward Wise Waste Generation	45 Ton per Day from 15 wards	---
3.	Number of Primary Collection Depots	388	---
4.	Number of Transportation vehicles involved in the SWM along with capacity and number of trips in a day.	18 Tata 407 @ three trips per day for collection of approx. 45 Ton of waste from 15 wards.	---
5.	Number of informal waste collectors/ waste picker/ other informal agencies authorized by the local body to handle waste	172	Waste pickers have been identified and issued licenses
6.	Door to Door Collection (Ward Wise)	100 % Door to Door collection from 15 Wards	---
7.	Segregation of Collected Wastes at Source (Ward Wise)	54% of collected wastes is being segregated at Source	100% will be achieved by September, 2019
8.	Quantity of Recyclable Waste (segregated non-biodegradable solid waste which can be transformed into new material or product or as raw material for producing new products which may or may not be similar to the originalproducts)	11 Ton per Day (Approx.)	---

9.	Quantity of Combustible Waste (non-biodegradable, non-recyclable, non-reusable, non-hazardous solid waste having minimum calorific value exceeding 1500 kcal/kg and excluding chlorinated materials like plastic, wood pulp, etc.)	11 Ton per Day (Approx.)	---
10.	Quantity of Sanitary Waste (wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste)	0.04 Ton per Day (Approx.)	---
11.	Quantity of Domestic Hazardous Waste Generation (i.e. discarded paint drums, pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level)	0.04 to 0.3 Ton per Day (Approx.)	---
12.	Quantity of Waste Suitable for Stabilization (biodegradable waste)	23 Ton per Day (Approx.)	---

b) Dadra & Nagar Haveli District Panchayat Area

- Dadra & Nagar Haveli rural areas include 20 Gram Panchayats (183 Wards), having a population of 239,385 people. Door to Door collection, segregation, processing and disposal have been initiated in 8 Gram Panchayat (77 Wards). 30 MT of solid wastes are generated on daily basis in the 8 Gram Panchayat. 100 % Door to Door collection, segregation, processing and disposal of generated wastes in remaining 12 Gram Panchayats (106 wards) will be done by June, 2020 and the details are in Table 2 as under.

Table 2: Waste Management in Rural Areas of Dadra & Nagar Haveli

Sr. No.	Data for Solid Waste Management	Existing Status	Remark
1.	Quantity of legacy waste in existing old dumping/ landfill sites.	120 MT (at old dumping site Khadoli)	--
2.	Total Quantity of Waste Generation/ Ward Wise Waste Generation	30 Ton per Day from 8 Gram Panchayats (77 wards)	Data of waste generation in remaining 12 Gram Panchayats (106 wards) will be gathered by June 2020
3.	Number of Primary Collection Depots	77	Another 106 Primary Collection Depots will be installed by December 2019.
4.	Number of Transportation vehicles involved in the SWM along with capacity and number of trips in a day.	11 Nos. Tata 407 @ 2 trips/day for collection of approx. 30 Ton of waste from8 Gram Panchayats (77 wards).	100% collection will be achieved by June 2020
5.	Number of informal waste collectors/ waste picker/ other informal agencies authorized by the local body to handle waste.	Not identified, however 2-3 in each Gram Panchayat	Survey & Registration will be completed by December 2019
6.	Door to Door Collection (Ward Wise)	100% in 8 Gram Panchayats (77 wards)	In remaining 12 Gram Panchayats (106 wards) it will be done by

			December 2019
7.	Segregation of Collected Wastes at Source (Ward Wise)	100% in 8 Gram Panchayats (77 wards)	In remaining 12 Gram Panchayats (106 wards) it will be done by March 2020
8.	Quantity of Recyclable Waste (segregated non-biodegradable solid waste which can be transformed into new material or product or as raw material for producing new products which may or may not be similar to the original products)	11.40 Ton per Day (Approx.)	---
9.	Quantity of Combustible Waste (non-biodegradable, non-recyclable, non-reusable, non-hazardous solid waste having minimum calorific value exceeding 1500 kcal/kg and excluding chlorinated materials like plastic, wood pulp, etc.)	11.10 Ton per Day (Approx.)	---
10.	Quantity of Sanitary Waste (wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste)	0.3 Ton per Day (Approx.)	---
11.	Quantity of Domestic Hazardous Waste Generation (i.e. discarded pain drums,	0.3 Ton per Day (Approx.)	

	pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level)		---
12.	Quantity of Waste Suitable for Stabilization (biodegradable waste)	6.9 Ton per Day (Approx.)	June 2020

Future Plans and Time Schedule:

- The immediate future plan for implementation of SWM Rules along with the time schedule is given separately for both Silvassa Municipal Council and Dadra & Nagar Haveli District Panchayat Areas in Table 3 and Table 4 as under.

Table 3: Future Plans for Implementation SWM Rules in Silvassa Municipal Council (DMC) Area

Sr. No.	Actions to be taken for implementation of SWM Rules, 2016	Existing Status of implementation	Targeted time line for complete implementation of SWM Rules, 2016.
1.	Clearing legacy waste from existing dumping/landfill sites.	Tender for clearing of legacy waste is being prepared.	June, 2020
2.	Computerization of Waste Collection Process.	In process	December, 2019
3.	Penalty provisions	Implemented under SWM bye laws and executive order	Rs. 10.92 lakhs released as penalty from violators. (Approx.)
4.	Centralized Waste Stabilization Facilities with Capacity (i.e. Windrow/	One Centralized plant Windrowed based Aerobic composting capacity of	Under construction to be functional by

	Microbial Composting, Vermi - Composting, Bio - Methanation, Anaerobic Digestion or any other appropriate processing for Bio-Stabilization of Biodegradable Wastes)	85TPD	September,2019
5.	Scientific Landfill Site with Capacity	Scientific Landfill Site of capacity 112 MTD will be constructed at Kharadpada Site, which is having 5.27 Hector of land.	June, 2020

Table 4: Future Plans for Implementation of SWM Rules in Dadra & Nagar Haveli Rural Areas

Sr. No.	Actions to be taken for implementation of SWM Rules, 2016	Existing Status of implementation	Targeted time line for complete implementation of SWM Rules, 2016.
1.	Clearing legacy waste from existing dumping/landfill sites.	Tender for clearing of legacy waste is being prepared by the SMC.	June, 2020
2.	Computerization of Waste Collection Process.	In process	Mach, 2020
3.	Penalty provisions	Penalty is being collected in similar lines as SMC.	By-Laws are being prepared.
4.	Centralized Waste Stabilization Facilities with Capacity (i.e. Windrow/ Microbial Composting, Vermi - Composting, Bio Methanation, Anaerobic Digestion or any other appropriate processing for Bio-Stabilization of Biodegradable Wastes)	One Centralized plant Windrowed based Aerobic composting capacity of 85TPD	Under construction to be functional by September, 2019
5.	Scientific Landfill Site with Capacity	Scientific Landfill Site of capacity 112 MTD	

		will be constructed at Kharadpada Site, which is having 5.27 Hector of land.	June, 2020

B. Plastic management Rules, 2016

- The UT Administration of Dadra & Nagar Haveli has imposed a blanket ban over the use, sale and storage of all kinds of plastic bags in the U.T. of DD & DNH (**Annexure H**).

- No supplier will supply any kind of plastic carry bags to any vendor. No manufacturer will sell any kind of plastic carry bags to anyone.

- All the shopkeepers, hoteliers, bars, restaurants, commercial establishments, hospitals, institutions, street vendors, fruits and vegetable vendors, and any other establishments are restricted from use of any kind of plastic carry bags.

- Manufacturing of plastic carry bags <50 micron is not allowed in the UT of Dadra & Nagar Haveli.

- All the plastic manufacturing industries in the Dadra & Nagar Haveli are marking & labelling on plastic carry bags & multi-layered packaging.

- UT Administration has constituted UT Level Advisory Body for Daman & Diu and Dadra Nagar Haveli vide No. PCC/DDD/Plastic (W,M&H) Rules,2011/11-12/663 dated 11/01/2012(**Annexure I**).

- Annual Report for the year 2018-19 of the Plastic Waste Management Rules, 2016 had been submitted to the Central Pollution Control Board, New Delhi vide letter No. PCC/DDD/PW/PART-IV/19-20/432 dated 17/07/2019 (**Annexure J**).

- There is generation of 1947.7 TPA of plastic waste generation in the UT of Dadra & Nagar Haveli.

- 100% of the generated plastic waste is being segregated from the collected municipal solid waste and send to the recycling industries.

- There are 104 number of plastic manufacturing units/ recycling units/ producers/ brand owners out of which 49 are registered and 55 are unregistered by the Pollution Control Committee, Dadra & Nagar Haveli. All the 55 unregisteredplastic manufacturing units/ recycling units have been directed to get themselves registered with the PCC.

- Utilization of plastic waste in road construction is under process.

- An amount of Rs.66,200/- had been collected as penalty during the year 2018-19.

- Various IEC activities listed under have been carried out by PCC and respective local bodies to create awareness among all walks of life.

    - Published advertisements in the Local News paper of Daman and Dadra Nagar Haveli regarding the ban on use of plastic bags.

    - Hoardings and banners have been displayed at various places of public importance to create awareness among public and visitors on plastic pollution and ban on plastic carry bags.

    - Self adhesive stickers on "No to Plastics" have been distributed to all the retail shop keepers to sensitise them about the ill effects of plastic carry bags.

    - Panchayats have been asked to take up awareness programmes on plastic pollution and ban on use of plastic carry bags.

    - Cloth bags, jute bags and paper bags have been distributed to public by PCC and Industries through CSR as part of Swacchata Mission to promote use of cloth/Jute bags instead of plastic carry bags.

- Regular meetings have been held by Collector/Member Secretary, PCC with various stakeholders viz. Industries, Shopkeepers, traders, PRI members, and Govt. Departments to implement the blanket ban on use, sale and storage of Plastic carry bags.

- Enforcement drive has been carried out by flying squad in market areas.

- Many Awareness programs have been conducted on theme 'Say No to Plastic Movement'.

- Open Burning of plastic has been banned as part of Solid Waste Management Bye Laws and being enforced strictly.

- Framing of Bye Laws for effective implementation of plastic Management Rules, 2016 is under process. It will be notified on or before July 2019.

C. Bio-Medical Waste Management Rules, 2016.

The Bio medical Management Rules, 2016 is being implemented in the UT of Dadra & Nagar Haveli very effectively. The status of Health Care Facilities, the waste generated and the steps taken by the Administration in compliance of the said rules are presented in Table 9, Table 10 and Table 11 as under.

Table 5: Status of Health Care Facilities in Dadra & Nagar Haveli

Sr. No.	HCF Category	No. of HCFs in Dadra & Nagar Haveli
a.	Bedded Hospitals	21
b.	Non-bedded Hospitals	52

c.	Others (Veterinary hospitals/Research Organizations etc.)	8
	Total	81

Table 6 :Bio Medical Waste generation in Govt. Hospitals of Dadra & Nagar Haveli

Health Unit	Monthly Average (in Kgs)				Yearly Total (in Kgs)			
	Red	**Yellow**	**Sharp Container**	**Blue**	**Red**	**Yellow**	**Sharp Container**	**Blue**
VBCH	1672.4	2222.5	66.83	493.1	20068.8	26670	801.96	5917.2
Khanvel/Rudana	392	437	7.75	96	4704	5244	93	1152
Kilvani	26.84	37.98	1.8		322.08	455.76	21.6	0
Rakholi	33.75	46.58	2.33	12.16	405	558.96	27.96	145.92
Dadra	32.25	34.08	1.77	0.83	387	408.96	21.24	9.96
Amboli	20	30	0.29		240	360	3.48	0
Randha	27.5	42.3	3.9	2.6	330	507.6	46.8	31.2
Mandoni	40.66	47.39	1.275	1.185	487.92	568.68	15.3	14.22
Dudhani	33	37	0.1		396	444	1.2	0
Naroli	14.5	18.4	1.8	3.75	174	220.8	21.6	45
Dapada	**18.5**	**16.3**	**0.5**	**2.12**	222	195.6	6	25.44
Total	**2311.4**	**2969.53**	**88.345**	**611.745**	27736.8	35634.36	1060.14	7340.94

Table 7 :Total Bio-medical waste generation in DD & DNH as per CBMWTF

Sr. No.	Category of waste	Generation of waste	Treatment
1	Yellow Category (Includes Human and Animal anatomical waste, Soiled waste, Expired and discarded medicines, Chemical waste, Laboratory-	5337 kg/month	Incinerated

	microbiology waste)		
2	Red Category (Contaminated waste recyclable)	4417 kg/month	Auto clave
3	White Category (Waste sharps)	184 kg/month	Shredder needle tip cutter
4	Blue Category (Glass ware)	1028 kg/month	Disinfection or autoclaving

a) Steps taken at UT level for effective compliance with Bio-Medical Waste Management Rules, 2016.

- Action Plan for compliance of Bio Medical Waste Management Rules, 2016 which includes inventory for the year 2018-19 was prepared and submitted to the CPCB vide letter No. PCC/DMN/NGT/710/2017/18-19/34 dated 15/04/2019 (**Annexure K**).
- Annual Report for the year 2018-19 of the Biomedical Waste Management Rules, 2016 had been submitted to the Central Pollution Control Board, New Delhi vide letter No. PCC/DDD/BMW/19-20/433 dated 17/07/2019 (**Annexure L**).

- State level Advisory Committee under the Bio Medical Waste Management Rules, 2016 is constituted for the UT of Dadra & Nagar Haveli vide No. ADM/DS/HEALTH/BMW2016/2019/393 dated 31/07/2019 (**Annexure M**).

- There are total 81 HCFs (includes bedded & non-bedded) in the UT of Dadra & Nagar Haveli out of which 62 are having valid authorization under BMW Rule, 2016 and against rest of 19 HCFs action is under progress.

- Pollution Control Committee, DD & DNH regularly monitor all the HCFs once in quarter (once in every three months)to ensure segregation in colour coded bins/containers, pre-treatment to laboratory waste, separate biomedical waste storage space, liquid waste treatment etc.

- Organized a workshop on centralized Bio-Medical waste disposal through environmentally sound practices in coordination with M/s En-cler (En-vision) Bio-Medical Waste Pvt. Ltd.

- Pollution Control Committee has authorized M/s En-Cler Bio-Medical Waste Pvt Ltd., Surat (Common Bio-Medical Waste Treatment Facility-(CBMWTF)) to collect, process & dispose of the Bio-medical waste generated in the UT of DD & DNH.

- The HCFs of Dadra and Nagar Haveli have engaged Common BMW Treatment Facility (CBMWTF), M/s En-cler Bio-Medical Waste Pvt Ltd, Gokul Nagar, Near SMC Solid Waste Disposal site, Azad Nagar Road, Bhatar, Surat for transportation and final disposal of BMW.

- Pollution Control Committee, DD & DNH had directed CBMWTF (M/s. En-cler Bio-Medical Waste Pvt. Ltd.) and all the HCFs to adopt Bar code system as required under the BMWM Rules, 2016.

- Department of Health and Family Welfare, U.T of Dadra & Nagar Haveli has submitted report on Bio Medical Waste Management in Dadra & Nagar Haveli (**Annexure N)**.
- Pollution Control Committee in coordination with CBMWTF imparted training to all the Nursing staff and other workers who are engaged in the BMW on handling, segregation and safe packing of bio medical waste for disposal.

D. E- Waste Management and Handling Rules, 2016

- In compliance of E–Waste Management Rules, 2016, PCC has identified the units which are manufacturing electronic and electrical products. Notices have been issued to all the units with the direction to apply and obtain authorization under the E- Waste Management and Handling Rules, 2016.

- PCC has issued a circular to Industrial Association Silvassa along with the categories of electric and electronic equipment including their components, consumables, parts and spares covered under the rules and the list of authorized E- waste recyclers and dismantlers located in the adjoining states of Maharashtra and Gujarat.

- A list of 20 E- waster dismantlers/recyclers from Gujarat and 22 E- waste dismantlers/recyclers from Maharashtra have been provided to the Industries Association.

- The vendors who are interested in handling the e-wastes in the territory are being identified who have not obtained EPR authorization.

- E- wastes generated in Govt. departments are being inventorised and directions have been issued to write off/condemn the unserviceable/obsolete materials as per procedure in vogue.

- Sensitization/Awareness programmes will be organized to create awareness among the public and other stakeholders in effective disposal of e-wastes.

- Bimonthly review is proposed to strengthen the monitoring for strict enforcement.

E. Hazardous Waste Management Rules, 2016

- There is an Integrated Common Hazardous Waste Treatment, Storage & Disposal Facility (ICHWTSDF) located at Sr. No. 9/1, Village-Mota Randha, Dadra & Nagar Haveli (having a Secured Landfill and an Incinerator) for the disposal & treatment of hazardous waste generated from the UT of Daman & Diu and Dadra Nagar Haveli.

- M/s. Green Gene Enviro Protection and Infrastructure Private Limited is issued with Consent to Operate for operating ICHWTSDF at Sr. No. 9/1, Village - Mota Randha, UT of Dadra & Nagar Haveli vide No. PCC/DDD/ICHWTSDF/05-03/52 dated 10/10/2006 subject to condition

that the unit shall comply with the conditions of the Environmental Clearance to be issued by MoEF, Government of India.

- Consent to Operate has been renewed from time to time and the latest Consent to Renewal was issued vide No. PCC/DDD/O-2350/ICHWTSDF/05-06/795 dated 17/03/2016 which is valid upto 31/08/2020 for collection, storage, transportation and safe disposal of hazardous waste at ICHWTSDF.

- The ICHWTSDF at Sr. No. 9/1, Village - Mota Randha, UT of Dadra & Nagar Haveli is having one secured land fill site of capacity 2 Lakh MT/Annum and one incinerator of capacity 12 MT/Day.

- The unit has created the escrow account in March 2019 and as per the Escrow Agreement the operator of the ICHWTSDF (M/s. Green Gene Enviro Protection and Infrastructure Private Limited) will deposit the 5% of the annual turnover of the secured landfill facility in the Escrow Account within 30 days from the closing of accounts of the company for the relevant financial year.

- Quantity of Hazardous & Other Waste generated as per Annual Return within the UT of Dadra & Nagar Haveli:

Landfillable	Incinerable	Recyclable	Utilizable
1341.27 MT	988.308 MT	778.1025 MT	Nil

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- In year 2017-18 the ICHWTSDF had received 2317.175 MT of landfillable waste and 1620.891 MT of incinerable waste from 256 industries.

- Annual inventory on hazardous & other waste generation and its management in the UT of Daman & Diu and Dadra & Nagar Haveli for the year 2017-18 had been submitted to the CPCB vide letter No. PCC/DDD/HW-2016/CPCB/16-17/423 dated 12/07/2019 (**Annexure O)**.

III. Status of functioning of Committees constituted by this order dated 19.01.2019.

- The State level Committee under the Chairmanship of Advisor to the Administrator, Daman and Diu and Dadra &Nagar Haveli has been constituted.

- The First meeting of the SLC was held on 20.02.2019 under the chairmanship of the Advisor to Administrator, DD&DNH. Issues related to the status of compliance of Solid Waste Management Rule, 2016, Plastic Waste management Rule, 2016, Biomedical Waste Management Rule, 2016, Status of preparation of Action Plan of River Damanganga in compliance of NGT order dated 20.9.2018, Ambient Air Quality Monitoring under National Ambient Air Quality Monitoring Programme (NAMP), Compliance of directions passed regarding imposing fines on erring industries based on polluter pay principle (**Annexure P**).

- The second meeting was held under the Chairmanship of Advisor on 09.4.2019 at Secretariat, Silvassa. Issues related to compliance of waste management rules, preparation of status report of compliance and immediate future plan to be submitted to Hon'ble NGT in compliance to the order dated 19.01.2019 in O.A. No. 606/2018 were discussed.

- The third meeting was held under the Chairmanship of Advisor on 13.5.2019 at Secretariat, Daman. All the District Magistrates were directed to coordinate with the local bodies and hold fortnightly meeting with in their respective jurisdictions for the compliance of the Hon'ble NGT order dated 11.04.2019 in O.A. No. 606/2018.

IV. Status of the Action Plan in compliance vide order dated 27.11.2018 in the matter of Mahesh Chandra Saxena Vs South Delhi Municipal Corporation & Ors.

- The Silvassa Municipal Council, Dadra Nagar Haveli has proposed underground Sewerage Networking and Sewage Treatment Plant for Silvassa-Amli Town in two phases.

- Phase-I covers the core area of the Silvassa. All the households are joined to a Sewerage Networking System and the length of the sewerage networking is 29.51 KM.

- 85% of the work of Sewerage Networking in phase – I has already been completed. Sewage Treatment Plant (STP) with a capacity of 13 MLD has already been constructed for processing of liquid waste.

- Survey for the quantity of sewage generation (liquid waste) from the existing household is not completed yet.

- Phase-II covers the remaining areas, which are on the periphery of the core area. The length of the sewerage networking is about 30.67 KM. STP with a capacity of 11 MLD will be constructed near the existing STP of capacity 13 MLD.

- Action Plan for the use of treated waste water from STP by Silvassa Municipal Council has already been submitted to CPCB.

V. Status of the Action Plan in compliance vide order dated 20.09.2018 in the News Item published in "The Hindu" authored 25 by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB (Original Application No. 673/2018).

- The UT Administration of DD & DNH has constituted River Rejuvenation Committee (RRC) under the chairmanship of Director, Municipal Administration, Daman & Diu vide Notification No.PCC/NGT-673/2018/18-19 dated 08/01/2019 (**Annexure Q**).

- The Action Plan for Rejuvenation of polluted stretch of Damanganga River was submitted to the CPCB vide No. PCC/DDD/NGT-673/2018/18-19/1487 dated 18/02/2019.

- The Task Team was constituted for the compliance of the Hon'ble NGT (PB), Delhi order dated 20/09/2018 and 19/12/2018. As per the minutes of the 4th meeting of the Task Team held on 28/03/2019, CPCB had provided some suggestions and the same have been incorporated in the Action Plan and resubmitted to the CPCB (**Annexure R**).

- Revised Action Plan for Rejuvenation of polluted stretch of Damanganga River was submitted to the CPCB after approval of the River Rejuvenation Committee for the UT of DD & DNH vide No. PCC/DDD/NGT-673/2018/18-19/473 dated 24/07/2019. (**Annexure S**).

- Damanganga River has been put in Priority I category. However, it is submitted that the river stretch in Dadra &Nagar Haveli falls non polluted zone and the remaining portion falls in category II and III based upon the water quality monitoring carried out in the last two years.

- Pollution Control Committee, Daman & Diu and Dadra & Nagar Haveli along with the Gujarat State Pollution Control Board and M/s. Vapi Green Enviro Ltd. (commonly known as CETP, Vapi) carries out joint monitoring the entire stretch of Damanganga River starting from Madhuban Dam in Dadra & Nagar Haveli till confluence of Damanganga River in Arabian Sea at Moti Daman jetty, Daman on monthly basis.

During the monitoring river water samples are being collected from various 14 locations which are listed as below:

Table 8 : Details of Sampling Locations in Damanganga River

Location Code	Sampling Location in Damanganga River
R-01	At Madhuban dam canal, DNH
R-02	At Naroli bridge, Silvassa, DNH, 1903 m u/s of drain discharge from Piparia Industrial Estate, Piparia, DNH
R-03	At Lavachha village, Gujarat, 100 m dis of drain discharge flowing adjacent to Rameshwari temple
R-04	Adjacent to New Surat Brewerage, Dadra, 3670 m u/s of drain discharge from Dungra village, Gujarat
R-05	Vapi weir over flow from GIDC, Vapi
R-06	At Namdha village, Gujarat, 4408 m d/s of treated effluent discharge from CETP, Vapi and 1546 m u/s of Zari Cause Way, Daman
R-07	At Zari Cause Way (Left channel), Daman, 985 m u/s of drain discharge from Kachhigam village, Gujarat
R-08	100 m d/s of confluence of treated effluent discharge from Khemani Distilleries Pvt. Ltd, and Daman Ganga river, Daman
R-09	At Moti Daman jetty, Daman (3675 m d/s of treated effluent discharge from Khemani Distilleries Pvt. Ltd and 12159 m d/s of treated effluent discharge from CETP, Vapi)
R-10	Drain near Vapi Weir (Drain flowing from Nani Sulpad, Khanki Falia)
R-11	Outlet of CETP, Vapi
R-12	Outlet of GHCL, Bhilad
R-13	100 meter downstream of outlet of CETP, Vapi (from river)
R-14	100 meter downstream of GHCL, Bhilad (from river)

- There are 22 nallahs which drain into Damanganga River and the details are given in Table 12 as under:

Table 9 : Details of Nallahs drain into Damanganga River

Sr. No	District/ Town	Location number	Location detail
1.	Dadra Nagar Haveli (DNH)	D-01	Drain from Rakholi industrial Estate, Silvassa, DNH
2.		D-02	Drain from Masat village, Silvassa, DNH
3.		D-03	Drain from near Govt. industrial estate, Masat Ambapadia village, Silvassa, DNH
4.		D-04	Drain from Govt. Industrial Estate, Piparia Silvassa, DNH
5.		D-05	Drain from Piparia Industrial Estate, Piparia Silvassa, DNH
6	Gujarat (Vapi)	D-06	Drain from Lawachha village flowing adjacent to Rameshwari temple, Lawachha
7		D-07	Drain from Dadra at Dungra village, Vapi, Gujarat
8		D-08	Drain from Borigaon village opp. Dungra village, Gujarat
9		D-09	Pipe discharge at Vapi weir, Vapi, Gujarat
10		D-10	Drain from Nani Sulpad, KhankiPhalia, Vapi, Gujarat
11		D-12	Drain from Nahuli village flowing adjacent to industry NeestechPvt. Ltd, Vapi,
12		D-13	Drain from Vapi Industrial Area, Vapi, Gujarat
13	Daman	D-14	Drain from Shree Ganesh Industrial Estate and Daman Industrial Estate, Daman
14		D-15	Drain from Kabra Industrial Estate, 50 m u/s of Zari Cause Way, Daman
15		D-16	Drain from Kachigam village, Daman
16		D-17	Drain from NaliaPardi village Daman, Tribute Jharia Ashram School, Daman
17		D-19	Drain from MakatFalia village, Daman
18		D-20	Drain from Varkhund village, Daman (Somnath Industrial Estate, Bhenslore Industrial Estate, Ringanwada Industrial Estate)
19		D-21	Drain from Nani Daman Near bus stand, Daman
20		D-22	Drain from Moti Daman near Rajiv Gandhi bridge, Daman

- All the industries located along the drains and adjacent areas will be directed to go for Zero Liquid Discharge.

- The industries located in these areas will not allowed to discharge treated or un-treated wastewater outside their industrial premises and strictly directed to utilise wastewater generated within the premises only.

- Regular checks and inspections are being carried out to ensure the same. Works related to sewerage network is underway and once it is completed, untreated sewage will be prevented.

- The Sewage Treatment Plant of capacity 13 MLD with 8 pumping stations constructed at Silvassa is covering the core area of the Silvassa town.

- The Sewerage system scheme for remaining area of Silvassa-Amli Town with 11 MLD STP, is being taken up in phase II.

- Plans have been chalked out by SMC to use the treated sewage water from STP effectively. The treated water from STP will not be dumped into Damanganga River.

VI. Status of functioning of Committees constituted in News Item Published in "The Times of India' Authored by Shri Vishwa Mohan Titled "NCAP with Multiple timelines to Clear Air in 102 Cities to be released around August 15" dated 08.10.2018

- Dadra Nagar Haveli does not fall under the non-attainment cities.

- However, the Pollution Control Committee, DD & DNH is monitoring the ambient air quality by establishing Ambient Air Quality Monitoring (AAQM) stations at three locations in Dadra & Nagar Haveli under National Ambient Air Quality Monitoring programme (NAMP) through the MoEF & CC recognized laboratory, M/s Unistar Environment & Research Labs P. Ltd., Vapi, Gujarat.

- The location include 03 in Dadra & Nagar Haveli at (i) M/s Chetan Guest House, Piperia, Silvassa (Residential cum Commercial) (ii) M/s Baldevi, Dandul Faliya, Silvassa, DNH (Rural area) and (iii) M/s Shivom Industries, Village Khadoli, Silvassa, DNH (Industrial area).

- Total eight (08) parameters are analyzed which include Particulate Matter (PM10), Particulate Matter (PM2.5), Oxide of Nitrogen (NOx), Sulphur Dioxide (SOx), Carbon Monoxide (CO), Ammonia, Ozone and Lead.

- The said parameters are within the limit in all six (06) locations except for Particulate Matter (PM). The Particulate Matter (PM10) is slightly above locations due to heavy vehicle transportation and dusty road.

- The UT administration is taking efforts to increase the green cover in the form of Road side/Avenue plantation, median plantation and plantation in Forest/Government land to reduce the level of (PM10) in atmosphere.

- In addition, parameters like Benzene (C6H6), Benzo (a) Pyrene (BaP), Arsenic (As) and Nickel (Ni) are being analysed since May, 2018. All the parameters are Below Detection Limit (BDL) at all three locations mentioned above.

- The analyzed data for all the locations is sent through e-mail on monthly basis to CPCB, Delhi regularly.

- Further, no industry is allowed to generate high Sulphur in order to improve the air quality and banned the use of coal, lignite & pet coke as fuel in the UT of Dadra & Nagar Haveli. Only agro based briquettes, LDO, FO and diesel is allowed as fuel in Boiler, Thermic Fluid Heater & D.G. Set, etc.

- It is decided to persuade the industries to develop green cover along the boundaries and also in the vacant plots in industrial premises so as to reduce the level of Particulate Matter (PM_{10}).

- To mitigate the impact of the increasing Particulate Matter (PM_{10}), UT Administration of Dadra & Nagar Haveli along with Industries Association of Dadra & Nagar Haveli had carried out Mass Tree Plantation Programme in the all the industrial areas. In the said Mass Tree Plantation Programme approximately 208 numbers of industries had participated by planting 29239 numbers of seedlings/plants inside or outside their industrial premises.

VII. Status of Action Plan with regard to identification of polluted industrial clusters in O.A. No. 1038/2018, News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels" dated 13.12.2018.

- CPCB has developed Comprehensive Environmental Pollution Index (CEPI) to find out an index value to characterize quality of the environment. This index is developed with an objective to assess the environment quality in the country.

- The CPCB has revised CEPI concept in concurrence with MoEF& CC and subsequently issued directions to SPCB/PCC having Critically Polluted Areas (CPAs) for adoption of the revised CEPI concept.

- The UT of Daman & Diu and Dadra Nagar Haveli do not fall under Critically Polluted Areas as per CPCB report.

- All the Industries have installed the ETP to treat the industrial waste water and STPs have been established in Hotels and Resorts. Silvassa Municipal Council has established an STP.

- The functioning of ETPs and STPs will be closely monitored to ensure desired outcome.

VIII. Status of the work in compliance of the directions passed in O.A. No. 173 of 2018, Sudarsan Das v. State of West Bengal & Ors. Order dated 04.09.2018.

- The matter is related to illegal sand/gravel mining from the river beds. In the UT of Dadra & Nagar Haveli there are no sand or gravel mining activities from the River bed.

IX. Total amount collected from erring industries on the basis of 'Polluter Pays' principle, 'Precautionary principle' and details of utilization of funds collected.

- Hon'ble NGT has directed to impose fine on erring industry on basis of Polluter Pay Principle & Precautionary Principle.

- In this connection, it is to inform that total amount of Rs. 1.25 Lakh is collected so far from the industries in Dadra & Nagar Haveli based on Polluter Pay Principle and precautionary principle. The same will be implemented henceforth on erring industries.

X. Status of the identification and development of Model Cities and Towns in the State in the first phase which can be replicated later for other cities and towns of the State.

- Silvassa town has been selected as a smart city and efforts are on to develop Silvassa as a model city by addressing all issues related to waste management.

c(12)

The
Dadra And Nagar Haveli
Gazette
सरकारी राजपत्र
संघ प्रदेश दादरा एवं नगर हवेली, प्रशासन

भारत सरकार/ Government of India
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EXTRAORDINARY
श्रेणी-१/ SERIES - I
प्राधिकरण द्वारा प्रकाशित
PUBLISHED BY AUTHORITY

Vol. No. XXXII SILVASSA Thursday 23rd November, 2017/Agrahayna 02, 1939 No. 113

Administration of
Dadra & Nagar Haveli, U.T.,
Urban Development Department
Silvassa

No. TPS/105(19)/SWMR-2016/2017/1319 Dated : 21/11/2017

NOTIFICATION

In exercise of powers conferred under Sub-section (1) of Section 23 of the Solid Waste Management Rules, 2016, the Advisor to Hon'ble Administrator of Union Territory of Daman & Diu and Dadra & Nagar Haveli is hereby pleased to constitute, State Level Advisory Body (SLAB) for UT of Dadra & Nagar Haveli as under:

1.	Secretary, Urban Development, UTs of DD & DNH	Chairperson
2.	Secretary, Panchayati Raj Institution, (PRI), DNH	Member
3	Secretary, (Revenue), DNH	Member.
4.	Representative from Ministry of Environment, Forest and Climate Change Government of India	Member
5.	Representative from Ministry of Urban Development, Government of India	Member
6.	Representative from Ministry of Rural Development, Government of India	Member

7.	Representative from Central Pollution Board Government of India.	Member
8.	Member Secretary, Pollution Control Committee, DD & DNH	Member Secretary
9.	Representative from Indian Institute of Technology or National Institute of Technology	Member
10.	Chief Town Planner, DNH	Member
11.	Three Representatives from the local bodies by rotation.	Member
12.	Two Representative from the Census Town or Urban agglomeration by rotation.	Member
13.	Representative from Reputed Non-Governmental Organisation or Civil Society working for the waste pickers or informal recycler or solid waste management.	Member
14.	Representative from a body representing Industries at the state or Central Level.	Member
15.	Representative from waste recycling industry	Member
16.	Two Subject Experts	Member
17.	Co-opt one Representative each from Agriculture Department and Labour Department of State Government.	Member

The Key functions of the SLAB are as under :

1. The State Level Advisory Body shall be meet at-least one in every six months to revie the matters related to implementation of Solid Waste Management Rules, 2016, state poli and strategy on Solid Waste Management and give advise to State Government for takin mensures that are necessary for expeditious and appropriate implementation of Solid Was Managemnent Rules, 2016.

2. The copies of Review report shall be forwarded to the State Pollution Control Board Pollution Control Committee for necessary action.

This is issued with the approval of the Advisor to Hon'ble Administrator vide diary No 274396, dated 15/11/2017.

(P. P. Parmar)
Deputy Secretary (UD)

The
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संघ प्रदेश दादरा एवं नगर हवेली, प्रशासन

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PUBLISHED BY AUTHORITY

Vol. No. XXXIII SILVASSA Thursday 5th April, 2018/ Chaitra-15, 1940 No. 56

Administration of Dadra and Nagar Haveli, Union Territory.
Urban Development Department

NOTIFICATION

No. DNH/SMC/BYE LAWS/18/2017 Silvassa Dated : 28/03/2018

The following draft Bye-Laws which are primarily based on model draft bye laws published by Ministry of Urban Development Union of India are proposed to be made by the council in exercise of the powers conferred by sub-sections (1) & (2) of Section 301 read with sections 221 and 223 Dadra and Nagar Haveli Municipal Council Regulation, 2004. They are hereby published, as required by clause (b) of Sub-Section (3) of Section 301 of the said Regulation. These have been published for suggestions and suggestions and objections received have been duly incorporated.

Draft Bye-Laws

In exercise of the powers conferred by sub-sections (1) & (2) of Section 301 read with Sections 221 and 223 of the Dadra and Nagar Haveli Municipal Council Regulation, 2004 the Silvassa Municipal Council hereby makes the following Bye-Laws.By powers vested in me as Collector cum Director (Municipal Administration), Dadra and Nagar Haveli under Sub-Section (1) of Section 301 of the said Regulation, I hereby sanction the draft Bye-Laws namely;

1. **Short title and Commencement.** 1.1 These **Bye-Laws** may be called the Dadra and Nagar Haveli Silvassa Municipal Council **Solid Waste (Handling and Management) Bye-Laws, 2018.**

1.2 They shall come in to force from the data of their publication in the Official Gazette.

1.3 They shall remain in force unless amended in accordance with Dadra and Nagar Haveli Municipal Council Regulation 2004.

2. Applicability.

It extends to the whole of the Municipal areas including public places, private places,dwellings, trade and commercials centers. This Bye-Law shall apply to every generator of Municipal Solid Waste and to every premise under the ownership or occupation of any person within the limits of Silvassa Municipal Council. It will be applicable to any government or non-government premises or organization operating within the premises of Silvassa Municipal Council.

3. Definitions

In this Bye-Law, unless the context otherwise requires the following words shall have meaning herein defined:-

3.1 **"Aangan"/premises/place** means the public place in front of, or adjacent on any side of any premises, extending to the road, kerb side including the footpath kerb, drain,nala, plot or premises.

3.2 **"aerobic composting"** means a controlled process involving microbial decomposition/breaking down of organic matter in the presence of oxygen;

3.3 **"Agency/Agent"** means any entity/person appointed or authorized by Municipal Corporation/Council/Municipality/Silvassa Municipal Council to act on its behalf, for discharge of duties or functions i.e. sweeping of streets, collection of waste, collection of charges / fines, and other such delegated responsibilities etc.;

3.4 **"anaerobic digestion**" means a controlled process involving microbial decomposition/ breaking down of organic matter in absence of oxygen;

3.5 **"authorisation"** means the permission given by the State Pollution Control Board or Pollution Control Committee,as the case may be, to the operator of a facility or urban local authority, or any other agency responsible for processing and disposal of solid waste;

3.6 **"Bio-degradable waste"** means any organic material that can be degraded by microorganisms into simpler stable compounds; for example the waste of plant and animal origin e.g. kitchen waste, food & flower waste, leaf litter, garden waste, animal dung, fish/meat waste and any other material that gets degraded/decomposed by the action of microorganisms;

3.7 **"Bio-medical waste"** means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production or testing of biological, and including categories mentioned in **Schedule IV** of the Bye-laws ;

3.8 **"bio-methanation"** means a process which entails enzymatic decomposition/ breaking down of the organic matter by microbial action to produce methane-rich biogas;

3.9 **"brand owner"** means a person or company who sells any commodity under a registered brand label.

3.10 **"buffer zone"** means zone of no-development to be maintained around solid waste processing and disposal facility, exceeding 5 TPD of installed capacity. This will be maintained within the total area allotted for the solid waste processing and disposal facility.

3.11 **"Bulk Waste Generator"** means the owner, occupier or any other person representing ownersand occupiers of House(s)/Flat(s), Group of Houses/Flats, housing society(s) / complex(s), Restaurant(s); Hotel(s), Market(s), Industrial Estate(s) and Shopping Complex(s) / Mall(s) and includes buildings occupied by the Central Government Ministries, Departments or Undertakings, State Government Departments or Undertakings, Local Bodies, Public Sector Undertakings or Private Companies, Hospital(s), Nursing Home(s), School(s), College(s), University(s), Other Educational Institutions, Hostel(s), Hotel(s), Commercial Establishment(s), Places of Worship, Stadia and Sports complexes, clubs, gymkhanas, marriage halls, recreation/entertainment complexes having an average waste generation rate exceeding 100kg per day; or any other establishment sources / premises that are specifically identified and notified by the Chief officer of Silvassa Municipal Council to be so;

3.12 **"Bulk garden and horticultural waste"** means bulk waste from parks, gardens, traffic islands,road medians etc. including grass & wood clippings, weeds, woody 'brown' carbon-rich material such as pruning, branches, twigs, wood chipping, straw or dead leaves and tree trimmings, which cannot be accommodated in the daily collection system for bio-degradable waste;

3.13 **"Rules/bye-laws"** means regulatory framework notified by State / Silvassa Municipal Council, census town and notified area townships for facilitating the implementation of these rules /bye-laws in their jurisdiction.

3.14 **"census town"** means an urban area as defined by the Registrar General and Census Commissioner of **India;**

3.15 **"Collection"** means lifting and removal of municipal solid waste from designated collection points or any other location;

3.16 **"Collection at Source"** means the collection of municipal solid waste by Silvassa Municipal Council directly from thepremises of any building or common premises of a group of buildings. This is also referred toas "point to point collection";

3.17 **"combustible waste"** means non-biodegradable, non-recyclable, non-reusable, nonhazardous solid waste having minimum calorific value exceeding 1500 kcal/kg and excluding chlorinated materials like plastic, wood pulp, etc;

3.18 **"Composting"** means a controlled process involving microbialdecomposition/ degradation/breaking down of organic matter including vermi-composting – which is a process of using earthworms for conversion of biodegradable waste into compost;

3.19 **"Community Service"** means to serve the community by sweeping of road, cleaning of walls, tree guard portion etc.;

3.20 **"contractor"** means a person or firm that undertakes a contract to provide materials or labour to perform a service or do a job for service providing authority;

3.21 **"Construction and Demolition waste"** means waste from building materials, debris and suchrubble resulting from construction, re-modeling, repair and demolition operations;

3.22 **"co-processing"** means use of non-biodegradable and non-recyclable solid waste having calorific value exceeding 1500kcal as raw material or as a source of energy or both to replace or supplement the natural mineral resources and fossil fuels in industrial processes;

3.23 **"decentralised processing"** means establishment of dispersed facilities for localised processing of biodegradable waste and recovery of recyclables closest to the source of generation so as to minimize transportation of waste for processing or disposal;

3.24 **"Delivery"** means handing over any category of solid waste to a Silvassa Municipal Council worker or anyother person appointed, authorized or licensed by the Silvassa Municipal Council for taking delivery of such waste;

3.25 **"disposal"** means the final and safe disposal of post-processed residual solid waste and inert street sweepings and silt from surface drains on land as specified in Schedule I to prevent contamination of ground water, surface water, ambient air and attraction of animals or birds;

3.26 **"domestic hazardous waste"** means discarded paint drums, pesticide cans, CFL bulbs, tube lights, medicines including expired medicines, broken mercury thermometers, batteries, used needles and syringes and contaminated gauge, etc., generated at the household level;

3.27 **"door to door collection"** means collection of solid waste from the door step of households, shops, commercial establishments, offices, institutional or any other non-residential premises and includes collection of such waste from entry gate or a designated location on the ground floor in a housing society, multi storied building or apartments, large residential, commercial or institutional complex or premises;

3.28 **"Door-to-Door collection system Municipal vehicle"** means the bell-ringing or such vehicle (includes a carriage, cart, van, dray, truck, hand-cart, bicycle, cycle-rickshaw, auto-rickshaw, motor vehicle and every wheeled conveyance which is used or is capable of being used on a street) provided by Silvassa Municipal Councilor an agency authorised by Silvassa Municipal Council forpoint to point collection of Municipal Solid Waste.

3.29 **"dry waste"** means waste other than bio-degradable waste and inert street sweepings and includes recyclable and non-recyclable waste, combustible waste and sanitary napkin and diapers, etc;

3.30 **"Dry Waste"** means the category of municipal solid waste referred to at No.5.1 (6) of these Bye-laws;

3.31 **"Dry Waste Sorting Center"** means any designated land, shed, kiosk, or structure located on any municipal or Government land or in a public space which is authorized to receive and sort dry waste;

3.32 **"dump sites"** means a land utilized by local body for disposal of solid waste without following the principles of sanitary land filling;

3.33 **"extended producer responsibility"** (EPR) means responsibility of any producer of packaging products such as plastic, tin, glass and corrugated boxes, etc., for environmentally sound management, till end-of-life of the packaging products;

3.34 **"facility"** means any establishment wherein the solid waste management processes namely segregation, recovery, storage, collection, recycling, processing, treatment or safe disposal are carried out;

3.35 **"fine"** means penalty imposed on waste generators or operators of waste processing and disposal facilities under the bye-laws for non-compliance of the directions contained in these rules and/or bye- laws;

3.36 **"Generator of waste"** means any person generating municipal solid waste within the limits of Silvassa Municipal Council;

3.37 **"handling"** includes all activities relating to sorting, segregation, material recovery, collection, secondary storage, shredding, baling, crushing, loading, unloading, transportation, processing and disposal of solid wastes;

3.38 **"Hazardous waste"** means any waste, which by reason of any of its physical, chemical, reactive, toxic harm able, explosive or corrosive characteristics causes danger or is likely to cause danger to health or environment, whether alone or when in contact with other wastes or substances and shall include wastes specifically listed in Schedule III of these Bye-laws.

3.39 **"House-gully"/lane/Service Lane** means a passage or strip of land, constructed, set apart or utilized for the purpose of serving as a drain or of affording access to the latrine, urinal, cesspool or other receptacle for filthy or other polluted matter by persons employed in the removal of cleaning thereof or in the removal of such matters there from;

3.40 **"incineration"** means an engineered process involving burning or combustion of solid waste to thermally degrade waste materials at high temperatures;

3.41 **"inerts"** means wastes which are not bio-degradable, recyclable or combustible street sweeping or dust and silt removed from the surface drains;

3.42 **"Inert Solid Waste"** means any solid waste or remnant of processing whose physical, chemicaland biological properties make it suitable for sanitary land filling;

3.43 **"informal waste collector"** includes individuals, associations or waste traders who are involved in collection, sorting, sale and purchase of recyclable materials;

3.44 **"Landfill"** means a waste disposal site for the deposit of residual solid waste in a facility designed with protective measures against pollution of ground water, surface water and air fugitive dust, windblown litter, bad odour, fire hazard, bird menace, pests or rodents, greenhouse gas emissions, slope instability and erosion;

3.45 **"leachate"** means the liquid that oozes and seeps through solid waste or other medium and has extracts of dissolved or suspended material from the media;

3.46 **"Litter"** means all refuse and other such waste material which, tends to create nuisance, dirt, insanitary conditions, ugliness and endangers cleanliness, public orderliness & movement, environment, public health, safety, life and welfare if dropped, thrown, scattered, deposited or left un-cleaned or unpicked as against the prohibition under these Bye-laws;

3.47 **"Littering"** means carelessly spreading litter so that falls, descends, blown, seeps, percolates or otherwise escapes or is likely to fall, descend, blown, seep, percolate or otherwise escape into or onto any public or private place; Or causing, permitting or allowing litter to fall, descend, blow, seep, percolate or otherwise escape into or onto any public or private place;

3.48 **" local body"** for the purpose of these rules means Silvassa Municipal Council or Village Panchayat as the case may be.

3.49 **"Lysometer"** means a device which is used to measure the movement of water in or through the medium of soil layer or which is used to collect the leached water for qualitative analyses.

3.50 **"Market"** includes any place where persons assemble for the sale of, or for the purpose of exposing of sale, meat, fish, fruits, vegetables, animals intended for human food or any other articles of human needs whatsoever, with or without the consent of the owner of such place notwithstanding that there may be no common regulation for the concourse of buyers and sellers and whether or not any control is exercised over the business of, or the person frequenting, the market by the owner of the place or by any other person;

3.51 **"materials recovery facility"** (MRF) means a facility where non-compostable solid waste can be temporarily stored by the local body or any other entity mentioned in rule 2 or any person or agency authorised by any of them to facilitate segregation, sorting and recovery of recyclables from various components of waste by authorised informal sector of waste pickers, informal recyclers or any other work force engaged by the local body or entity mentioned in rule 2 for the purpose before the waste is delivered or taken up for its processing or disposal;

3.52 **"Chief Officer"** means Chief Officer of Silvassa Municipal Council.

3.53 **"Municipal Council"** means Silvassa Municipal Council established Dadra and Nagar Haveli Municipal Council Regulation for Silvassa area.

3.54 **"Municipal Solid Waste"** includes commercial and residential wastes generated in a Municipalor Notified Local Body in either Solid or Semi -Solid form excluding industrial hazardous waste but including properly and fully treated bio-medical waste(as per applicable rules);

3.55 **"non-biodegradable waste"** means any waste that cannot be degraded by micro-organisms into simpler stable compounds;

3.56 **"Nuisance"** includes any act, omission, place, animal or thing which causes or is likely to causeinjury, danger, annoyance or offense to the sense of sight, smell,

hearing, breath, modesty and dignity or disturbance to movement, work, rest or sleep, or which is or may be dangerous to life or injurious to health or property;

3.57 **"Nuisance Detectors"** (NDs) means those employees of Municipal Corporation/ Council/Municipality/Silvassa Municipal Council, who are appointed by Municipal Corporation/Council/Municipality/Silvassa Municipal Council to detect acts of Public nuisance etc. under the Bye laws;

3.58 **"Occupier"** includes- (a) any person who for the time being is paying or is liable to pay to the owner the rent or any portion of the rent of the land or building in respect of which such rent is paid or is payable; in occupation of, or otherwise using, any land or building or part thereof, for any purpose whatsoever;

(b) an owner in occupation of, or otherwise using his land or building;

(c) a rent- free tenant of any land or building;

(d) a licensee in occupation of any land or building; and

(e) any person who is liable to pay to the owner damages for the use and occupation of any land or building;

(f) the custodian of evacuee property in respect of evacuee property vested in him under the Administration of Evacuee Property Act

(g) the General Manager of a Railway and the head of a Govt. Department, in respect of properties under their respective control;

3.59 **"operator of a facility / operator of concession"** means a person or entity, who owns oroperates the concession for handling, collection, sorting, storage, transportation, processing and disposal of municipal solid waste and it also includes any other agency appointed by the local body / municipal authority for management and handling of municipal solid waste in its area and any other entity or agency appointed by the local body;

3.60 **"Pellet forming"** means a process used to make pellets, which will be small cubes/ cuboids or cylindrical pieces from solid waste and will also include fuel pellets which is obtained from garbage.

3.61 **"Person"** means any person or persons and shall include any shop or establishment or firm or company or association or body of individuals whether incorporated or not and their agents; assignee etc; and shall mean to include Government and its offices and employees.

3.62 **"Point to Point Collection"** means the system of collection of municipal solid waste from specific pick-up points as designated by Silvassa Municipal Council up to which the generator must bring the collected and storedwaste for delivery in vehicles so provided/appointed/permitted by the Silvassa Municipal Council

3.63 **"Premises"** means any land or building or part of a building and includes- (a) The garden, ground and out- houses, if any, appertaining to a building or part of a building;

(b) Any fittings affixed to a building or part of a building for the more beneficial enjoyment thereof;

3.64 **"primary collection"** means collecting, lifting and removal of segregated solid waste from source of its generation including households, shops, offices and any other non-residential premises or from any collection points or any other location specified by the local body;

3.65 **"Processing"** means any scientific process by which solid waste is treated for processing for the purpose of reuse, recycling or transformation into new products or making it suitable for land filling;

3.66 **"Public Nuisance"** means any act, omission, offence or wrong-doing which causes or is likely to cause nuisance (as defined) in any public place;

3.67 **"Public place"** means any place which is open to the use and enjoyment of the public, whether it is actually used or enjoyed by the public or not;

3.68 **"Rubbish"** includes ashes, broken bricks, broken glasses, dust, malba, mortar and refuse of any kind which is not filth;

3.69 **"Receptacle"** means container, including bins and bags, used for the storage of any category of municipal waste as prescribed by Municipal Corporation/Council/ Municipality/Urban Local Body form time to time;

3.70 **"Recycling''** means the process of transforming segregated non-biodegradable solid waste into raw materials for producing new products, which may or may not be similar to the original products;

3.71 **"redevelopment"** means rebuilding of old residential or commercial buildings at the same site, where the existing buildings and other infrastructures have become dilapidated;

3.72 **"refuse derived fuel"**(RDF) means fuel derived from combustible waste fraction of solid waste like plastic, wood, pulp or organic waste, other than chlorinated materials, in the form of pellets or fluff produced by drying, shredding, dehydrating and compacting of solid waste ;

3.73 **"Refuse"** means any waste matter generated out of different activities, processes, either degradable/non-degradable garbage and rubbish /inert in nature in either solid or semi-solid form which cannot be consumed, used or processed by the generator in its existing form;

3.74 **"Repeated offence"**means when an offence under these bye-laws has been repeated five times by the same person it will be called repeated offence.

3.75 **"residual solid waste"** means and includes the waste and rejects from the solid waste processing facilities which are not suitable for recycling or further processing;

3.76 **"sanitary land filling "** means the final and safe disposal of residual solid waste and inert wastes on land in a facility designed with protective measures against pollution of ground water, surface water and fugitive air dust, wind-blown litter, bad odour, fire hazard, animal menace, bird menace, pests or rodents, greenhouse gas emissions, persistent organic pollutants slope instability and erosion;

3.77 **"Sanitation"** means the promotion of hygiene and the prevention of disease and other Causesof ill health related to environmental factors. However, the relevant

provisions in respect of sanitation and health in any other rules, act or bye laws shall continue to prevail as usual.

3.78 **"sanitary waste"** means wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste;

3.79 **"Schedule"** means the Schedule appended to these Bye-laws;

3.80 **"secondary storage"** means the temporary containment of solid waste after collection at secondary waste storage depots or MRFs or bins for onward transportation of the waste to the processing or disposal facility;

3.81 **"segregation"** means sorting and separate storage of various components of solid waste namely biodegradable wastes including agriculture and dairy waste, non-biodegradable wastes including recyclable waste, non-recyclable combustible waste, sanitary waste and nonrecyclable inert waste, domestic hazardous wastes, and construction and demolition wastes;

3.82 **"service provider"** means an authority providing public utility services like water, sewerage, electricity, telephone, roads, drainage, etc;

3.83 **"solid waste"** means and includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other non-residential wastes, street sweepings, silt removed or collected from the surface drains, horticulture waste, agriculture and dairy waste, treated bio-medical waste excluding industrial waste, biomedical waste and e-waste, battery waste, radio-active waste generated in the area under the local authorities and other entities mentioned in rule 2;

3.84 **"sorting"** means separating various components and categories of recyclables such as paper,plastic, cardboards, metal, glass, etc., from mixed waste as may be appropriate to facilitate recycling; means separating organic, inorganic, recyclable and hazardous wastes into categories to facilitate recycling;

3.85 **"stabilizing"** means the biological decomposition of biodegradable wastes to a stable state where it generates no leachate or offensive odours and is fit for application to farm land, soil erosion control and soil remediation;

3.86 **"State board or Committee"** means, as applicable, the State Pollution Control Board of a stateor the Pollution Control Committee of a Union Territory.

3.87 **"street vendor"** means any person engaged in vending of articles, goods, wares, food items ormerchandise of everyday use or offering services to the general public, in a street, lane, side walk, footpath, pavement, public park or any other public place or private area, from a temporary built up structure or by moving from place to place and includes hawker, peddler, squatter and all other synonymous terms which may be local or region specific; and the words "street vending" with their grammatical variations and cognate expressions, shall be construed accordingly;

3.88 **"Source"** means the premises from which waste is generated.

3.89 **"Stabilized biodegradable waste"** means the biologically stabilized (free of pathogens) wasteresulting from the mechanical / biological treatment of biodegradable waste; only when stabilized such waste can be used with no further restrictions;

3.90 **"Storage"** means the temporary containment of municipal solid waste in receptacles; prevent littering, attraction to vectors, stray animals and excessive foul odour;

3.91 **"Street"** includes any way, road, lane, square, court, alley, gully, passage, whether a thoroughfare or not and whether built upon or not, over which the public have a right of way and also the roadway or footway over any bridge or causeway.

3.92 **"tipping fee"** means a fee or support price determined by the local authorities or any state agency authorised by the State government to be paid to the concessionaire or operator of waste processing facility or for disposal of residual solid waste at the landfill;

3.93 **"transfer station"** means a facility created to receive solid waste from collection Local Body and transport in bulk in covered vehicles or containers to waste processing and, or, disposal facilities;

3.94 **"transportation"** means conveyance of solid waste, either treated, partly treated or untreated from a location to another location in an environmentally sound manner through specially designed and covered transport system so as to prevent the foul odour, littering and unsightly conditions and accessibility to vectors, animals and birds;

3.95 **"treatment"** means the method, technique or process designed to modify physical, chemical or biological characteristics or composition of any waste so as to reduce its volume and potential to cause harm;

3.96 **"user fee"** means a fee imposed by the local body and any entity mentioned in rule 2 on the waste generator to cover full or part cost of providing solid waste collection, transportation, processing and disposal services.

3.97 **"Vadose water"** means the water situated between top soil and ground water table level, i.e. in the unsaturated soil strata.

3.98 **"vermi composting"** means the process of conversion of bio-degradable waste into compost using earth worms;

3.99 **"waste generator"** means and includes every person or group of persons, every residential premises and non-residential establishments including Indian Railways, Defence establishments, which generate solid waste;

3.100 **"waste hierarchy"** means the priority order in which the solid waste is to should be managed by giving emphasis to prevention, reduction, reuse, recycling, recovery and disposal, with prevention being the most preferred option and the disposal at the landfill being the least;

3.101 **"Waste picker"** means a person or groups of persons informally engaged in collection and recovery of reusable and recyclable solid waste from the source of waste generation the streets, bins, material recovery facilities, processing and waste disposal facilities for sale to recyclers directly or through intermediaries to earn their livelihood.

3.102 Words and expressions used herein but not defined, but defined in the Environment (Protection) Act, 1986, the Water (Prevention and Control of Pollution) Act, 1974,

Water (Prevention and Control of Pollution) Cess Act, 1977 and the Air (prevention and Control of Pollution) Act, 1981 and all the Waste Management Rules shall have the same meaning as assigned to them in the respective Acts/Rules

4. Prohibition of littering, and other nuisances and ensuring "Clean Aangan/ Premises/Place".

4.1 Littering in/or on any public/private place: No person shall throw or deposit litter in any occupied/unoccupied/open/vacant public or private place except in authorized public or private litter receptacles.

4.2 Littering from vehicles: No person shall throw or deposit litter upon any street, road, sidewalk, playground, garden, traffic island or other public/private place from any vehicle either moving or parked.

4.3 Litter from waste carriage vehicles: No person shall drive or move any truck or other vehicle filled with litter unless such vehicles are so designed to cover the litter and loaded as to prevent any litter from being blown off or deposited upon any road, sidewalks, traffic islands, playground, garden or other public place.

4.4 Creating Public Nuisance: No person shall cook, bathe, spit, urinate, defecate, feed animals / birds or allow their droppings/poop, wash utensils or any other object or keep any type of storage in any public place except in such public facilities or conveniences specifically provided for any of these purposes

4.5 Silvassa Municipal Council reserves the right to ban sale, purchase and use of any items including but not limited to polythene, plastic bags, poisonous spray within Silvassa Municipal Council area, so as to regulate solid waste disposal, and manage any threat to the environment. Provided that any such resolution shall be sent to the Director, who shall have the authority to annul any such resolution in general public interest. No person shall indulge in production, distribution, storage, sale and use of banned items.

4.6 Temporary toilets shall be provided by the builder at construction sites, where a labour force is deployed for carrying out construction activities to prevent open defecation. Making of such prior provision should be one of the conditions while granting building permission and must be adhered to.

4.7 It shall be the responsibility of the owner of any premises to provide adequate toilets and sanitation facility for the residents or occupier of the said premises. Failure to do so shall invite penalties as specified in the schedule.

4.8 Silvassa Municipal Council through Chief Officer is authorized to seal any premises where toilet/sewerage/septic tank facilities have not been provided by the owners or occupiers. Provided that no such order of sealing shall be made without giving the owner one month's notice. Provider further that any such seal shall be opened on directions of Standing Committee on providing such facilities and payment of Rs. 10,000/-.

4.9 Silvassa Municipal Council, through Chief Officer, may request any other department including electricity, road, PWD, water etc to cut-off the supply of essential services to the occupier who has refused to comply with the directions of Chief Officer regarding Solid waste disposal/management/toilets/sewerage. The concerned

department, on receipt of such request, shall within three days of such request, comply with the same

5. Segregation, storage, delivery and collection of Municipal Solid Waste

5.1 Segregation of waste into separate specified groups: Every generator of Municipal Solid Waste shall separate the waste at source of generation into the following categories as applicable and shall store separately, without mixing it for segregated storage in authorized storage bins , private/public receptacles for handing over or delivering to authorized waste pickers or waste collectors as directed by the Silvassa Municipal Council from time to time;

1) Bio-degradable (wet) waste,

2) Specified domestic hazardous waste,

3) Fully treated Bio-medical waste (as per applicable rules),

4) Construction and demolition waste,

5) Bulk garden and horticulture waste including tree and plant trimmings,

6) All other non- biodegradable (dry) waste including recyclable and non-recyclable waste. Sanitary waste like napkins, diapers, tampons etc shall be securely wrapped in pouches provided by the manufacturers or brand owners or in suitable wrappers as instructed by the official / authority and shall be stored with the dry waste for handing over.

7) All bulk generators shall manage the waste at their premises as per instructions notified by the Silvassa Municipal Council from time to time.

5.2 Silvassa Municipal Council may separately notify different stages for implementation of the rules/ byelaw taking into account the level of awareness among generators of waste as well as availability of infrastructural support in their operational Local Body.

5.3 Silvassa Municipal Council shallseparately notify from time to time the mandatory colour coding and other specifications ofreceptacles prescribed for storage and delivery of different types of solid waste to enable safeand easy collection without any mixing or spillage of waste, which generators of differenttypes of solid waste shall have to a there to.

5.4 Delivery of segregated premises waste: It shall be the duty of every generator of municipal solid waste, either owner or occupier of every land and building to collect or cause to be collected from their respective land, premises and building, to segregate waste and to store and deliver the same to the municipal worker/vehicle/ waste picker / waste collector deployed by the Silvassa Municipal Council for the purpose.

5.5 Bio-degradable waste: Segregated Bio-degradable Municipal Solid Waste (as per the illustrative list in Schedule II if not composted by the generator, shall be stored by them within their premises and its delivery shall be ensured to the municipal worker/vehicle/waste picker / waste collector or to the bio-degradable waste collection vehicle provided for specified commercial generators of bulk bio-degradable waste at such times as may be notified from time to time.

5.6 Composting by all generators: Local composting or processing of waste shall be promoted to minimize transportation of waste.**It shall be mandatory for the bulk generators to do inhouse processing of waste.**

5.7 Specified household hazardous waste: (as listed in Schedule III) shall be stored and delivered by every generator of waste to the collection vehicle, which shall be provided weekly by Silvassa Municipal Council or any other Agency authorized by the Dadra and Nagar Haveli Pollution Control Committee (PCC). for collection of such waste, or to a center designed for collection of such waste for disposal ina manner that is mandated by the Government of Union Territory of Dadra and Nagar Haveli or Dadra and Nagar Haveli Pollution Control Committee (PCC).

5.8 Untreated bio-medical waste (as listed in Schedule IV) shall be collected & stored in specified type of covered receptacles and delivered by every generator of such waste to the collection vehicle which shall be provided weeklyby Silvassa Municipal Council or any other Agency authorized by the Dadra and Nagar Haveli Pollution Control Committee (PCC)for collection of such waste, or to a center designed for collection of such waste for disposal ina manner that is mandated by the Government of Union Territory of Dadra and Nagar Haveli or Dadra and Nagar Haveli Pollution Control Committee (PCC) in accordance with the Bio-Medical Waste (Management &Handling) Rules, 2016.

5.9 Construction and Demolition waste shall be stored and delivered separately at such spot and at such time as notified by Silvassa Municipal Council or its agent from time to time for collection of such waste. Small generators(household level) shall be responsible to segregate the Construction & Demolition waste atsource by contacting a local help-line of Silvassa Municipal Council or the Agent who shall then send a vehicle to pick up suchsegregated construction & demolition waste on payment of necessary charges by the saidgenerator and transport this waste to a processing centre. The details of local Help line ofSilvassa Municipal Council shall be available in the Office of Silvassa Municipal Council and on their website.

5.10 All other Non-biodegradable (“Dry”) waste – both recyclable and non-recyclable – shall be stored and delivered by every generator of waste to the dry waste collection vehicle, which shall be provided Silvassa Municipal Councilorits Agents at such spots and at such times as may be notified by them from time-to-time forcollection of such waste.

5.11 Bulk garden and horticultural waste shall be kept un-mixed and composted at source. Silvassa Municipal Council shall also notify Instructions/ guidelines with regard to pruning of trees and storage and delivery of treetrimmings including segregated garden and horticultural waste by charging suitable fees asnotified by it from time to time, for collection and transport to its facility.

5.12 Burning of waste: Disposal by burning of domestic, hazardous and commercial solid waste at roadsides, or at anyprivate or public property is prohibited.

5.13 If such owner or occupied fails to comply with any direction contemplated by this Bye law, he / she shall be guilty of an offence punishable under section 221, 222 and 223 of regulations and the Silvassa Municipal Council may remove, or cause to be removed dispose of or treat such hazardous waste in any suitable manners and recover the expenses incurred in doing so from such owner or occupier.

6) Obligatory duties of Silvassa Municipal Council

6.1 **Action against Transport Contractors, agents or Employees of Municipal Council:**Silvassa Municipal Council shall take action against theTransport Contractor and/or Agents/employees of Silvassa Municipal Council, if any worker of the contractor orany employee of Silvassa Municipal Council mixes segregatedwaste at any point of collection, or fails to pick up waste as per the specified time schedule.

6.2 **Infrastructure facilities:** Silvassa Municipal Councilshall provide adequate infrastructure facilities to assist citizens' compliance with theseRules/Bye-laws. In addition to waste collection services, litter bins, dry waste sorting centers,and composting centers shall be set up, wherever possible and essential, in consultation withlocal citizens. Adequate community toilets shall be provided in slum localities with theparticipation of Community Based Organizations to prevent nuisance such as defecating/urinating, washing and bathing in public places.

6.3 **Citizen Resource Base:** The Silvassa Municipal Council shall facilitate information about composting as well as recycling of dry waste throughcomposting centres and dry waste sorting centers listing them on its website.

6.4 **Bio-degradable puja articles:** The Silvassa Municipal Council shall authorise interested organizations to collect bio-degradable 'puja' articles(flowers, leaves, fruits etc.) at certain designated sites near water-bodies such as beaches,lakes, ponds, etc. in notified receptacles. The collection from such receptacles shall preferablybe composted at a suitable location.

6.5 **Point-to-Point waste collection services:** The Silvassa Municipal Council shall provide for the collection ofthe municipal solid waste from specific pick-up points on a public or private road up to whichthe generator must bring the collected, segregated and stored waste for delivery to municipal worker/vehicle/waste picker / waste collector provided by Silvassa Municipal Council according to the route plans atsuch times and at such spots as notified by the concerned Chief Officer/ Health Officer/ any other authorised officialin advance forspecified types of waste for different localities**.**

6.6 **Collection at source:** Silvassa Municipal Councilshall provide for the collection of municipal solid waste from premises of a building or groupof buildings from waste storage receptacles kept on the premises to which Silvassa Municipal Council shall be provided access at such times as may be notified by the Council.

6.7 **Data about waste received at landfill:** Silvassa Municipal Council shall release publicly, the monthly data about the quantity of waste going tothe different landfills and waste processing sites. Such information shall be available at theOffice and on Silvassa Municipal Council website.

6.8 **Community Bins in public places:**

a) Silvassa Municipal Council shallprovide and maintain suitable community bins on public roads or other public spaces, asdetermined by the Silvassa Municipal Councilitself or through an Agent as an interim arrangement till Silvassa Municipal Council makes provision forcollection at source or point-to-point collection at the

required frequencies and shallnotify the same on Silvassa Municipal Councilwebsite from time to time.

b) Segregated waste shall be delivered by the concerned generators to such community bins, and thereafter collected by Silvassa Municipal Council. Silvassa Municipal Councillor its Agents have to ensure compliance of segregation and avoidance of publicnuisance and health hazards from these community bins. Every community bin shall beseparate for bio-degradable and non-bio-degradable waste. Details of all such placesincluding the arrangements and schedules of waste collection from such places shall beavailable at the Office and on Council's website.

c) Officials/authority of Silvassa Municipal Councilshall ensure that at no point of time the community bins are notoverflowing nor exposed to open environment and prevent their scattering by rag pickers, stray animals or birds etc.

6.9 **Dry waste sorting centers / Material Recovery Facilities:** In order to regulate and facilitate the sorting of the recyclable and non-recyclable waste, Silvassa Municipal Council shall provide for as many drywaste sorting centers as possible and required. These dry waste sorting centers shall be on Silvassa Municipal Council land or land belongingto the Government or other bodies, made available especially for this purpose, or in the formof sheds or kiosks provided at suitable public places and shall be manned/operated byregistered cooperative societies of waste pickers / licensed recyclers or any other Agentsauthorised / appointed by Silvassa Municipal Council. The non-recyclable waste, which remains after sorting shall be further, transported fromsuch sorting centers from time-to- time to waste disposal sites for processing or land-filling.Such center shall be fenced/ screened in such a way that waste shall not be visible to passers by.

6.10 **Time schedule and route of collection:** The daily and weekly time schedules and routes in Silvassa Municipal Councilfor collection of differenttypes of municipal solid waste shall be fixed and notified in advance by the concernedofficial/authority. Details shall be available at all Offices and on the Council's website.

6.11 Similarly, the arrangements for the collection of construction and demolition waste, and garden and horticultural waste by Silvassa Municipal Council or its licensees shall be made available to the public as well as to the bulk generators of waste by the Chief Officer/Health Officer/ any other authorised officialas the case may be.

6.12 **Surprise checks:** Any authorized Officer / Agent of Silvassa Municipal Council shall have right to enter, at allreasonable times, with such assistance as he considers necessary, any place for the purpose of(i) performing any of the functions entrusted to him by Silvassa Municipal Council or (ii) determine whether, and ifso, in what manner, any such functions are to be performed, or whether any provisions oftheseBye-laws has been complied with**.**

6.13 **Nuisance Detectors:** The Chief Officer/Health Officer/ any other authorised officialshall provide and strengthen the system ofNuisance Detectors by providing suitable uniforms and vehicles to Nuisance Detectors.

6.14 **Publicity:** Citizen Information Services: Silvassa Municipal Council shall publicize the provision of theBye-laws through the media of signs, advertisement, leaflets, announcement on radio and televisions, newspapers and through any other appropriate means, so that all citizens are made aware about the statutory duties of citizens and

Silvassa Municipal Council for services, recycling, anti-litterand anti-nuisance penalties and fines.

6.15 **Designated officers and periodic reports:** The Chief Officer/Health Officer/ any other authorised official concerned shall designateofficers under their control who shall be responsible for implementing the obligatoryresponsibilities of Silvassa Municipal Councilspecified under these Bye-laws in accordance with the plans and time schedules forimplementation. The specific plans and time schedules and achievements against the samealong with reasons for short falls, if any, shall also be shared publicly by the official/authoritythrough the Silvassa Municipal Council website.

6.16 **Transparency and Public Accessibility:** To ensure greater transparency and public accessibility, the Silvassa Municipal Council shallprovide all necessary information that is required to be publicized through its website.

6.17 **Co-ordination with Government Bodies:** Silvassa Municipal Councilshall co-ordinate with other government agencies and authorities, to ensurecompliance of these Bye-law.

6.18 The Silvassa Municipal Council shall ensure arrangements for cleaning daily or at set intervals and all the year through at all the public roads, places, colonies, slums, Local Body, markets and tourism places, parks of the urban body, cremation grounds etc. and the Silvassa Municipal Council shall be committed to collect and carry the garbage from these places door to door or from the nearest garbage bin/container/ facility and transport it from there to the final disposal place in closed vehicles.

6.19 The Silvassa Municipal Council shall utilize its own/outsourced/contract sanitation workers and vehiclesin carrying out sanitation and solid waste management functions for full or partial daily cleaning work, so that the urban body is able to keep its area neat and clean in public interest.

6.20 In order to manage the complete daily cleaning system of the city, the Silvassa Municipal Council shall establish a ward office (complaint center) in each ward, garbage bin/container at suitable places as required, public toilets/urinals, transfer stations to transport the garbage to the landfill for final disposal, processing unit, etc.

6.21 **User charges**: The Silvassa Municipal Council shall levy user charges from the households / premises for the waste management services rendered as per the table given below as determined from time to time. For this purpose, the Silvassa Municipal Council shall appoint its staff/designated persons in all the regions/Local Body/wards of the corporation/council/municipality to collect garbage from every home/premises in compliance with Solid Waste Management Rules, 2016.

6.22 A time will be fixed compulsorily in each area to collect garbage from each house/ premises/Aangan. Usually, the time will be from 7.00 to 11.00 in the morning but can vary. But the Silvassa Municipal Council should ensure compliance with the timed fixed for any special cleaning purpose. A bell/horn/announcement (whose sound must not be over the permissible sound limit) should be fitted on the vehicle of garbage collection/blown by worker so that the residents can be made aware of collection being undertaken.

6.23 The time for garbage collection from commercial establishments/shops/markets shall be from 9.00 to 12.00 in the morning in general but can vary.

6.24 The **Rates/User Charges/Fees** for collecting garbage from home and establishments for Garbage Collection are fixed as follows: -

Category of customer	**Amount (from each premises) per month**
Houses up to 50 sq. m. built-up area	Rs. 20/-
Houses over 50 sq. m. built-uparea up to 300 sq. m.	Rs. 80/-
Houses with over 300 sq. m.built-up area	Rs. 150/-
Commercial establishments,shops, eating places (Dhaba/sweet shops/coffeehouse etc)	Rs. 250/-
Guest House	Rs. 500/-
Hostel	Rs. 500/-
Hotel Restaurant (Unstarred) Rs. 10/room	Rs. 500/-
Hotel Restaurant (Up to 3 star) Rs. 20/Room	Rs. 1000/-
Restaurant (Non-AC)	Rs. 200/-
Restaurant (AC)	Rs. 500/-
Hotel Restaurant (over 3 star)	Rs. 2000/-
Commercial offices, governmentoffices, Bank, Insurance offices,coaching classes, educationinstitutes etc.	Rs. 750/-
Clinic, dispensary, Hospital (up to 50 beds)	Rs. 2000/-
Laboratories	Rs. 500/-
Clinic, dispensary, laboratories(more than 50 beds)	Rs. 4000/-
Small and cottage industryworkshops (only nonhazardous), waste upto 10 Kg per day	Rs. 500/-
Go-downs, cold storages (onlynon-hazardous) waste	Rs. 1000/-
Marriage halls, festival halls,exhibition and fairs with area upto 3000 sq. m.	Rs. 1000/-
Marriage halls, festival halls,exhibition and fairs with areaover 3000 sq. m.	Rs. 3000/-
Other places not marked as above	As assessed by the urban body

This user charges shall be levied one month after the house-house collection has come into force. The above rates shall be increased by at least 5 percent every year. **Silvassa Municipal council, subject to subsequent approval of the Director Municipal Administration, is authorised to change these user charges by a resolution. Such resolution shall have to be published in at least 3 local newspapers. Such resolution shall come in force as soon as the same is approved by Silvassa Municipal Council.**

6.25 The charges for door to door or point garbage collection as above shall be collected only by the authorized institution/person/agency of each ward/area. The above rates shall be properly advertised by the Silvassa Municipal Council and the rates shall also be displayed on the Waste Management Vehicles. The Chief Officer shall also write the name of theauthorized institution/person on the Waste Management Vehicles.

6.26 The waste shall not be handled manually. But, due to some unprecedented circumstances, if the waste material has to be manually handled and lifted using manual labour, in such circumstances manual labour would be used with all due care and precautions of personal safety gear.

6.27 If the waste material is not disposed by any person on the designated sites, waste bins, litter bins, containers kept on the road and parks by the concerned municipal council/corporation and is disposed by any person/party elsewherewaste disposal is prohibited, in such circumstances, fine / compounding charges can be levied on the concerned person/party in addition to fine.

6.28 Silvassa Municipal Council may by a resolution relax collection of fine or user charge from any charitable, Government or religious organisation.

7) Obligatory Responsibilities of* Silvassa Municipal Council *and /or generators of waste in case ofsome specific categories/situations:Keeping in mind the particular nature of some situations, the following responsibilities arespecifically mandated:

7.1. Slums

7.1.1 The Chief Officer/Health Officer/ any other authorised officialshall extend solid waste management to the uncovered areaswith in their jurisdiction.

7.1.2 Where applicable, Silvassa Municipal Council shall extend door-to-door collection system at fixed times at a point outside the slum, forcollection of segregated solid waste.

7.1.3 In exceptional cases, until the services of a door-to-door collection system at required frequencies are provided at designated spots on a public road or any other public place for the time being, manned community waste storage bins shall be maintained by Silvassa Municipal Council, where segregated wasteshall be deposited by the generator, and from where Silvassa Municipal Council shall collect such waste.

7.1.4 Cleanliness drives shall be conducted by Silvassa Municipal Council with the help of local councillors,Citizens organizations, Government bodies / Corporates etc for the cleanliness inside the slums, from time to time.

7.2 Poultry, Fish and Slaughter Waste (From all areas other than designated slaughter houses and markets)

7.2.1 Every owner / occupier of any premises other than designated slaughter houses and markets, who generates poultry, fish and slaughter waste as a result of any

commercial activity, shall store the same separately in closed, hygienic condition and deliver it at a specified time, on a daily basis to Silvassa Municipal Council collection vehicle provided for this purpose. Deposit of such waste in anycommunity bin is prohibited and shall attract fines as indicated in the schedule of Fines.

7.2.2 The Chief Officer/Health Officer/ any other authorised official of Silvassa Municipal Council shall be responsible for repair/re-modelling of civic facilities in the markets to provide maximum hygiene and sanitary conditions in the market premises.

7.3 Vendor/Hawkers:

All vendors/hawkers shall keep their biodegradable and other waste unmixed in containers / bins at the site of vending for segregated storage of waste generated by that vending activity. It shall be the responsibility of the generator/ vendor to deliver this waste duly segregated to the Municipal Collection Vehicle of Silvassa Municipal Council or to the nearest designated community bins as directed. Failing which fine shall be imposedas per the Schedule of Fines. Each Vendor/hawker shall be responsible to maintain their'Clean Aangan'.

7.4 House /gullies/Service Lanes:

7.4.1 It shall be the responsibility of the owner/occupier of premises within house-gullies to ensure that no waste is dumped or thrown in the house-gully, and to segregate and deliver any solid waste to the waste collection vehicle which shall be provided by Silvassa Municipal Council at such spots and at such times asmay be notified by official/authority.

7.4.2 Where owners/occupiers of such premises wish to avail of the services of Silvassa Municipal Council for the cleaning of the house gully,they must apply to the concerned Office of Silvassa Municipal Council and pay suitable prescribedcharges as notified by Silvassa Municipal Council from time to time. It shall be the responsibility of the owners/occupiers to provide access tothe house gully for cleaning purposes.

7.5 Litter by owned / pet animals

It shall be the responsibility of the owner of any pet animal to promptly scoop/ clean up any poop/litter/faecal matter created by any owned/pet animals on the street or any public place, and take adequate steps for the proper disposal of such waste in their own sewage or other such sanitary system.

7.6 Public Gatherings and Events:

7.6.1 For Public Gatherings and Events, organised in public places for any reason (including for processions, exhibitions, circus, fairs, political rallies, commercial, religious, socio-cultural events, protests and demonstrations, etc.) where Police and/or Silvassa Municipal Council's permission is required,it shall be the responsibility of the Organiser of the event or gathering to ensure thecleanliness of that area as well as all appurtenant area immediately after the event.

7.6.2 A Refundable Cleanliness Deposit: The Organiser of the event shall pay required deposit with the concerned office for the duration of the event, which shall be refundable on the completion of the event on notifying that the said public place has been restored back to a clean state, and any waste generated as a result of the event

has been collected and transported to designated sites, to the satisfaction of Chief Officer/Health Officer/ any other authorised official concerned. Thisdeposit shall be only for the cleanliness of the public place and does not cover any damage to property. This section shall also, apply to various other events which are being organizedoutside the Municipal Parks i.e. on roads/lanes etc. In case the Organizers of the event wishes to avail of the services of Silvassa Municipal Council for the cleaning, collection and transport of waste generated as a result of that event, they shall apply in advance to the concerned Office of Silvassa Municipal Council andpay the necessary charges in advance as may be fixed for this purpose by Silvassa Municipal Council. Such cleanliness deposit and charges shall be such as are decided by council from time to time. So long as council does not pass any resolution, the cleanliness deposit and cleanliness charges shall be equal to Rs. 2 per Square meter of the area in which Gathering has to take place. If any party conducts an event without giving security deposit, the cleanliness deposit shall be recovered as a fine from them.

7.7 Receptacles on private property:

Every owner or occupant of private property shall maintain authorized refuse receptacles on private premises provided the receptacles are neither visible from public street/roads and sidewalks nor accessible to animals.

7.8 Other public places.

The Government / Semi-government, statutory bodies shall be responsible forimplementation of theseBye-laws within the public premises owned/occupied by them.

8) Penalties for contravention of these Bye-laws.

8.1. Whosoever contravenes any of the provisions of these Byelaws or fails to comply with the requirements made under any of these Byelaws shall be punished with a fine as mentioned in **Schedule-I** appended to these Bye-laws, failing which, the said defaulter shall be **liable to do the community service for at least one hour like road sweeping or graffiti cleaning etc. as directed / ordered by the Nuisance Detector or Implementing Authority or any person authorised to do so.**The fines can be recovered in the same manner and to the same extent as property tax. The schedule of fine can be amended by Silvassa Municipal Council by a resolution. Any such resolution shall come in to effect as soon as the same is approved by Director Municipal Administration. Any such resolution shall be published in three local newspaper.

8.2 The owner/ occupier shall be deemed to be guilty of the offence and shall pay the fine, if the responsible person for dumping waste in a private place is unidentified.

8.3 If it becomes necessary on the part of the Silvassa Municipal Council to remove or process the waste, which was the responsibility of any other agency to remove or process then the responsible person or entity shall be liable to pay the expenses to the Silvassa Municipal Council at the rate of 5 times the chargesprescribed or Rs. 5000/- per incidence whichever is higher.

8.4 (Nothing in these bye-laws prevents Silvassa Municipal Council to recover—in addition to the fine prescribed under Dadra and Nagar Municipal Council regulation or under any rules or bye-laws made thereunder—administrative charges for any extra

expense incurred on removal or disposal of waste because of non-cooperation of any person.

8.5 The dues under these bye-laws shall be recovered in the same manner and to the same extent as property tax. Provided that no such recovery Proceedings shall be initiated unless the defaulter has been given one month's time to pay the dues.

9) Miscellaneous provisions:

9.1 Bio medical waste and industrial waste shall not be mixed with urban solid waste and the collection of such waste shall be made as per the rules/byelaws specified separately for the purpose. Common Bio Medical Waste Treatment Facility (CBWTF) services shall be availed for disposal of bio medical waste as per rules/byelaws. Disposal of such hazardous waste will have to be ensured at the Common Bio Medical Waste Treatment Facility (CBWTF) plant at the prescribed charges.

9.2 Stray animals shall not be allowed to roam freely around waste dumps or at other places in the city and arrangement will have to be made for restraining them at authorized area/place only.

9.3 No one will collect or throw waste water, muddy water, night soil, dung, excreta etc. from his/her building, institution or commercial establishment to pollute the atmosphere and ground with its stench and harm public health or obstruct traffic, failing which, administrative charges or fine shall be levied onthe spot for spreading such waste, and case can be brought against them in court.

9.4 If a person is found spreading pollution or filth in public parks etc. by throwing dead animal/cattle or its parts, it will be a punishable offense and administrative charges shall also be levied

9.5 It shall be the duty of Silvassa Municipal Council to protect all waste handlers from the ill-effects of their occupation and should be given annual medical examination and monitoring, given appropriate health education and free medical treatment if it is felt that the illness is occupation – related. Silvassa Municipal Council shall provide person protection equipment's and monitor that the same is used by the workers.

9.6 The Silvassa Municipal Council shall develop a management information system for effectively taking corrective measures as well as proper planning for future. Geographic Information System (GIS) shall be introduced and MIS may be integrated in this system. There should be route maps and duty charts with each of the supervisory staff, who should check whether work on site is going as per schedule and whether vehicles and manpower are giving their optimum output.

10) Responsibility of Silvassa Municipal Council-

10.1 Transport of the municipal solid waste: - The vehicles used for the transport of solid waste are to be duly closed so that the waste should not be visible to the public and the waste is not scattered elsewhere on the road during transportation, the following standards should be maintained during the transportation of the solid waste.

10.2 The solid waste would be collected and cleaned as per schedule from the established waste collectors. Along with the waste, the surrounding area of the disposal site should also be kept clean.

10.3 The design of the transport vehicles will be such that the waste will not be allowed to touch ground until it reaches its final processing/disposal site, and thus the recurring handling of the waste will not be allowed

11) Recycling of the municipal solid waste - To process the solid waste collected in the Local Body of Municipal Corporation/ council as useful materials, various solid waste disposal units approved by the pollution control board/PCC and different techniques of such solid waste should be applied so that the dependency of waste disposal on the landfills can be minimized. Following standards should be applied for the expected results:-

11.1 For the processing of the bio-degradable waste, various techniques can be used such as vermicomposting, composting, mechanized composting, bio-methanation etc. Also the waste can be degraded using the other natural methods/resources by obtaining the required authorisations.

11.2 For the waste material mixed with the recyclable/renewable resources as a mixture, the method of recycling should be used. In some cases the waste resources can be used to generate energy. Such plants with the technology should be authorised by the pollution control board.

12) Prosecution and Penalties: -As provided in these byelaws, for any breaching of the said byelaws, prosecutions and penalties can be rendered as levied down in these byelaws or in the Dadra and Nagar Haveli Municipal Council Regulation 2004. Further, asper the Environment Protection Act of 1986, cases can be filed against them.

13. RESPONSIBILITY OF ELECTED MEMBERS AND CHIEF OFFICER

13.1 The administrative powers to implement the provisions of this Byelaw and the resolutions passed by a Council shall be vested in the Chief Officer and he/ she shall be directly responsible for the proper discharge of the functions imposed by or under this bye law.

13.2 The Chief Officer shall-

a. Supervise and control the acts done and steps taken by the officers and employees of the Silvassa Municipal Council in solid waste management.

b. Exercise such other powers and perform such other functions that may be conferred or entrusted under the provisions of this Bye law or the rules made there under.

c. The President, the Chief Officer, the Health Officer may, in emergent circumstances, direct the execution of any work or performance of any act related to solid waste management, in respect of which sanction of the Council is necessary and in his/her opinion the immediate execution or performance of which is necessary for the safety of the public and may also direct that the expenses incurred for the execution of such work or performance of such act be paid from the fund of the Silvassa Municipal Council.

13.3 The elected members of the council shall have the responsibility to ensure that the provisions of these bye laws are followed in letter and spirit in their respective areas.

14 . Appeal. There shall be no appeal against fine when the total amount of fine does not exceed Rs. 10,000/- per incidence. Appeal against any other order of Chief Officer or any other official of Silvassa Municipal Council shall lie with standing committee whose decision shall be final.

Schedule – I (Schedule of Fines): It is hereby declared for all intents and purposes that applicable provisions Solid Waste Management Rules 2016, Shall be read as part and parcel of these Bye laws.

Sr. No.	**No. of Bye law**	**Sub-division/ Description of Rule/ Byelaw**	**Fines for up to 5 offences**	**Repeated Offense**
1.	No.4.1 to4.3	Littering in/or on any public/private place, Vehicles, Waste carriage vehicles, Creating Public Nuisance	Rs. 100/-	Rs. 1000/-
2.	No.4.4	Creating Nuisance	Rs. 100/-	Rs. 1000/-
3.	No. 4.5	Using banned items	Rs. 100/-	Rs. 1000/-
4.	No. 4.6	Not Providing functional toilets or sanitation facilities at construction sites.	Rs. 1000/-	Rs. 10000/- & Sealing
5.	No. 4.7	Not providing toilet/sanitation facilities	Rs. 100/-	Rs. 1000/-
6.	No 5.1 and 5.2	For delivering waste that is not segregated and not stored in separate bins: a) individual	Rs. 50/-	Rs. 500/-
7.		b) bulk generator	Rs. 1000/-	Rs. 10,000/-
8.	No. 5.3	For not delivering bio-degradable waste in a segregated manner as specified	Rs. 50/-	Rs. 500/-
9.	No. 5.8	For not storing & delivering Construction and Demolition waste in segregated manner.	Rs. 1000/-	Rs. 10,000/-
10.	No. 5.9	All other Non-biodegradable Waste	Rs. 100/-	Rs. 1000/-
11.	No. 5.10	For not delivering garden waste and tree trimmings as specified	Rs. 100/-	Rs. 1000/-
12.	No. 5.11	For Burning waste	Rs. 100/-	Rs. 1000/-
13.	No.6.1	Mixing Segregated Waste	Rs. 100/-	Rs. 1000/-
14.		Putting waste at not specified places	Rs. 100/-	Rs. 1000/-
15.	No. 7.2	For not delivering (non household) fish, poultry and meat waste in a segregated manner, as specified	Rs. 100/-	Rs. 1000/-
16.	No. 7.3	For a vendor / hawker without a container / waste basket	Rs. 100/-	Rs. 1000/-
17.		For a vendor / hawker who does not deliver waste in a segregated manner as specified	Rs. 100/-	Rs. 1000/-
18.	No. 7.4	For not keeping a house/ gully/ Service lanes clean	Rs. 100/-	Rs. 1000/-
19.	No. 7.5	For littering/defecation by pet / owned animals	Rs. 100/-	Rs. 1000/-
20.	No. 7.6	For not cleaning-up after public gathering / event within 4 hours	Forfeiture of the Cleanliness Deposit.	
21.	No. 9	Violation of provisions regarding hazardous waste and bio-medical waste.	Rs. 100/-	Rs. 1000/-
22.	No. 4.5	Use, Sale, Storage or distribution of plastic bags in SMC area	Rs. 100/-	Rs. 1000/-

SCHEDULE – II –

Illustrative list of biodegradable and recyclable waste

Biodegradable Waste "**Biodegradable waste**" means "wet" waste of plant and animal origin.	**Recyclable waste** **"Recyclable waste"** means "dry" waste that can be transformed through a process into raw materials for producing new products, which may or may not be similar to the original products.
•Kitchen Waste including: tealeaves, egg shells,fruit and vegetable peels •Meat and bones •Garden and leaf litter, includingflowers •Soiled paper •House dust after cleaning •Coconut shells •Ashes	•Newspapers •Paper, books and magazines •Glass •Metal objects and wire •Plastic •Cloth Rags •Leather •Rexene •Rubber •Wood /furniture •Packaging

Schedule III:

Specified hazardous waste:

Specified Household Hazardous Waste:
•Aerosol cans •Batteries and button cells •Bleaches and household kitchen and drain cleaning Agents &its Containers. •Car batteries, oil filters and car care products and consumables •Chemicals and solvents and their containers •Cosmetic items, chemical-based Insecticides and their containers •Light bulbs, tube-lights and compact fluorescent lamps (CFL) •Discarded Medicines and its containers, •Paints, oils, lubricants, glues, thinners, and their containers •Pesticides and herbicides and their containers •Photographic audio/video tapers and their containers, chemicals •Styrofoam and soft foam packaging of furniture, packaging and equipment •Thermometers and mercury-containing products

Schedule IV:

List of Bio-medical waste: (Extract from the Bio-Medical Waste Rules).

Bio-medical waste
"Bio-medical waste" means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production or testing of biological. Category No 4 Waste sharps (Needles, syringes, scalpels, blades, glass, etc. that may cause puncture and cuts. This includes both used and unused sharps) Category No 5 Discarded Medicines and Cytotoxic drugs (waste comprising of out dated, contaminated and discarded medicines) Category No 6 Solid Waste(Items contaminated with blood, and body fluids including cotton, dressings, soiled plaster casts, lines, beddings, other material contaminated with blood) Category No. 7 Solid Waste (waste generated from disposable items other than thewaste sharps such as tubing's, catheters, intravenous Sets etc)

By prior approval of
Director (Muni. Admin)/Collector, DNH

Silvassa
Dated : 28/03/2018

Deputy Secretary (UD)
Dadra and Nagar Haveli,
Silvassa

Printed and Published by Principal I.T.I. and Incharge Govt. Printing Press, Silvassa-2018
PRICE : ₹ : 25-00

The Dadra And Nagar Haveli Gazette

सरकारी राजपत्र

संघ प्रदेश दादरा एवं नगर हवेली, प्रशासन

भारत सरकार / Government of India

असाधारण

EXTRAORDINARY

श्रेणी-१ / SERIES - I

प्राधिकरण द्वारा प्रकाशित

PUBLISHED BY AUTHORITY

Vol. No. XXXIII SILVASSA Tuesday 11th September, 2018/Bhadrapad 20, 1940 No. 122

Administration of
Dadra and Nagar Haveli, UT
Department of Urban Development
Silvassa

No. SMC/CO/GNL/State Policy/263/2018-19/53 **Date: -11/09/2018**

NOTIFICATION

The Administrator of Daman & Diu and Dadra& Nagar Haveli is pleased to notify the Dadra and Nagar Haveli Solid Waste Management Policy-2018 for the Union Territory of Dadra & Nagar Haveli to ensure scientific and systematic management of solid waste in UT of Dadra and Nagar Haveli.

The Policy enclosed herewith shall come in force on the date of its notification.

This is issued with the approval of Hon'ble Administrator, Daman & Diu and Dadra & Nagar Haveli vide diary No.422787 dated 11/09/2018.

By order and in the name of the
Administrator, Dadra & Nagar Haveli

(Mohit Mishra)
Deputy Secretary (UD)
Dadra & Nagar Haveli,
Silvassa.

Dadra and Nagar Haveli Solid Waste Management Policy
Swachh Bharat Mission
U.T. Administration of Dadra and Nagar Haveli.
Sept 2018

1. Introduction:

Solid Waste Management has become one of the most challenging and pressing problems of the day. While the insidious heaps of garbage are slowly shadowing the soul of the country, waste-which could have been reused and recycled as a resource-is polluting the air, land and water. The solution lies in changing our perspective towards waste. The aim should not merely be a society with reduced waste but a society with no waste. Like mother earth and its wonderful ecology every decay should give rise to growth, and every waste should generate a resource. Indeed, waste is a distinct human phenomenon. In mother nature there is no waste. The answer to the conundrum of waste lies in realising that we are an integral part of ecology and it's a high time we should start behaving like it.

The scientific solid waste management (SWM) assumes importance with the increasing urban population, changing living styles and its importance in general life for good health. Considering its importance, Ministry of Environment and Forests and Climate Change (MoEF&CC) has notified the Solid Waste Management Rules, 2016 vide notification No. S.O.1357(E) dated 8th April, 2016 in supersession of Municipal Solid Waste (management & handling) Rules, 2000. In conformity with Rule 11 (1) (a) of Solid Waste Management Rules, 2016, and after perusing many other documents and policies "Dadra and Nagar Haveli Solid Waste Management Policy 2018" is being notified to ensure scientific and systematic management of solid waste in UT of Dadra and Nagar Haveli.This policy aims to enunciate goals, objectives and principles and strategies which should be followed by the administration and the citizens of the union territory of Dadra and Nagar Haveli to achieve the goal of zero waste union territory.

2. Background

With rapid urbanisation, the country is facing massive waste management challenge. Over 377 million urban people live in 7,935 towns and cities and generate 62 million tonnes of municipal solid waste per annum. Only 43 million tonnes (MT) of the waste is collected, 11.9 MT is treated and 31 MT is dumped in landfill sites.With the 74th amendment of the Constitution of India in 1992, municipal authorities or Local Bodies in the country have been recognized as the third tier of Government. The 12th schedule of the Constitution has laid down the functions envisaged to be performed by the ULBs and scientific and systematic solid waste management (SWM) as per prescribed SWM Rules, 2016 is one of them. However, almost all municipal authorities deposit solid waste at dump-yards within or outside the city haphazardly.

The key to efficient waste management is to ensure proper segregation of waste at source and to ensure that the waste goes through different streams of recycling and resource recovery. Reduced final residue is to be then deposited scientifically in sanitary landfills. Sanitary landfills are the ultimate means of disposal for unutilised municipal solid waste from waste processing facilities and other types of inorganic waste that cannot be reused or recycled. Major limitation of this method is the costly transportation of MSW to far away landfill sites.

A report by IIT Kanpur (2006) found the potential of recovering at least 15 per cent or 15,000 MT of waste generated every day in the country. This, the report said, could also provide employment opportunities to about 500,000 rag-pickers. The report added that despite immense potential in big cities in this area, participation from non-profits or community is limited.

Solid Waste Management rules in India are based on the principle of "sustainable development", "precaution" and "polluter pays". Solid Waste Management Rules 2016, have placed a greater accountability on waste generator and the focus has shifted from mere collection and transportation of solid waste to mandatory source segregation, preferably decentralized low cost scientific processing and safe disposal of solid waste. The SWM Rules 2016 also focus on the principal of 3Rs (reduce, re-use and re-cycle), source segregation and appropriate processing/ management of biodegradable and non-biodegradable closest to point of generation to reduce the financial burden on the local bodies and natural resources and elimination of environmental degradation.

Scientific and systematic SWM is one of the key components of Swachh Bharat Mission-Urban also and Mission mandates to achieve the goal of garbage free cities on 150th birth anniversary of Mahatma Gandhi i.e. 2nd October, 2019. Urban Local Bodies have overall responsibility for SWM, however; most of them are unable to provide requisite SWM system to tackle the current situation. Various studies revealed that out of total budget allocated for SWM, scant amount is being spent for scientific processing of waste and most of the fund is utilized on waste collection and transportation only About 80-95% of total SWM budget spent on collection and transportation activities being carried out through their own arrangements or private agencies. Huge expenditure on collection and transportation activities affecting the other key components such as scientific processing and safe disposal.

On the contrary, scientific treatment and its safe disposal is an underinvested area and open dumping in low lying areas or dump sites or in water bodies and open burning are common waste disposal practices across cities and towns. This unscientific disposal of solid waste is causing serious health hazards through ground/ surface water pollution, air pollution, soil contamination and vector borne diseases. The challenges of SWM range from lack of ownership of implementing agencies and citizen, poor involvement of community, low level of awareness among the stakeholders, lack of dedicated manpower qualified in environment & solid waste management subject, insufficient budget allocation and land for SWM disposal.

3. About Dadra and Nagar Haveli

Demographic and other relevant details of the Dadra and Nagar Haveli are attached as annexure and charts with this policy. However, before proceeding further a brief detailing of the territory is necessary to truly appreciate the provisions of the policy.

Dadra and Nagar Haveli is a small Union Territory of total area of about 491 square kilometres and situated in the western part of India nestled between state of Gujarat on one hand and the state of Maharashtra on the other. Census of 2011 says that the territory has a population of about 3,42,853. Capital city of Silvassa is the only municipal Council in this union territory. Again, as per census of 2011 the city is populated with 98,265 people. It is

estimated that the current population of Dadra and Nagar Haveli is 4,12,174 and Silvassa is 1,68,931. There are about 24,105 properties in Silvassa and about 90,000 households in gram panchayat area. Out of 24,105 properties in Silvassa municipal Council area, 21,294 residential houses while 3582 are commercial properties. That might appear surprising to many, that in this small territory of merely 17 square kilometres there are 1229 industries.

In addition to Silvassa, there are five other census towns mainly Dadra, Naroli, Samarvani, Masat, Rakholi. Total number of industries in Dadra and Nagar Haveli are 3490. With groups like Sterlite, Hindalco, Hind Aluminum, Associated Group, Advance Detchem Ltd, Gulf Oil, Castrol, Reliance Industries, Blue Star, Global Wind Power(Reliance ADAG), Hindustan Unilever, Sterling & Wilson (P) Ltd, an associate company of Shapoorji&Pallonji Group, Dabur and host of other players in the field of Textiles like Alok Industries, VRIL, and many other FMCG, Gensets, Electronics, Heavy Engineering goods, Chemical, Insecticides, Paints, it has now developed into a full blown industrial hub. Therefore, it goes without saying that Solid Waste Management Policy of DNH should keep in account the realities of the industries and migrant labour/floating population which usually comes with them.

Apart from this, this area is also experiencing a rapid urban growth. Even the casual observer can see several high-rise buildings in the urban centres of this territory which is a phenomenon not often associated with a small towns and cities. Despite such a small population, presence of such swift vertical urban growth gives rise to the problem of construction and demolition waste which is neither sufficient to be economically viable for processing nor so minuscule so as to be ignored.

Being situated on Western Ghats, Dadra and Nagar Haveli experiences rainfall significantly higher than national average. No policy or action plan for disposal of solid waste in the territory can ignore an average annual rainfall of 2169 mm. Extra care needs to be taken to ensure that the leachate does not flow in the perennial water streams.

4. Vision

Dadra and Nagar Haveli administration aims create a sustainable, inclusive, clean, progressive and a zero waste society by adopting well established principles of Solid Waste Management by implementing environment friendly, economically viable, socially inclusive, technology intensive and easy to use and maintain Solid Waste Management technologiesandensuring whole hearted participation of all stakeholders resulting in 100% door to door collection of segregated solid waste and processing thereof.

Corollary to the above-mentioned vision is the goal of changing public perspective towards the waste. Waste should not be treated as a liability but as a resource which reduces the ecological footprint of human activities and increases sustainability of human existence. Therefore, this policy aims at changing habits of the residents of the Union Territory of DNH to ensure that waste is neither littered nor mixed; to guarantee that almost all waste is collected and processed; and to make certain that landfilling is used only as a last resort and to habituate segregation in a manner that it no longer looks impractical or unviable.

5. Solid Waste Management Rules 2016

The Solid Waste Management Rules, 2016 issued by the Ministry of Environment and Forests and Climate Change, Government of India, under the Environment (Protection) Act, 1986, prescribe the manner in which the Authorities have to undertake source

segregation, collection & transportation in similar manner, scientific and systematic processing closet to point of waste generation and safe disposal of solid waste within their jurisdiction under their respective governing legislation. Though the SWM Rules, 2016 make the Local Bodies responsible for management of wastes, LBs have to management their waste at their own level or engagement of private partners, NGOs, CBOs etc. ensuring scientific and systematic SWM focusing on 100% source segregation, door to door collection in similar manner, composting or biogas from organic wastes and maximum recovery of commercially recyclables and refuse derived fuel (RDF) from commercially non recyclables and safe disposal of inerts ensuring no environmental and health hazards. In this context, there is need to revisit, develop, and implement appropriate strategy framework for scientific and systematic processing and safe disposal of solid waste in order to comply with the SWM Rules, 2016. The framework will guide and support the local bodies in the Union Territory of Dadra and Nagar Haveliin managing the solid waste scientifically, cost effectively, by using various approaches.

5.1 Composition of solid waste: Solid waste comprises of i). bio-degradable waste [means any organic material that can be degraded by micro-organisms into simpler stable compounds -3(4) SWM Rules, 2016] and ii) non-biodegradable waste [means any waste that cannot be degraded by micro-organisms into simpler stable compounds - 3(32) SWM Rules, 2016].

5.2 Solid waste management comprises of i) source segregation, ii) door to door collection and transportation in similar manner (segregated form), iii) scientific processing (bio-degradable) for production of compost and bio-gas, iv) resource recovery/ recycling (non-biodegradable - commercially recyclables), v) RDF production (non-biodegradable - commercially non-recyclables) and vi) safe disposal (inerts - chulah ash, fine earth etc.) following waste hierarchy [means the priority order in which the solid waste is to should be managed by giving emphasis to prevention, reduction, reuse, recycling, recovery and disposal, with prevention being the most preferred option and the disposal at the landfill being the least [3(57) SWM Rules, 2016].

5.3 Solid waste management approach: Preference shall be given to decentralized processing to minimize transportation cost and environmental impacts such as – bio-methanation, microbial composting, vermi-composting, anaerobic digestion or any other appropriate processing for bio- stabilisation of biodegradable wastes [15(v) SWM Rules, 2016].

5.4 Key principals of solid waste management: 100% source segregation of solid waste is mandatory [means sorting and separate storage of various components of solid waste namely biodegradable wastes including agriculture and dairy waste, non-biodegradable wastes including recyclable waste, non- recyclable combustible waste, sanitary waste and non-recyclable inert waste, domestic hazardous wastes, and construction and demolition wastes [3(44) SWM Rules, 2016].

Waste segregation at source is a necessary first step for use of all technologies (available) for waste management across the world (Centre for Science -CSE, 2016). Land filling of i) biodegradable waste or garden waste (composted preferably) and ii) dry recyclables (recycled preferably); is not allowed in the MSW (CPHEEO, 2016) and waste to be managed as per waste management hierarchy.

5.5 Bio-degradable (compostable) wastes: "biodegradable waste" means any organic material that can be degraded by micro-organisms into simpler stable compounds/ compost [3(4) SWM Rules, 2016]. Preference shall be given to decentralized processing to minimize transportation cost and environmental impacts such as bio-methanation, microbial composting, vermicomposting, anaerobic digestion or any other appropriate processing for bio-stabilization of biodegradable/ organic wastes [15(v) SWM Rules, 2016]. Organic waste may be composted aerobically or used for generating energy through anaerobic decomposition processes (CPHEEO, 2016). Bio-degradable waste management will be consisting of following key steps: i. Source segregation [means sorting and separate storage of biodegradable wastes]. ii. Processing [decentralized processing - means establishment of dispersed facilities for maximizing the processing of bio- degradable waste and recovery of recyclables closest to the source of generation so as to minimize transportation of waste for processing or disposal -3(15) SWM Rules, 2016] and centralized processing unit. iii. Processing technologies - Composting a) Aerobic composting - means a controlled process involving microbial decomposition of organic matter in the presence of oxygen, b) Anaerobic digestion - means a controlled process involving microbial decomposition of organic matter in absence of oxygen - 3(1 & 2) SWM Rules, 2016] and c) Bio-methanation - means a process which entails enzymatic decomposition of the organic matter by microbial action to produce methane rich biogas [3(5) SWM Rules, 2016).

5.6 Commercially recyclables: "materials recovery facility" (MRF) means a facility where non-compostable solid waste can be temporarily stored by the local body or any other entity mentioned in rule 2 or any person or agency authorised by any of them to facilitate segregation, sorting [means separating various components and categories of recyclables such as paper, plastic, card- boards, metal, glass, etc., from mixed waste as may be appropriate to facilitate recycling - 3(47) SWM Rules, 2016]) and recovery of recyclables from various components of waste by authorised informal sector of waste pickers, informal recyclers or any other work force engaged by the local body or entity mentioned in rule 2 for the purpose before the waste is delivered or taken up for its processing or disposal [3(31) SWM Rules, 2016]. The first preference should always be given to segregating recyclables for further reuse or recycling (CPHEEO, 2016).

5.7 Commercially non- recyclables: "refused derived fuel"(RDF) means fuel derived from combustible waste fraction of solid waste like plastic, wood, pulp or organic waste, other than chlorinated materials, in the form of pellets or fluff produced by drying, shredding, dehydrating and compacting of solid waste [3(38) SWM Rules, 2016].

5.8 Inerts (fine earth and road sweep silt): safe disposal of inert waste (fine earth, house ash, road sweep silt etc. and C&D waste as per C&D Rules, 2016) in landfill as per SWM Rules, 2016.

6. Steps taken under Solid Waste Management Rules 2016

On 8th April 2016, the Solid Waste Management Rules were notified by the Ministry of Environment Forest and Climate change. These rules prescribe duties and standards for various authorities in a state. They implored that the Solid Waste Management Policy of a state should be made in accordance with these rules and that the local bodies should also frame bye laws incorporating the provisions of these rules.

Many milestones, as enunciated in the policy, have already been achieved by Dadra and Nagar Haveli administration. In the implementation of these rules by local authorities: a)Silvassa Municipal Council Solid Waste Management Bye-Laws have already been framed {See Rule 11(d) and 15(a) of SWM rules 2016}. b) In compliance of Rule 23, State Level Advisory Body for the UT of Dadra and Nagar Haveli has been formed and notified. c) Suitable land for setting up of processing and disposal facility for solid waste has already been identified {See Rule 11(f) of SWM rules 2016}. d) Group Housing Societies in Silvassa Municipal Council area are already being directed to ensure that a separate space for segregation, storage decentralised processing of solid waste is demarcated in the development plan of the housing complexes (Rule 11(h) and 12(a)). e) Land has already been identified for the establishment of sanitary landfill for all the urban centres of the Union Territory. f) Waste pickers and waste dealers have been registered in Silvassa municipal Council area (Rule 11(m). g) In the Solid Waste Management Bye Laws, user fee has been prescribed. h) Littering has been made punishable and fines are being actively collected. i) Land is being identified for material recovery facility or secondary storage facility. j) Door to Door collection and Segregation of waste has started in a few societies. k) Bulk Waste Generators have been identified and have been directed to process their own waste. l) The administration and the Municipal Council have banned plastic in the territory. m) Letter of Acceptance has been given to an agency for door to door collection, segregation, transportation and processing of waste.

7. Principles of Dadra and Nagar Haveli Solid Waste Management Policy

1. Solid Waste Management, which includes segregation, collection, transportation and processing of solid waste, is an integral part of the right to life of all human beings. This is, in addition to water, electricity and other such services, a basic service for which the administration is duty bound to create opportunities and provide basic support.

2. The basic duty of providing Solid Waste Management service lies on the local bodies. However, active support, handholding and monitoring by administration are not only necessary but imperative in achieving the final aim of a zero waste society.

3. It is neither feasible nor advisable to achieve the goals and objectives of Solid Waste Management Policy without active assistance and participation of all stakeholders which includes rag-pickers, waste-dealers, sanitation workers, and the citizens. Therefore, any action or decision of Solid Waste Management must be taken only after active consultation of these stakeholders.

4. Active implementation of bye-laws including fines, and user charges is paramount to achieve the stated goals of this policy.

5. Solid Waste Management Rules, Policy and Bye-Laws are, inter-alia, tools to safeguard and uphold the dignity and safety of sanitation workers. Therefore, any Solid Waste Management Mechanism should actively promote safety and well being of all sanitation workers.

6. Waste is a resource, which if properly utilised could generate livelihood, wealth and profit. It should be treated as an investment.

7. Cleanliness, Health and Prosperity and intricately linked with each other and it is not possible to have one without another.

8. The Polluter should pay; which basically means that the producer of goods or itemsshould be responsible for the cost of preventing or dealing with any pollution that the process causes.

8. Objectives of Dadra and Nagar Haveli Solid Waste Management Policy

1. To move towards a waste management system wherein not more than 10% of non-recyclable waste alone is disposed in a scientifically managed sanitary landfill.

2. To ensure 100% segregation of waste at source and 100% digitally monitored door to door segregated waste collection and processing as per the SWM Rules 2016.

3. To achieve high standards of cleanliness in the urban centres of Dadra and Nagar Haveli to ensure a healthy, hygienic and livable environment by scientific collection, well managed and efficient road sweeping and strict enforcement of fines.

4. To guarantee complete safety and dignity of sanitation workers and active and systematic engagement of rag pickers and waste collectors for activities concerning waste collection, secondary sorting, processing of waste etc.

5. To sustain the Open Defecation Free (ODF) status by providing sewer and water connections wherever possible.

6. To make citizens aware of different categories of solid waste, the importance and necessity of segregation, their duties and rights under Solid Waste Management Rules and Bye-Laws and thereby bring about behavioural changes in the citizens.

7. To ensure and continue complete ban on plastic bags, thermocols, water pouches, non recyclable use and use and throw plastic glasses etc.

8. To build capacity and upgrade consciousness of local bodies to ensure effective and efficient Solid Waste Management by training the stakeholders.

9. To ensure that user charges are levied as notified in the DNH Bye Laws and use it for more efficient collection, transportation, processing and disposal.

10. Ensure that the process of solid waste collection and disposal uplifts the rag pickers and self help groups by giving them legal recognition creating livelihood opportunities.

11. To make sure that the Bulk Waste Generators and industries are responsible for the processing of their own waste. To conduct onsite processing of waste in all the gardens of the territory.

12. To either process construction and demolition waste or to use it for filling roads pits etc.

13. To create market linkages for the ULBs to be able to sell and benefit from their waste products.

14. To promote inhouse, decentralized and onsite processing of the waste so that the cost of transportation of the waste could be minimized.

9. Approach towards Solid Waste Management

9.1 Rural Areas

The Waste Management of rural areas differs from Waste Management of urban areas in not only scope but also in approach. While the interventions in rural areas should be - To achieve the aforementioned objectives it is planned that in all rural areas:-

a) segregation at source of biodegradable kitchen waste and horticultural waste is initiated, facilitated and implemented. This shall be done even when there is no facility for wet waste processing in a village as the wet waste can always be composted using pit composting.

b) Composting structures of the windrow type, NARDEP type (latticework brick structures) or pits with low side walls for aerobic composting and vermicomposting will be constructed in every village in a common area. If feasible a small composting or methanation machine of capacity not more than one tonne shall also be installed in some villages. Some of the agricultural waste which is shredded can also be used for mixing with the kitchen waste and composted along with it. If there are soak pits, septic tanks or DEWATS for treating septage, then the primary treated sludge (after ensuring that the faecal matter/ excreta is free of pathogens) can be co-composted with the kitchen, horticultural and agricultural waste to produce high quality compost and manure, which after proper curing, can be directly used for the fields and crops.

c) Door to door collection of segregated wet waste and horticultural waste will be organized by having tricycles integrated with tractors and trolleys. For this purpose self help groups of the same village or neighbouring village should be preferably employed.

d) Non-biodegradable waste other than construction and demolition waste/ debris etc. can be collected and transported to a shed or a go-down and from there picked up once in a week or fortnight as per weight and volume accumulated and taken to the urban area where a common Dry Waste Collection and Processing Centre can be established for both the rural and urban non-biodegradable waste. Construction and Demolition waste should be used locally to fill pits of stagnant water to prevent malaria, dengue or for filling foundation while building new houses. It should not be preferably transported unless hazardous.

e) Similarly, the small amounts of hazardous waste should also be segregated at source, collected and transported to the shed or go-down in common locations for groups of villages like one in each 20 group panchayats along with the non-biodegradable waste but in a separate collection location so that they can be transported directly to the Sanitary Landfill when a common SLF comes up in the designated spot in DNH.

f) Bulk Waste Generators and Industries in rural areas should have to process their own waste as per various rules regulations and guidelines laid down by the central government and UT administration from time to time.

g) While Solid Waste Management Bye Laws, a user charge and penalty structure is already in force in Silvassa Municipal Council Area, the same is not present in District Panchayat areas. It follows that to be truly effective in implementation of Solid Waste Management Rules 2016, District Panchayat and Gram Panchayats will need to evolve some legal framework to collect user charges and impose fines. User charges, in this respect, are easier to implement as they can be collected merely by a Panchayat resolution. Fines, on the other hand, require either some act, rule, or byelaw for implementation. One solution is that instead of imposing fines, Gram Panchayats can collect administrative charges from the people who generate waste, litter, or do not segregate. It is because administration has to incur extra expense to correct these users behaviour. Every non segregated waste has to be segregated at the level of Gram Panchayats; every waste littered unscrupulously has to be picked by someone in the pay of Panchayat. So Panchayats are fully justified in collecting user charges from people littering or not segregating the waste.

9.2 Urban Areas

a) For urbanized areas, the decentralized waste processing model should be preferred for Bulk Waste Generators and Industries. For remaining places, given the small size of the territory and small population a centralized waste processing unit for the entire territory is more advisable. In this direction, the administration has already hired an agency for door to door collection of segregated waste, its processing and transportation for the urban areas of the territory. Waste should be segregated in wet, dry and hazardous waste (Hazardous preferably in two categories of sanitary/ home healthcare and toxic/chemical & electronic) and they should be collected separately with proper digital RFID/ GPS enabled systems so that 100% segregation at source and 100% door to door collection and transportation is ensured. Colour coded/ lidded bins/ bags shall be made available as per convenience of the residents and the collecting service provider. In urban areas a combination of tricycles for narrow lanes and slums with four wheel tippers of 1cu.m to 2 and 5 cu.m capacities for transportation to Wet waste processing units/Secondary collection Points may be utilized. From these Primary collection vehicles, waste in closed containers shall be brought to secondary collection points from where, after material recovery and processing the waste will be taken to a centralized processing centre. The movement should be towards a no bin system. Waste compactor bins with proper demarcation of green and blue waste can be kept in commercial areas as it is found that in such areas mere two time collection of waste is not sufficient. However, litter bins which will carry inert dust as well as thrown

garbage of the general public should be available for every 100 meters in the Urban Areas and in the tourist spots or market places of rural area.

b) One area each in every urban centre should be identified as material recovery cum sorting facility. This will increase the amount of recyclable materials salvaged from the waste and will further lead to reduced transportation costs of the waste. The material can then be sold to the waste dealers. In such sorting facilities the active assistance of rag pickers should be taken. There are several industries in DNH including paper and plastic, glass and metal industries in the industrial areas of DNH and it is envisaged that there will be no difficulty in recycling all the recyclables within DNH with employment generation for ragpickers. In centralized plants, composting should be used to process the wet waste Bio Gas plants or waste to electricity plants are not suitable for the territory as the amount of waste generation is quite low. However, small biogas plants of up to one tonne capacity may be used by the bulk waste generator to allow them to use the fuel so generated in their premises. The gas and manure thus produced can be used for street lighting, cooking, heating and for running vehicles as well as develop open spaces and parks respectively. It is recommended that these common material recoveries cum sorting facilities will serve both rural and urban areas and will be located at a convenient location. Of course, if the quantity of dry waste turns out to be large, then two such facilities can also be set up in one urban area.

c) A Sanitary Landfill will be constructed at the designated site already identified by the administration, where the unprocessable but somewhat treated hazardous waste like chemicals, parts of electronic waste emanating from the households can be deposited as per the rules and guidelines of MoEFCC and CPCB.

d) A small incinerator of up to 50 kg/ hr with dual chamber and all pollution control measures, as specified in the CPCB guidelines for Biomedical waste and Hazardous waste management, can be placed at the Common Solid Waste Processing site to incinerate the waste which is hazardous and cannot be put in the landfill without treating. The ash from the incinerator can be placed in the sanitary landfill. If the same is found to be toxic then

e) If possible, the sanitary and home healthcare waste from homes and institutions can be picked up separately and kept at the material recovery facility from where the service provider for the Biomedical waste should take this and process at a reasonable cost to avoid any spread of infection.

f) It is recommended that bulk generators like hotels, resorts, marriage halls, large market places like mandis, slaughter houses and industrial estates should set up facilities in accordance with this policy and process their wet, dry, sanitary and hazardous waste. For the ease of processing, they should be also allowed to use the services of any service provider for the management of their waste. Any such bulk waste generator should adhere to the norms of source segregation and not give any mixed waste to the service provider All bulk generators should treat their biodegradable wet waste and horticultural waste by themselves or by employing a common service provider.

10. Time frame for Scientific Solid Waste Management Implementation

Necessary infrastructure shall be created by the administration and the local authorities for the implementation of Scientific Solid Waste Management within the time frame specified below.

Sr. No.	**Milestone**	**Time Frame**
1.	Identification of suitable sites for setting up solid waste processing facilities	Already Completed
2.	Identification of suitable sites for setting up sanitary landfill facilities	Already Completed
3.	Enforcing waste generators to practice segregation of wet waste, dry wastes and domestic hazardous waste at source.	31st March, 2019
4.	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities in urban areas.	31st March, 2019
5.	Ensure separate storage, collection and transportation of construction and demolition wastes.	31st March, 2020
6.	Setting up solid waste processing plant/ facilities	31st May, 2019
7.	Bio remediation or capping of old and abandoned dump sites	31st December, 2020
8.	Ensure door to door collection of segregated waste in covered vehicles to processing at local processing site in rural areas.	31st December, 2020

Annexure – 1

Demographic Details Of Dadra and Nagar Haveli

State	Dadra & Nagar Haveli
Area of UT	491 sq. km
Total no. of Panchayat in DNH	20
Total no. of Wards in the ULB	15

Sr. No.	Demographics		Units
1.	Population (Census 2011)	**Total** **Male** **Female**	3,43,709 1,93,760 1,49,949
2.	Estimated population of Dadra and Nagar Haveli in 2018	**Total** **Male** **Female**	5,02,980 2,83,546 2,19,434
3.	Number of Households (2016 @ growth rate)		76,458
4.	Number of Slums		0
5.	Number of Slum Households		0
6.	Number of Properties / Assessments		52431
7.	Length of Roads (kms) (CC,BT,WBM)		866.14
8.	Length of Pucca drains (kms) (including Storm water Drains)		56.65
9.	Number of Commercial establishments		1
10.	Number of Govt Hospitals		2
11.	Number of Hostels		17
12.	Number of Private Schools		49
13.	Number of Government Schools		26
14.	Number of Government Colleges		2
15.	Number of Bus Stations		1
16.	Number of Railway stations		0
17.	Number of Markets (Vegetable/ Fish/ Non- Veg markets)		11
18.	Number of Play grounds and other Mpl. Lands		10
19.	Number of Public Toilets		18
20.	Number of Surface Water Bodies (tanks/ lakes/ponds)		56

Number of Properties in Silvassa Municipal Council Area

Sr. No.	Parameter	Total Number
1	Residential	21294
2	Commercial	3582
3	Worship Place	60
4	Vacant Plot	105
5	Government Building	632
6	Industrial	1229
7	Other	2850
	Total	**29752**

Number of Properties in Rural Areas of Dadra and Nagar Haveli

Sr. No.	Parameter	Total Number
1	Residential	115424
2	Commercial	4760
3	Worship Place	130
4	Vacant Plot	0
5	Government Building	900
6	Industrial	3994
7	Other	288
	Total	**125496**

(Mohit Mishra)
Deputy Secretary (UD)
Dadra & Nagar Haveli,
Silvassa.

Printed and Published by Principal I.T.I. and Incharge Govt. Printing Press, Silvassa-2018
PRICE : ₹ : 14-00

ANNEXURE -D

No.PCC/DDD/NGT-606(2018)(DNH)/2018-19/151
Pollution Control Committee,
DD & DNH,
Daman.

Dated: 29/04/2019

READ:- Hon'ble National Green Tribunal (Principal Bench), New Delhi order dated 16/01/2019 in O.A. No. 606/2018 in the matter of Compliance of Municipal Solid Waste Management Rules, 2016.

NOTIFICATION

In order to compliance of the Hon'ble National Green Tribunal (Principal Bench), New Delhi order dated 16/01/2019 & vide approval of Advisor to Administrator dated 07.03.2019 the "State Level Committee" is constituted as follows;

Sr. No.	Designation	Member
1	Advisor to Administrator, Dadra & Nagar Haveli.	Chairman
2	Secretary, Urban Development	Member
3	Secretary, Environment and Forest	Member
4	Secretary, Rural Development	Member
5	Secretary, Health	Member
6	Mr. B. R. Naidu, Regional Director, CPCB, Vadodara.	Member
7	Member Secretary, PCC, Dadra & Nagar Haveli	Member Secretary

Member Secretary
Pollution Control Committee,
Dadra Nagar Haveli,
Silvassa

Copy to,

1) The Collector, DNH.
2) Chief Officer, Silvassa Municipal Council, DNH.
3) Chief Executive Officer, District Panchayat, Silvassa.
4) The Assistant Director (Official Language), DNH with a request to get the Notification translated in Hindi language.
5) Guard file.

ANNEXURE - E

No.PCC/DDD/SWM/DNH/18-19/481
Pollution Control Committee,
DD & DNH,
Daman.

Dated : 31/07/2019.

To,
The Chairman,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
Delhi - 110032.

Sub: Annual Report for the UT of Dadra & Nagar Haveli under Solid Waste Management Rules, 2016 - reg.

Sir,

With reference the above-mentioned subject, Annual Report on the municipal solid waste management for the year 2018-19 in the UT of Dadra & Nagar Haveli is enclosed herewith in Form – V of Solid Waste Management Rules, 2016.

Further it is to inform you that the monitoring report of the old dumping sites will be submitted by September, 2019.

Yours faithfully,

Member Secretary
Pollution Control Committee
Dadra & Nagar Haveli
Silvassa

Enclosed as above.

Form – V
[see rule 24(3)]

Format of annual report to be submitted by the state pollution control board or pollution control committee committees to the central pollution control board

To,

PART A

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

1.	Name of the Union territory	:	Dadra & Nagar Haveli
2.	Name & address of the State Pollution Control Board	:	Pollution Control Committee, Daman & Diu and Dadra & Nagar Haveli, 2nd Floor, Secretariat, Silvassa, UT of Dadra & Nagar Haveli.
3.	Number of local bodies responsible for management of solid waste in the State/Union territory under these rules	:	02 No 1. Silvassa Municipal Council 2. Dadra Nagar Haveli District Panchayat
4.	No. of authorization application received	:	Nil
5.	A Summary Statement on progress made by local bodies in respect of solid waste management	:	Please attach as Annexure-I
6.	A Summary Statement on progress made by localbodies in respect of waste collection, segregation, transportation and disposal	:	Please attach as Annexure-II
7.	A summary statement on progress made by local bodies in respect of implementation of ScheduleII	:	Please attach as Annexure-II

Date: 31/07/2019

Place: Silvassa

Member Secretary
Pollution Control Committee
Dadra Nagar Haveli
Silvassa

PART B

Towns/ Cities:

Total number of towns/cities	:	**01 (Silvassa)**
Total number of ULBs	:	**01 (Silvassa Municipal Council)**
Number of class I & class II cities/towns	:	

Authorization Status (Names/ Number):

Number of applications received	:	PCC DD & DNH has not received any application till date.
Number of authorizations granted	:	Nil
Authorizations under scrutiny	:	Nil

Solid Waste Generation Status:

Solid waste generation in the UT :		45 TPD (Silvassa Municipal Council) 30 TPD(Dadra Nagar Haveli District Panchayat)
Collected	:	45 TPD by Silvassa Municipal Council and 30TPDby Dadra Nagar Haveli District Panchayat.
Treated	:	29.9 TPD of waste is being stabilized in windrowed based Centralized Aerobic Composting Facility. (approx. 23 TPD by Silvassa Municipal Council and 6.9 TPD by Dadra Nagar Haveli District Panchayat)
Landfilled	:	Presently local bodies had stopped dumping waste at old dumping sites at Khadoli (DNH). About 2,00,120 Ton of legacy waste is in the existing old dumping site/ unsecured landfill sites at Khadoli (UT of Dadra & Nagar Haveli) and it is expected to be cleared by 2020. A scientific landfill site of capacity 112 TPD will be developed at Kharadpada by June, 2020.

Compliance to Schedule - I of SW Rules:

{Number: One ULB & One RLB/ **Names of town:** Silvassa (Dadra & Nagar Haveli) **/Capacity:** 98,265 people in 15 wards and 239,385 people in 20 Gram Panchayat (183 Wards)**}**

Good practices in cities/towns	:	Sweeping of streets is done once a day in all residential area & twice in all commercial and public areas.
House-to-house collection & segregation	:	100% Collection & Segregation by Silvassa Municipal Council from house-to-house in all 15 wards. 100 % Collection & Segregation by Dadra Nagar Haveli District Panchayat from house-to-house in 8 District Panchayat (77 Wards) out of 20 District Panchayat (183 Wards).
Storage	:	Total storage capacity is 112 TPD (Silvassa Municipal Council and Dadra Nagar Haveli, District Panchayat)
Covered transportation	:	14 Tractors, 6 Dumper Truck, 1 Compactor lifter, 3 Hydraulic Lifter and 6 Pick-up Tempo collects waste from house to house and 668 twin bins, 20 compactor bins & 45 Hydraulic large bins for collection of 75 TPD of waste from 92 wards.

Processing of Solid Waste:

(Number: One/ **Names of towns:** Silvassa (Dadra & Nagar Haveli)/ **Capacity:** 85 TPD)

Solid Waste processing facilities setup: Kharadpada Site (Dadra & Nagar Haveli)

Sl. No.	Composting	Vermi-composting	Biogas	RDF/ Pelletization
1.	One centralized manual aerobic windrow based composting plant of capacity 85 TPD	No	No	No

Processing facility operational: Kharadpada Site (Dadra & Nagar Haveli)

Sl. No.	Composting	Vermi-composting	Biogas	RDF/ Pelletization
1.	One centralized manual aerobic windrow based composting plant of capacity 85 TPD	No	No	No

Processing facility under installation/ planned: Nil

Sl. No.	Composting	Vermi-composting	Biogas	RDF/ Pelletisation
1.	No	No	No	No

Waste-to-Energy Plants:

(Number: Nil **/ Names of towns:** N.A.**/ Capacity:** N.A. **)**

Sl. No.	Plant Location	Status of operation	Power generation (MW)	Remarks
---	---	---	---	N.A.

Disposal of solid waste:

(Number: One **/ Names of town:** Silvassa (Dadra & Nagar Haveli) **/Capacity:** 112 TPD**)**

Landfill sites identified	:	5.27 Hector of land had been identified to establish scientific landfill site of capacity 112 TPD at Kharadpada in the UT of Dadra & Nagar Haveli.
Landfill constructed	:	Nil
Landfill under construction	:	Nil
Landfill in operation	:	Nil
Landfill exhausted	:	Nil
Landfilled capped	:	Nil

Solid Waste Dumpsites:

(Number: One old dumping site**/ Names of town:** Khadoli, Silvassa (Dadra & Nagar Haveli) **/ Capacity:** about 2,00,120 Tons of legacy waste**)**

Total number of existing dumpsites	:	One old dumping site is situated at Khadoli having 2,00,120 Tons of legacy waste. It will be cleared by 2020.
Dumpsites reclaimed/capped	:	No
Dumpsites converted to sanitary landfill	:	Expected to be used for filling it with Construction & Demolition waste after removal of legacy waste from it.

Monitoring at Waste processing/Landfills sites:

Sl. No.	Name of facilities	Ambient air	Groundwater	Leachate quality	Compost quality	VOCs
1.	---	---	---	---	---	---

**Monitoring data will be updated by September, 2019.*

Status of Action Plan prepared by Municipalities:

Total number of municipalities	:	One (Silvassa Municipal Council)
Number of Action Plan submitted	:	One (Dadra & Nagar Haveli Solid Waste Management Policy, 2018 notified vide Notification No. SMC/CO/GNL/State Policy/ 263/2018-19/53 dated 11/09/2018.

Annexure-I

For effective implementation of the Solid Waste Management Rules, 2016 UT Administration of Dadra & Nagar Haveli has notified the following.

a) UT Level Advisory Body vide Notification No. TPS/105(19)/SWMR-2016/2017/1319 dated 21.11.2017 (**Annexure A**).

b) Dadra and Nagar Haveli Silvassa Municipal Council Solid Waste (Handling & Management) Bye Laws, 2018 notified vide Notification No. DNH/SMC/BYE LAWS/18/2017 dated 28.03.2018 (**Annexure B**).

c) Dadra & Nagar Haveli Solid Waste Management Policy, 2018 notified vide Notification No. SMC/CO/GNL/State Policy/ 263/2018-19/53 dated 11/09/2018 (**Annexure C**).

- Silvassa is having plastic recycling industries which utilise plastics, PET bottles scraps and waste polyester yarns as raw materials to manufacture recycled plastic granules and fibres.

- All the bulk waste generators (Hotels and Restaurants) have been identified and it has been made compulsory for them to process their own waste. 60% Hotels/Restaurants are complying and processing the wastes.

- The remaining small hotels/restaurants are persuaded to process their waste.

- User fee from different stakeholders is being levied along with property tax and a resolution to this effect has already been passed in the Silvassa Municipal Council.

a) Silvassa Municipal Council (SMC) Area:

- There are 15 wards in Silvassa Municipal Council and has a population of 98,265 people. Door to Door collection, segregation, processing and disposal of solid wastes is being carried out regularly and effectively in SMC areas.

b) Dadra & Nagar Haveli District Panchayat Area

- Dadra & Nagar Haveli rural areas include 20 Gram Panchayats (183 Wards), having a population of 239,385 people. Door to Door collection, segregation, processing and disposal have been initiated in 8 Gram Panchayat (77 Wards). 30 MT of solid wastes are generated on daily basis in the 8 Gram Panchayat. 100 % Door to Door collection, segregation, processing and disposal of generated wastes in remaining 12 Gram Panchayats (106 wards) will be done by June, 2020.

Annexure-II

Table 1: Status on Implementation SWM Rules in Silvassa Municipal Council (SMC) Area

Sr. No.	Compliances for implementation of SWM Rules, 2016	Existing Status	Targeted time line for 100% Implementation/ Remark
1.	Quantity of legacy waste in existing old dumping/ landfill sites.	2 Lakh Metric Ton	---
2.	Clearing legacy waste from existing dumping/landfill sites.	Tender for remediation of legacy waste is being prepared.	June 2020
3.	Total Quantity of Waste Generation/ Ward Wise Waste Generation	45 Ton per Day from 15 wards	---
4.	Number of Primary Collection Depots	388	---
5.	Number of Transportation vehicles involved in the SWM along with capacity and number of trips in a day.	18 Tata 407 @ three trips per day for collection of approx. 45 Ton of waste from 15 wards.	---
6.	Number of informal waste collectors/ waste picker/ other informal agencies authorized by the local body to handle waste	172	Waste pickers have been identified and issued licenses
7.	Door to Door Collection (Ward Wise)	100 % Door to Door collection from 15 Wards	---
8.	Segregation of Collected Wastes at Source (Ward Wise)	54% of collected wastes is being segregated at Source	100% will be achieved by September, 2019
9.	Computerization of Waste Collection Process.	In process	December, 2019
10.	Quantity of Recyclable Waste (segregated non-biodegradable solid waste which can be transformed into new material or product or as raw material for producing new products which may or may not be similar to the originalproducts)	11 Ton per Day (Approx.)	---
11.	Quantity of Combustible Waste (non-biodegradable, non-recyclable, non-reusable, non-hazardous solid waste having minimum calorific value exceeding 1500 kcal/kg and excluding chlorinated materials like plastic, wood pulp, etc.)	11 Ton per Day(Approx.)	---

12.	Quantity of Sanitary Waste (wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste)	0.04 Ton per Day (Approx.)	---
13.	Quantity of Domestic Hazardous Waste Generation (i.e. discarded paint drums, pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level)	0.04 to 0.3 Ton per Day (Approx.)	---
14.	Quantity of Waste Suitable for Stabilization (biodegradable waste)	23 Ton per Day (Approx.)	---
15.	Penalty provisions	Implemented under SWM bye laws and executive order	Rs. 10.92 lakhs released as penalty from violators. (Approx.)
16.	Centralized Waste Stabilization Facilities with Capacity (i.e. Windrow/ Microbial Composting, Vermi-Composting, Bio-Methanation, Anaerobic Digestion or any other appropriate processing for Bio-Stabilization of Biodegradable Wastes)	One centralised plant (Windrow based Aerobic composting having 85 Ton per Day of capacity)	Under construction to be functional by September, 2019.
17.	Scientific Landfill Site with Capacity	To be constructed at existing old land fill site at Kharadpada which is having 5.27 Hector of land.	June, 2020

Table 2: Status on Implementation of SWM Rules in Dadra & Nagar Haveli Rural Areas

Sr. No.	Compliances for implementation of SWM Rules, 2016	Existing Status	Targeted time line for 100% Implementation/Remark
1.	Quantity of legacy waste in existing old dumping/ landfill sites.	120 MT (at old dumping site Khadoli)	--
2.	Clearing legacy waste from existing dumping/landfill sites.	Tender has been floated by SMC	June 2020
3.	Total Quantity of Waste Generation/ Ward Wise Waste Generation	30 Ton per Day from 8 Gram Panchayats (77 wards)	Data of waste generation in remaining 12 Gram Panchayats (106 wards) will be gathered by June 2020
4.	Number of Primary Collection Depots	77	Another 106 Primary Collection Depots will be installed by December 2019.
5.	Number of Transportation vehicles involved in the SWM along with capacity and number of trips in a day.	11 Nos. Tata 407 @ 2 trips/day for collection of approx. 30 Ton of waste from 8 Gram Panchayats (77 wards).	100% collection will be achieved by June 2020
6.	Number of informal waste collectors/ waste picker/ other informal agencies authorized by the local body to handle waste.	Not identified, however 2-3 in each Gram Panchayat	Survey & Registration will be completed by December 2019
7.	Door to Door Collection (Ward Wise)	100% in 8 Gram Panchayats (77 wards)	In remaining 12 Gram Panchayats (106 wards) it will be done by December 2019
8.	Segregation of Collected Wastes at Source (Ward Wise)	100% in 8 Gram Panchayats (77	In remaining 12 Gram Panchayats (106 wards)

		wards)	it will be done by March 2020
9.	Computerization of Waste Collection Process.	In process	Mach 2020
10.	Quantity of Recyclable Waste (segregated non-biodegradable solid waste which can be transformed into new material or product or as raw material for producing new products which may or may not be similar to the original products)	(11.40 TPD) approximate	---
11.	Quantity of Combustible Waste (non-biodegradable, non-recyclable, non-reusable, non-hazardous solid waste having minimum calorific value exceeding 1500 kcal/kg and excluding chlorinated materials like plastic, wood pulp, etc.)	(11.10 TPD) approximate	---
12.	Quantity of Sanitary Waste (wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste)	(0.3 TPD app.)	---
13.	Quantity of Domestic Hazardous Waste Generation (i.e. discarded pain drums, pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level)	(0.3 TPD app.)	---
14.	Quantity of Waste Suitable for Stabilization (biodegradable waste)	(6.9 TPD approx.)	June 2020
15.	Penalty provisions	Penalty is being collected in similar	By-Laws are being prepared

		lines as SMC	
16.	Centralized Waste Stabilization Facilities with Capacity (i.e. Windrow/ Microbial Composting, Vermi-Composting, Bio Methanation, Anaerobic Digestion or any other appropriate processing for Bio-Stabilization of Biodegradable Wastes)	1-Centralized plant Windrowed based Aerobic composting capacity of 85TPD	Under construction to be functional by September 2019
17.	Scientific Landfill Site with Capacity	112 MT	June 2020

Minutes of the 1st meeting held on 31/05/2018 at 11:30 regarding the status of compliance of the Solid Waste Management Rules, 2016 as per the Hon'ble NGT (PB), New Delhi Order dated 11th April, 2019 in the matter of Original Application No. 606/2018

The 1st meeting was held on 31/05/2018 at 11:30 in the chamber of the Collector Daman to discuss the issue regarding the status of compliance of the Solid Waste Management Rules, 2016. The following members were present during the meeting:

1. Shri Kannan Gopinathan, IAS, Collector, Dadra & Nagar Haveli/ Member Secretary, Pollution Control Committee, Dadra & Nagar Haveli.
2. Shri Mohit Mishra, Chief Officer, Silvassa Municipal Council.
3. Dr. D. M. Dumralia, District Panchayat, Dadra & Nagar Haveli.
4. Shri Santoshkumar Sutariya, Junior Project Engineer, PCC DD & DNH.
5. Shri Deepak Rathod, Silvassa Municipal Council.

Collector, Dadra & Nagar Haveli welcomed all the members and started the discussion.

In the beginning the status of implementation of Solid Waste Management Rules, 2016 was discussed as per the previous data which were submitted in the Hon'ble NGT (PB), New Delhi on 11/04/2019;

Sr. No.	Actions to be taken for implementation of SWM Rules, 2016	Silvassa Municipal Council (SMC) Area		Dadra & Nagar Haveli Rural Areas	
		Existing status	Targeted time line for complete implementation of SWM Rules, 2016.	Existing status	Targeted time line fc complete implementation of SWM Rules, 2016.
1.	Notify buffer zone for the solid waste processing and disposal facilities of more than five tons per day in consultation with the PCC.	Implemented		Implemented	December 2019
2.	Quantity of legacy waste in existing old dumping/ landfill sites.	2 lakhs MT	-	NA	

3.	Clearing existing dumps/landfills sites.	In process	The waste is to be processed by the agency once the plant is functional. It is expected to be cleared in 2020.	NA	
4.	100% Door to Door Collection.	100 %	---	30 % under progress. 14 tractors and 6 Hydraulic pick up vans distributed in 20 GPs	December 2019
5.	100% Segregation at Source.	25 %	June, 2019	30 %	December 2019
6.	100% Processing of waste.	60 % (30% windrowed based composting and 30% sorting/recycling)	December, 2019	60 % (30% windrowed based composting and 30% sorting/recycling)	December 2019
7.	100% Computerization of waste collection process.	In process	December, 2019	In process	December 2019
8.	Develop Scientific Landfill Site.	---	June, 2020	Tender floated	Will be completed b 30/06/2020
9.	Penalty provisions.	Already implemented under SWM bye laws and executive orders	Approx. 10.92 lakhs realised as penalty from violators	Being implemented	Rs. 10,950

There was a misunderstanding on the data of collection, processing and stabilization/ composting. Therefore the Collector, DNH had directed both the local bodies to prepare and submit fresh data within a week.

All the above listed points were discussed in detail by the members and after detailed discussion it was decided to initiate following actions:

1. A fresh checklist for the compliance of the Solid Waste Management Rules, 2016 shall be prepared by the PCC, so that there shall be no variation in the data of implementation status.
2. Local bodies shall submit fresh updated on the status as per the new checklist provided by the PCC.
3. Operators of the processing/ stabilization/ Disposal facilities shall obtain Environmental Clearance from the EIAA, DD & DNH and Consent to Establish/Operate from the PCC.
4. PCC shall carry out environmental monitoring of the existing old dumping sites and the new processing/ stabilization/ disposal facilities in the UT of DNH twice a year.
5. PCC shall look into the procedure which industrial units are following for the disposal of generated solid waste from the domestic activities in their respective premises.
6. All the biomedical wastes generating units shall be inspected by the PCC and action shall be initiated against the defaulting units.

Finally it was directed by the Collector, DNH that on 2nd and 4th Friday of every month at 11:30 AM similar meeting shall be conducted in the Chamber of the Collector, DNH to discuss the status on implementation of the Solid Waste Management Rules, 2016 in the UT of Dadra & Nagar Haveli.

The meeting ended with vote of thanks to the Chair.

s/d
Collector, DNH/
Member Secretary
Pollution Control Committee, DNH
Silvassa

No. PCC/DDD/NGT-606(2018) (DNH)/2018-19/ 62
Date: 12/07/19

To,
All Concerned.

Minutes of the 2nd meeting held on 17/07/2019 at 10:30 regardingthe status of compliance of the Solid Waste Management Rules, 2016 as per theHon'ble NGT (PB), New Delhi Order dated 11th April, 2019 in the matter of Original Application No. 606/2018

The 2ndmeeting was held on 17/07/2019 at 10:30 in the chamber of the Collector Dadra & Nagar Haveli to discuss the issue regarding the status of compliance of the Solid Waste Management Rules, 2016. The following members were present during the meeting:

1. Shri Sandeep Kumar Singh, IAS, Collector, Dadra & Nagar Haveli/ Member Secretary, Pollution Control Committee, Dadra & Nagar Haveli.
2. Shri H.M. Chavda, Chief Executive Officer, District Panchayat, Dadra & Nagar Haveli.
3. Shri Mohit Mishra, Chief Officer, Silvassa Municipal Council.
4. Dr. Rajeev Ranjan, HO, Silvassa Municipal Council.
5. Dr. D. M. Dumralia, DPO, District Panchayat, Dadra & Nagar Haveli.
6. Shri Santoshkumar Sutariya, Junior Project Engineer, Pollution Control Committee, DD & DNH.
7. Shri Deepak Rathod, SO, Silvassa Municipal Council.

Collector, Dadra & Nagar Haveli welcomed all the members and started the discussion.

In the beginning the status of implementation of Solid Waste Management Rules, 2016 was discussed as per the previous data which were submitted in the Hon'ble NGT (PB), New Delhi on 11/04/2019;

Agenda No. 1 - Status of the compliance under Rule-22 of Solid Waste Management Rules, 2016 (Time line for implementation with present status as per prescribed format provided vide PCC letter dated 26/06/2019).

- All the bulk generators in village panchayat will have to collect their waste and dispose on their own at the dumping ground. Notice has to be issued to all such bulk generator.
- Collection bins or containers will be provided by the district panchayat for solid waste collection in Village panchayat region.
- Operator of the integrated solid waste management facility (ISWMF) at Kharadpada Site shall obtain Environmental Clearance from the EIAA, DD & DNH and Consent to Establish/Operate from the Pollution Control Committee.
- Pollution Control Committee shall carry out environmental monitoring of the existing old landfill site at Kharadpada and suggest remediation measure.
- As a part of awareness programme all the government school shall be involved by providing collection centre for recyclable plastic waste or scrap for the students.
- List of all the plastic recycling industries located in the UT of Dadra & Nagar Haveli authorised by the Pollution Control Committee shall be shared with the local bodies.

Agenda No. 2 - Status of the compliance under Rule-24 of Solid Waste Management Rules, 2016 (Annual Report).

- Both Silvassa Municipal Council and District Panchayat had submitted Annual Report in Form–IV to the Pollution Control Committee, but the data was not appropriate therefore again a prescribed format was given to both the local bodies.
- Solid Waste Management data in prescribed format was received from Silvassa Municipal Council and Shri H.M. Chandra, CEO, District Panchayat had informed that the data in prescribed format will be provided within next two days.
- Pollution Control Committee shall compile the data received from the local bodies and submit annual report in Form-V to the CPCB by next week.

Agenda No. 3 - Performance audit to be done on 18 parameters of Solid Waste Management as directed in the Hon'ble NGT Order 11/04/2019.

- Municipal Council and District Panchayat shall identify criteria for conducting performance audit and consult third party to conduct performance audit for solid waste management in the UT of Dadra & Nagar Haveli.

Agenda No. 4 - Status of timely implementation of Schedule-III of the Construction and Demolition Waste Rules, 2016.

- The existing unsecured site (old dumping site) at Khadoli is having low land which can be easily filled with C & D waste without causing any adverse impact on environment (soil, surface or ground water and ambient air).
- Khadoli old dumping site will be used for construction and demolition waste disposal after removal of legacy waste.

Agenda No. 5 - The notification needs to be published for the PWD to mandatorily mix 10% of plastic for road making, from the ISWM facility. The PWD should buy the plastic of prescribed quality from the ISWM facility. The plastic comes about 25 % cheaper to tar.

- Pollution Control Committee shall issue direction to both the local bodies and PWD to mandatorily mix 10% of plastic in road making, which have been recovered from the integrated solid waste management facility or material recovery facility at Kharadpada.

Agenda No. 6 - The industry using fuel in the DNH area should be made compliant to the SWM Rules 2016, which states that – "All the industries using fuel and located within 100 Km of Solid Waste based RDF plant shall make arrangement within 6

months from the notification of these rules to replace at least 5% of their fuel requirement by RDF so produced." There are many industries in DNH which are using the fuel but not compliant to the SWM Rules, 2016. We can offer them of supply of RDF or Briquettes as per their requirement.

- Pollution Control Committee shall direct all the industries which are using agro based briquettes to procure briquettes as fuel from the local facility (Solid Waste based RDF plant).

Agenda No. 7 - Industrial waste management is mandated by SWM Rules, 2016. The same needs to be implemented in DNH as well. In the agreement signed for solid waste management in DNH the industrial waste management is defined to be done by the Agency but implementation of the rules across the DNH industries is to be regulated. Without strict compliance the Industries are not taking the subject seriously.

- All the industries shall be directed by the Pollution Control Committee to manage and dispose the generated solid waste in their premises by having independent agreement with the agency or operator of the integrated solid waste management facility (ISWMF) or material recovery facility (MRF) at Kharadpada Site.
- All the industries shall store the generated solid waste in segregated form at their premises and the same shall be handed over to the agency responsible of collection &transportation of solid waste to the ISWM facility.

Agenda No. 8– As per the agreement signed we are supposed to get a land for MRF (Material Recovery Facility) purpose. There was a land identified and intimated to us by the Authority (SMC) on the ring road. But the land allotment is not done so far for MRF facility. We need the land allotted to us for the same.

- Material Recovery Facility will be developed at existing Kharadpada land fill site which is having 5.27 Hector of land.

Agenda No. 9– Regular Police Patrolling in the ISWM Plant area is required to make the work smooth. Some disturbing elements keep marking small issues there with the intention to create tension. Police activity shall keep disturbing elements in check.

- CO, SMC to initiate action in this regard.

Agenda No. 10 – Revised action plan for the utilization of treated sewage water in the UT of Dadra & Nagar Haveli.

- Silvassa Municipal Council shall submit Consent to Establish application for Common Sewage Treatment Plant before the Pollution Control Committee through OCMMS.
- Silvassa Municipal Council shall submit revised action plan for the utilization of treated sewage water from the Common Sewage Treatment Plant on urgent basis.

Agenda No. 11– Status of Plastic Waste Management Rules, 2018and Bio-medical Waste Management Rules, 2016in the UT of Dadra & Nagar Haveli.

In the next meeting status report on the implementation of Plastic Waste Management Rules, 2018and Bio-medical Waste Management Rules, 2016in the UT of Dadra & Nagar Haveli shall be brought by the concern department.

Finally, the meeting ended with vote of thanks to the Chair.

Collector, DNH/
Member Secretary
Pollution Control Committee, DNH
Silvassa

No. PCC/DDD/NGT-606(2018) (DNH)/2018-19/ 67
Date: 24/7/19

To,
All Concerned. with information that next meeting will be convened on 31.07.2019 at 1000 Hrs.

Minutes of the 3rd meeting held on 31/07/2019 at 10:45 regardingthe status of compliance of the Solid Waste Management Rules, 2016 as per theHon'ble NGT (PB), New Delhi Order dated 11th April, 2019 in the matter of Original Application No. 606/2018

The 3rdmeeting was held on 31/07/2019 at 10:45 in the chamber of the Collector Dadra & Nagar Haveli to discuss the issue regarding the status of compliance of the Solid Waste Management Rules, 2016. The following members were present during the meeting:

1. Shri Sandeep Kumar Singh, IAS, Collector, Dadra & Nagar Haveli/ Member Secretary, Pollution Control Committee, Dadra & Nagar Haveli.
2. Shri H.M. Chavda, Chief Executive Officer, District Panchayat, Dadra & Nagar Haveli.
3. Shri Mohit Mishra, Chief Officer, Silvassa Municipal Council.
4. Dr. Rajeev Ranjan, HO, Silvassa Municipal Council.
5. Shri Santoshkumar Sutariya, Junior Project Engineer, Pollution Control Committee, DD & DNH.
6. Smt. Pooja Bhalodiya, Junior Project Engineer, Pollution Control Committee, DD & DNH.
7. Shri Deepak Rathod, SO, Silvassa Municipal Council.

Collector, Dadra & Nagar Haveli welcomed all the members and started the discussion.

In the beginning the status of implementation of Solid Waste Management Rules, 2016 was discussed as per the previous data which were submitted in the Hon'ble NGT (PB), New Delhi on 11/04/2019;

Agenda No.1 - Status of the compliance under Rule-22 of Solid Waste Management Rules, 2016 (Time line for implementation with present status as per prescribed format provided vide PCC letter dated 26/06/2019).

S. No.	Agenda	Status	Remarks
1.	Solid waste management for Bulk Waste generators in village panchayat area	All the bulk generators will have to collect their waste and dispose on their own or through the agency.	Notice has to be issued to all such bulk generator by the SMC and District Panchayat shall identify all the bulk generators in the rural area.
2.	Collection bins or containers for solid waste collection in Village panchayat region	SMC had procured collection bins or containers for solid waste collection in Village panchayat region of DNH.	District Panchayat shall collect collection bins or containers from SMC for solid waste collection in Village Panchayat region.
3.	Environmental Clearance from the EIAA, DD & DNH and Consent to Establish/Operate from the PCC for the	Terms of Reference is obtained by the SMC for ISWMF at Kharadpada Site.	SMC shall submit application for CTE before the PCC through OCMMS.

	integrated solid waste management facility (ISWMF) at Kharadpada Site.		
4.	Environmental Monitoring of the existing old landfill site at Kharadpada.	Monitoring of the existing old landfill site at Kharadpada will be done under Smart City Project.	PCC shall initiate steps for monitoring and suggest remediation measure in coordination with Smart City Project.
5.	Material Recovery Facility to be developed at existing Kharadpada land fill site which is having 5.27 Hector of land.	Initiated the process for developing Material Recovery Facility at existing Kharadpada land fill site.	Will be completed by
6.	All the industries using fuel and located within 100 Km of Solid Waste based RDF plant shall make arrangement within 6 months from the notification of these rules to replace at least 5% of their fuel requirement by RDF so produced."	There are many industries in DNH which are using agro based fuel or Briquettes, we can offer them supply of RDF or Briquettes as per their requirement after developing facility for producing Solid Waste based RDF or Briquettes at Kharadpada Site.	PCC shall direct all the industries which are using agro based briquettes, to procure briquettes as fuel from the local facility (Solid Waste based RDF or Briquettesplant).
7.	PCC shall issue direction to both the local bodies and PWD to mandatorily mix 10% of plastic in road making instead of tar, which have been recovered from the integrated solid waste management facility or material recovery facility at Kharadpada.	PCC is in process of issuing the direction. PCC shall share list of all the plastic recycling industries located in the UT of Dadra & Nagar Haveli with the local bodies.	Shall be completed within a week.
8.	Implementation of the SWM Rules, 2016 across all the DNH industries.	PCC shall direct all the industries to manage and dispose the generated solid waste in their premises by having independent agreement with the agency or operator of the integrated solid waste	Direction to be issued by PCC to all the industries within a week.

		management facility (ISWMF) or material recovery facility (MRF) at Kharadpada Site.	
9.	Performance audit to be done on 18 parameters of Solid Waste Management as directed in the Hon'ble NGT Order 11/04/2019.	Criteria for conducting performance audit and consult third party to conduct performance audit for solid waste management in the UT of Dadra & Nagar Haveli.	Updated shall be provided by November, 2019.
10.	Creating awareness among the stake holders and IEC activities	Resolution of council has been passed. 75 days programme had already been initiated by the SMC with five different activities: 1. Issuing notices to all the bulk waste generators. 2. Pamphlets distributions. 3. IEC activities. 4. Dustbin distribution 5. Segregation at source.	Awareness programme in all the government school shall be initiated through Reliance industries Ltd. by providing collection centre for recyclable plastic waste or scrap for the students.
11.	Regular Police Patrolling in the ISWM Plant area is required to make the work smooth. Some disturbing elements keep marking small issues there with the intention to create tension. Police activity shall keep disturbing elements in check.	CO, SMC had already initiated action.	Done

Agenda No.2 - The compliance under Rule-24 of Solid Waste Management Rules, 2016 (Annual Report).

S. No.	Agenda	Status	Remarks
1.	Annual Report in Form–IV to	Annual Report in Form–	PCC shall submit updated

	be submitted by the local bodies to the PCC.	IVfor the year 2018-19 are already submitted by the local bodies to the PCC.	report onSolid Waste Management in the UT of Dadra Nagar Haveli to the Hon'ble NGT (PB), New Delhi.
2.	Annual Report in Form-Vto be submitted by the PCC, DD & DNHto the CPCB.	Annual Report in Form-V is already prepared and put-up for approval by the PCC staff.	
	Updated on Solid Waste Management data in prescribed format.	PCC had already received updated data on Solid Waste Management in prescribed format from the local bodies.	

Agenda No. 3 - Timely implementation of Schedule-III of the Construction and Demolition Waste Rules, 2016.

S. No.	Agenda	Status	Remarks
	Notify C & D waste disposal and recovery facility in the UT of Dadra & Nagar Haveli.	The existing unsecured site (old dumping site) at Khadoli is having low land which can be easily filled with C & D waste without causing any adverse impact on environment (soil, surface or ground water and ambient air).	Khadoli old dumping site will be used for construction and demolition waste disposal after removal of legacy waste. Notification for the same shall be shared with the PCC.

Agenda No.4 – Revised action plan for the utilization of treated sewage water in the UT of Dadra & Nagar Haveli.

S. No.	Agenda	Status	Remarks
	Consent to Establish for Common Sewage Treatment Plant before the Pollution Control Committee through OCMMS	SMC is in process for submitting Consent to Establish application for Common Sewage Treatment Plant.	SMC shall submit Consent to Establish application on urgent basis.
	Submit revised action plan for the utilization of treated sewage water from the Common Sewage Treatment Plant for the compliance of	Revised action plan is prepared by the SMC for the utilization of treated sewage water from the Common Sewage	SMC shall submit the Revised action plan on urgent basis to the PCC.

	NGT Order.	Treatment Plant and is in the approval stage.	

Agenda No.5 – Plastic Waste Management Rules, 2018 in the UT of Dadra & Nagar Haveli.

S. No.	Points to be complied by the local bodies
1	Constitution of Squads for vigilance purpose and ensure ban on stocking, distribution, selling and use of any carry bag<50micron thickness and plastic sachets/pouches used for packing, storing or selling of Gutkha, tobacco and pan masala by Urban Development Department.
2	Implementation of provision 5 and 6 of PWM Rules, 2016 for the disposal of plastic waste and prevent littering of plastic waste and prevent littering of plastic waste in public, religious and historical places by local bodies
3	Annual report by local bodies to PCC for the year 2018-19 in prescribed format
4	Development and setting up of infrastructure for segregation, collection, storage, transportation of plastic waste and channelization of recycled plastic waste fraction to recyclers with valid registration
5	Creating awareness among the stake holders and IEC activities
6	Prevention of open burning of plastic wastes
7	Amendment of bylaws by the local bodies for implementation of Plastic Waste Management Rules, 2016
8	Segregation of dry and wet waste by the local bodies
9	Decentralized Composting Plant
10	Setting up of Material Recovery Facility prior to processing of Solid Waste
11	Quantity of Plastic Waste generated(TPD)
12	Percentage of gram panchayat which have setup of plastic waste management system as per Rule7
13	Status of Utilization of Plastic Waste in Recycling, Road Construction, Waste to oil, Co-processing of plastic waste in cement kilns, RDF, Footpath/Tiles, Others
14	Whether local bodies have framed bye-laws
15	Has complete ban on plastic carry bags been imposed?
16	Status of marking &labeling on plastic carry bags & multi layered packaging

Agenda No.6 – Bio-medical Waste Management Rules, 2016 in the UT of Dadra & Nagar Haveli.

S. No.	Points to be complied by the PCC
1	Inventory on BMW in the UT of DNH
2	Authorization of non bedded HCFs under BMWM Rules, 2016
3	Evolve a mechanism for monitoring compliance by HCFs for segregation in

	color coded bins/ containers, pre-treatment to laboratory waste, separate biomedical waste storage space, liquid waste treatment etc.
4	Bar-code system is not implemented by all HCFs as required under BMWM Rules, 2016.
5	Annual Report on Biomedical Waste Management.

In the next meeting status report on the implementation of Plastic Waste Management Rules, 2018 and Bio-medical Waste Management Rules, 2016 in the UT of Dadra & Nagar Haveli shall be brought by the concern department.

Finally,the meeting ended with vote of thanks to the Chair.

Collector, DNH/
Member Secretary
Pollution Control Committee, DNH
Silvassa

No. PCC/DDD/NGT-606(2018) (DNH)/2018-19/71
Date: 23/08/19

To,
All Concerned.

सिलवासा नगर पालिका परिषद
SILVASSA MUNICIPAL COUNCIL
दादरा एवंनगर हवेली, /DADRA & NAGAR HAVELI,
सिलवासा /SILVASSA

No. SMC/CO/SS/2018/03/4132 Date: 13 /12/2018.

ORDER

Whereas, the Union Government has vide notification number G.S.R. 317(E), Dated 29/03/2016 notified Construction and Demolition Waste Rules 2016 directing therein that it shall be compulsory for ULB's to ensure proper management of Construction and Demolition Waste.

Whereas, Solid Waste Management Bye Laws 2018 and Solid Waste Management policy 2018 make it necessary for the SMC to notify the spot and time where C&D waste can be deposited.

Whereas, non segregation of C&D waste has been made an offence by these bye laws.

Therefore, I, Chief Officer Silvassa Municipal Council, in exercise of powers vested in me under Dadra and Nagar Haveli Municipal Council regulation 2004 and rules and bye-laws mentioned forthwith, and with prior approval and concurrence of President Silvassa Municipal Council, do hereby order that:-

1. Every generator of Construction and Demolition Waste shall ensure that other waste (such as solid waste) does not get mixed with this waste and is stored and disposed separately
2. No generator of C&D waste shall without prior approval of HO, SMC and without paying charges shall dump or throw the C&D waste in any Sanitary or insanitary landfill maintained, or used by Silvassa Municipal Council.
3. Every C&D waste generator can use the C&D waste in filling cavities, pits etc.
4. Every C&D waste generator shall ensure that the waste is not kept on roads, is not kept in open and is not thrown on or in water bodies. The waste generator shall either keep the waste in its own premises or on the premises of the agency he has sought to process such waste. The generator shall be required to keep a record of receipts and agreements proving that the waste was properly handled or processed.
5. There shall be a recovery of administrative charges of Rs. 500/tonne of the C&D waste that was deposited or littered on public place or road or was kept in open in a manner to cause pollution.

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6. The C&D waste generator not able to process the waste of its own can take help of Silvassa Municipal Council by generating a request by calling on phone no 0260-2633192 or by applying to SMC in written. For use of landfill site of SMC or for the collection and transportation of the waste, the generator shall be required to pay the charges to the SMC at commercial rates in force at the time of such collection or transportation.
7. Waste generators who generate more than 20 tons or more in one day or 300 tons per project in month shall segregate the waste into four streams such as concrete, soil, steel, wood and plastics, bricks and mortar and shall submit waste management plan and get appropriate approvals from the Silvassa Municipal Council before starting construction or demolition or remodeling work and keep the concerned authorities informed regarding the relevant activities from the planning stage to the implementation stage and this should be on project to project basis.

This order shall come in force with immediate effect.

Chief Officer
Silvassa Municipal Council
Silvassa

Copy to,
1) The Collector/Director (Muni. Admin.) DNH, Silvassa.
2) The President, SMC, Silvassa.
3) The Resident Deputy Collector, DNH, Silvassa.

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No.PCC/DMN/Plastic Bags/12-13/474
U.T. of Administration of Daman & Diu,
Office of the Member Secretary,
Pollution Control Committee,
Daman & Diu and DNH.
Daman.

Dated :- 24 .01.2014.

To,

The Deputy Director (Planning & Statistics),
Department of Planning & Statistics,
Secretariat,
Daman.

Subject :- Final Notification regarding ban on Plastic bags.

Sir,

Please find enclosed a copy of Notification No.PCC/DMN/Plastic Bags/12-13/473 dated 24.01.2014. You are requested to publish the same in the Official Gazette of U.T. of Daman & Diu (pages 1 to 3) immediately.

This is for your information and further action please.

Yours faithfully,

Encl :- As above.

N. Jalim Ltno
24/1/2014
Member Secretary,
Pollution Control Committee,
Daman & Diu and Dadra & Nagar Haveli,
Daman.

Copy to :-

(1) The District Informatics Officer, NIC, Daman with request to upload the above said notification in the official website of U.T. of Daman & Diu immediately.
(2) The Chief Publicity Officer, Daman with a request to publish the above said notification in one English / Gujarati / Hindi regional news papers.
(3) The Data Entry Officer, Pollution Control Committee, DD & DNH, Daman to upload the above said notification in the official website of Pollution Control Committee, DD & DNH immediately.

U.T ADMINISTRATION OF DAMAN & DIU AND DADRA & NAGAR HAVELI

DEPATMENT OF ENVIRONMENT AND FORESTS

SECRETARIAT, DAMAN

No: PCC/DMN/Plastic Bags/12-13/473 Date: 24/01/2014

NOTIFICATION

Whereas, article 48-A of the Constitution of India, inter-alia envisages that the state shall endeavour to protect the environment;

Whereas, the U.T. Administration of Daman & Diu and Dadra & Nagar Haveli after considering the adverse effects of the plastic carry bags on the environment and local ecology, felt that plastic carry bags are littered about irresponsibly and have detrimental effect on the environment;

And whereas, it is observed that the plastic carry bags also cause blockage of gutters, sewerage system and drains thereby resulting in serious environmental and health related problems to both humans and livestocks.

And whereas, a draft notification, in exercise of powers conferred by section 5 of the Environment (Protection) Act, 1986 read with the Ministry of Home Affairs, Notification No. S.O.667 (E) dated the 10th September 1992 and sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 was published in the Official Gazette vide PCC/DMN/Plastic Bags/12-13/57 dated 26/4/2013, by the U.T. Administration of Daman and Diu and Dadra and Nagar Haveli, inviting objections and suggestions from general public with respect to the said notification within sixty days from the date of the publication of the said notification.

And whereas, the objections and suggestions received from the public with respect to the said draft notification have been considered by the Government.

Now, therefore in exercise of the powers conferred by section 5 of the Environment (Protection) Act, 1986 read with the Ministry of Home Affairs, Notification No. S.O.667 (E) dated the 10th September 1992 and sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Administrator of Daman & Diu and Dadra & Nagar Haveli hereby directs the following:

1. That with effect from 1st March, 2014, the use, sale and storage of all kinds of plastic bags shall be forbidden in respect of the following places in the U.T. of Daman & Diu and Dadra & Nagar Haveli, namely;

(a) All Hotels & Resorts

(b) Hospitals with 20 or more beds except for the use of plastic bags as prescribed under Bio medical waste (management and handling) Rules 1998.

(c) All fruit and vegetable outlets.

(d) All liquor shops.

(e) All Restaurants and eating places having seating capacity of more than 10 seats.

(f) All shops in main markets and local shopping centres and all shopping malls.

(g) All retail and wholesale outlets (including branded chain of outlets) selling different consumer products including fruits and vegetables.

(h) Protected Areas i. e. Notified Wildlife/Bird Sanctuaries and National Parks.

(i) All Water Bodies including Rivers, Canals, Reservoirs, Ponds, Lakes and Wells.

(j) All Tourist Places.

(k) All Gardens and Parks.

(l) All Beaches.

2. The following officers shall implement these directions in their respective jurisdiction namely:-

(a) Member Secretary, Pollution Control Committee, Daman & Diu and Dadra & Nagar Haveli.

(b) Sub-Divisional Magistrates in their respective districts.

(c) Chief Officer, Municipal Council in their respective areas.

(d) Food and Supply Officer in their respective jurisdiction.

(e) Director, Health services in their respective areas.

(f) Chief Executive Officer, District Panchayat in their respective areas.

(g) Police inspectors in their respective jurisdiction.

3. The Member Secretary, Pollution Control Committee, Daman & Diu and Dadra & Nagar Haveli, Shall ensure all monitoring and implementation of these directions. The Member Secretary (PCC) and the Sub-Divisional Magistrates of the respective area/jurisdictions are authorized to file complaint under Section 19 of the Environment (Protection) Act, 1986 as already empowered vide Notification no. S.O 349(E) dated 16th April, 1987 as amended up to date.

By order and in the name of

Administrator, Daman & Diu and Dadra & Nagar Haveli.

N. Jethwa 24/1/2014.

Deputy Secretary (Environment & Forests)

DD & DNH

PCC/DDD/Plastic(W,M&H)Rules,2011/11-12/ 6633
U.T. Administration of Daman & Diu,
Department of Environment & Forest,
Daman & Diu,
Daman.
Dated: -1) /01/2012.

C/3
C/6413

NOTIFICATION

In exercise of the powers conferred by the sub-section (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) and in pursuance of the Government of India notification number S.O. 249(E) New Delhi, the 4th February, 2011 of the Plastic (Waste Management and Handling) Rules, 2011 as per para 11 of the said notification the U.T. Administration of Dadra & Nagar Haveli is hereby pleased to constitute the Union Territory Level Advisory Body to monitor the implementation of these rules comprising of the following members;

For the UT of Dadra Nagar Haveli :

1)	Secretary, Department of Urban Development	Chairman
2)	Collector, Dadra Nagar Haveli	Member
3)	Deputy Conservator of Forests (Territorial), Silvassa.	Member
4)	Environmental Engineer, Pollution Control Committee, DD & DNH.	Member
5)	Chief Officer, Silvassa Municipal Council.	Member
6)	One expert from Non-Governmental Organization (to be nominated by the Chairman)	Member
7)	President Silvassa Industrial Association.	Member
8)	Principal Government Polytechnic, Karad.	Member

By order and in the name of the
Administrator of Daman, Diu &
Dadra and Nagar Haveli.

Joint Secretary (Environment & Forest),
Daman, Diu and Dadra & Nagar Haveli.

Despatch Clerk
Dept. ... Statistics
Secretariat ... Silvassa.
13/01/12

To,
The Assistant Director (Planning and Statistics) /
Head of Office of Govt. Printing Press,
Silvassa with a request to publish
the notification in the next issue of the official
Gazette.

Copy to,

1) The Secretary (Urban Development), DD & DNH, Silvassa. 13/1/12
2) The Additional Secretary (Urban Development), DD & DNH, Silvassa. 13/1
3) The Collector, Silvassa. 13/1/12
4) The Deputy Conservator of Forest (T), Silvassa. 13/1
5) The Chief Officer, Silvassa Municipal Council, Silvassa. 13/1/12
6) The Principal, Government Polytechnic, Karad, Dadra and Nagar Haveli. 13/1/2012
7) The Environmental Engineer, Pollution Control Committee, Silvassa. 13/1/12
8) The President, Silvassa Industries Association, Silvassa.
9) The Assistant Director (Official Language), Silvassa with a request to get the Notification translated in Hindi language. 13/1/12
10) Guard File.

o/c.

No.PCC/DDD/pw(part-iv)19-20/432
Office of the Member Secretary,
Pollution Control Committee,
Daman Diu & Dadra Nagar Haveli,
Daman.
Dated:- 17/07/19

To,
Dr.S.K.Nigam,
Additional Director,
Central Pollution Control Board,
MoEF, Parivesh Bhavan,
C.B.D. Cum-Office complex,
East Arjun Nagar, Shahdara,
Delhi-110032.

Sub: Submission of Annual Report 2018-19 on implementation of Plastic Waste Management Rules-2016-Reg.

Sir,

With reference to the above cited subject the details pertaining to the UT of Daman, Diu and Dadra Nagar Haveli regarding submission of Annual Report on Plastic Waste Management Rules-2016 is enclosed as per the format as Annexure-I for kind information and necessary action at your end.

Yours Faithfully,

Rakesh
17/7/19

Member Secretary,
Pollution Control Committee,
Daman Diu & Dadra Nagar Haveli,
Daman.

Encl: As above.

State wise Status of Implementation of PWM Rules, 2016 for the year 2018-2019

Name of the SPCB/PCC	Estimated Plastic waste generation Tons/Annum (TPA)	No. of registered Plastic Manufacturing/Recycling (including multilayer, compostable) units.(Rule 9)			No. of Unregistered plastic manufacturing Recycling units. (in residual/unapproved areas)	Details of plastic Waste Management (PWM) eg. Collection, Segregation, Disposal (Co-processing road construction etc.) (rules 6) (Attach separate sheet)	Partial or complete ban on usage of Plastic Carry Bags (through Executive order) (Attach copy of notification or executive order)	Status of Marking Labelling on Carry bags (Rule 8) (Specify the number of units or not compiled)	Explicit Pricing of carry bags (Rule 10)	Details of the meeting of State Level Advisory Body(SLA) along with its recommendations on Implementation (Rule 11)	No. of violations and action taken on non compliance of provision of these Rules	Number of Municipal Authority or Gram Panchayat under jurisdiction and Submission of Annual Report to CPCB (Rule 12)
		Plastic units	Compostable Plastic Units	Multilayer Plastic Units								
(1)	(2)	(3)			(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Pollution Control Committee, DD & DNH	As per Local Body data: Approx. 1947.7 TPA	261	---	---	---	The aforesaid instructions/notification is already forwarded to the respective Municipalities of Daman,Diu and DNH and other departments as related	Yes, Copy enclosed herewith	—	Plastic carry bags are banned in DD & DNH area.	State Level Advisory Body(SLAB) has been constituted	Notice of Direction have been issued to the plastic units: 613 units in daman and 102 units in D.N.H.	6 nos.

No.PCC/DMN/Plastic Bags/12-13/474
U.T. of Administration of Daman & Diu,
Office of the Member Secretary,
Pollution Control Committee,
Daman & Diu and DNH.
Daman.

Dated :- 24.01.2014.

To,

The Deputy Director (Planning & Statistics),
Department of Planning & Statistics,
Secretariat,
Daman.

Subject :- Final Notification regarding ban on Plastic bags.

Sir,

Please find enclosed a copy of Notification No.PCC/DMN/Plastic Bags/12-13/473 dated 24.01.2014. You are requested to publish the same in the Official Gazette of U.T. of Daman & Diu (pages 1 to 3) immediately.

This is for your information and further action please.

Yours faithfully,

Encl :- As above.

24/1/2014
Member Secretary,
Pollution Control Committee,
Daman & Diu and Dadra & Nagar Haveli,
Daman.

Copy to :-

(1) The District Informatics Officer, NIC, Daman with request to upload the above said notification in the official website of U.T. of Daman & Diu immediately.
(2) The Chief Publicity Officer, Daman with a request to publish the above said notification in one English / Gujarati / Hindi regional news papers.
(3) The Data Entry Officer, Pollution Control Committee, DD & DNH, Daman to upload the above said notification in the official website of Pollution Control Committee, DD & DNH immediately.

U.T ADMINISTRATION OF DAMAN & DIU AND DADRA & NAGAR HAVELI

DEPATMENT OF ENVIRONMENT AND FORESTS

SECRETARIAT, DAMAN

No: PCC/DMN/Plastic Bags/12-13/473 Date: 24/01/2014

NOTIFICATION

Whereas, article 48-A of the Constitution of India, inter-alia envisages that the state shall endeavour to protect the environment;

Whereas, the U.T. Administration of Daman & Diu and Dadra & Nagar Haveli after considering the adverse effects of the plastic carry bags on the environment and local ecology, felt that plastic carry bags are littered about irresponsibly and have detrimental effect on the environment;

And whereas, it is observed that the plastic carry bags also cause blockage of gutters, sewerage system and drains thereby resulting in serious environmental and health related problems to both humans and livestocks.

And whereas, a draft notification, in exercise of powers conferred by section 5 of the Environment (Protection) Act, 1986 read with the Ministry of Home Affairs, Notification No. S.O.667 (E) dated the 10th September 1992 and sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 was published in the Official Gazette vide PCC/DMN/Plastic Bags/12-13/57 dated 26/4/2013, by the U.T. Administration of Daman and Diu and Dadra and Nagar Haveli, inviting objections and suggestions from general public with respect to the said notification within sixty days from the date of the publication of the said notification.

And whereas, the objections and suggestions received from the public with respect to the said draft notification have been considered by the Government.

Now, therefore in exercise of the powers conferred by section 5 of the Environment (Protection) Act, 1986 read with the Ministry of Home Affairs, Notification No. S.O.667 (E) dated the 10th September 1992 and sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Administrator of Daman & Diu and Dadra & Nagar Haveli hereby directs the following:

1. That with effect from 1st March, 2014, the use, sale and storage of all kinds of plastic bags shall be forbidden in respect of the following places in the U.T. of Daman & Diu and Dadra & Nagar Haveli, namely;

(a) All Hotels & Resorts

(b) Hospitals with 20 or more beds except for the use of plastic bags as prescribed under Bio medical waste (management and handling) Rules 1998.

(c) All fruit and vegetable outlets.

(d) All liquor shops.

(e) All Restaurants and eating places having seating capacity of more than 10 seats.

(f) All shops in main markets and local shopping centres and all shopping malls.

(g) All retail and wholesale outlets (including branded chain of outlets) selling different consumer products including fruits and vegetables.

(h) Protected Areas i. e. Notified Wildlife/Bird Sanctuaries and National Parks.

(i) All Water Bodies including Rivers, Canals, Reservoirs, Ponds, Lakes and Wells.

(j) All Tourist Places.

(k) All Gardens and Parks.

(l) All Beaches.

2. The following officers shall implement these directions in their respective jurisdiction namely:-

(a) Member Secretary, Pollution Control Committee, Daman & Diu and Dadra & Nagar Haveli.

(b) Sub-Divisional Magistrates in their respective districts.

(c) Chief Officer, Municipal Council in their respective areas.

(d) Food and Supply Officer in their respective jurisdiction.

(e) Director, Health services in their respective areas.

(f) Chief Executive Officer, District Panchayat in their respective areas.

(g) Police inspectors in their respective jurisdiction.

3. The Member Secretary, Pollution Control Committee, Daman & Diu and Dadra & Nagar Haveli, Shall ensure all monitoring and implementation of these directions. The Member Secretary (PCC) and the Sub-Divisional Magistrates of the respective area/jurisdictions are authorized to file complaint under Section 19 of the Environment (Protection) Act, 1986 as already empowered vide Notification no. S.O 349(E) dated 16th April, 1987 as amended up to date.

By order and in the name of

Administrator, Daman & Diu and Dadra & Nagar Haveli.

N. Jadhav 24/1/2019.

Deputy Secretary (Environment & Forests)

DD & DNH

9/515

No.COL/DMN/EST/2017/ 8429
Administration of U.T. of Daman & Diu,
Office of the Collector,
Collectorate, Daman – 396 220.
Phone No.(0260) – 2230698, Fax No. 2230689 email address collector.daman-dd@nic.in

Dated: 19/09/2017.

O R D E R

WHEREAS, the UT Administration of Daman & Diu has imposed a blanket ban over the use, sale and storage of all kinds of plastic bags in the U.T. of Daman & Diu under Section 5 of the Environment (Protection) Act, 1986 vide Notification No.PCC/DMN/Plastic Bags/12-13/473 dated 24/01/2014.

AND WHEREAS, the ban was imposed after considering the adverse effects of the plastic carry bags on the environment and local ecology where the plastic carry bags are littered irresponsibly and having detrimental effect on the environment.

AND WHEREAS, the usage of plastic carry bags causes blockage of gutter, sewage system and drain thereby resulting in serious environmental and health related problems to both human and livestocks.

AND WHEREAS, the above mentioned Notification was issued after considering the objections and suggestions received from the public in general.

AND WHEREAS, it is still observed that plastic carry bags are being used rampantly by the hotels, resorts, restaurants, hospitals, shops, fruits & vegetable outlets, retail outlets etc. in both urban and rural areas. The plastic carry bags are haphazardly littered on the roadside, gardens, parks, beaches, tourism areas and in the water bodies including rivers, canals, reservoirs, ponds, lakes, nalas etc.

AND WHEREAS, it is utmost necessary to enforce the ban imposed by the above mentioned Notification for the protection of environment and all the stake holders need to follow the directions issued under the Notification by a way of refraining from use, sale and storage of all kinds of plastic carry bags in Daman District with immediate effect.

THEREFORE, it is hereby directed that in Daman District :

1. No supplier will supply any kind of plastic carry bags to any vendor.
2. No manufacturer will sale any kind of plastic carry bags to anyone.
3. All the shopkeepers, hoteliers, bars, restaurants, commercial establishments, hospitals, institutions, street vendors, fruits and vegetable vendors, or any other establishments are restricted from the usage of any kind of plastic carry bags.
4. There shall be blanket ban over the usage of plastic carry bags by the general public at any location including the tourist places, gardens, parks, households, etc.

If anybody is found to violate the directions issued as mentioned above shall be liable to be penalized under Section 15 of the Environment (Protection) Act, 1986, wherein it is mentioned that :

"(1) Whoever fails to comply with or contravenes any of the provisions of this Act, or the rules made or orders or directions issued there under, shall, in respect of each such failure or contravention, be punishable with imprisonment for a term which may extend to five years with fine which may extend to one lakh rupees, or with both, and in case the failure or contravention continues, with additional fine which may extend to five thousand rupees for every day during which such failure or contravention continues after the conviction for the first such failure or contravention continues after the conviction for the first such failure or contravention.

(2) If the failure or contravention referred to in sub-section (1) continue beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to seven years."

The following officers are hereby authorized to take action against the violators after taking cognizance under **Section 19 of the Environment (Protection) Act, 1986** :-

1)	Member Secretary, PCC	All the Industrial Establishments and Sectors within the jurisdictions of Daman District.
2)	CEO, District Panchayat, Daman.	All Rural areas of Daman District.
3)	Deputy Collector (HQ) / SDM, Daman	In whole of Daman District.
4)	Civil Supplies Officer and Food Inspector & Senior Inspector (Weights & Measures)	All Food Stores / shops, retailers, provisional stores etc. and all such related establishments.
5)	Chief Officer, DMC, Daman	Daman Municipal Area
6)	Director Medical & Health Services, PHC Daman.	All Health Institutions, pharmacies, private hospitals etc.
7)	Mamlatdar, Daman	Moti Daman Area
8)	B.D.O., Daman	Nani Daman Area

The Chief Executive Officer, District Panchayat, Daman the Chief Officer, DMC, Daman will be the Nodal Officer to implement this order in their respective jurisdictions. The Pollution Control Committee will carry out necessary IEC activities to aware general public about the same.

19/9/17

(Sandeep Kumar Singh)
Collector / District Magistrate
Daman.

Copy for favour of information to :-

1) The PS to Hon'ble Administrator, DD&DNH, Secretariat, Daman.
2) The P.A. to Advisor to Administrator, DD&DNH, Secretariat, Daman.
3) The Finance Secretary, DD&DNH, Secretariat, Daman.
4) The Secretary (Tourism), DD&DNH, Secretariat, Daman.
5) The Deputy Inspector General of Police, Police Department, DD&DNH, Daman.
6) The Member of Parliament, Daman & Diu, Daman.
7) The President, District Panchayat, Daman.
8) The President, DMC, Daman.
9) All Members of District Panchayat, Daman (Through B.D.O., Daman)
10) All Councilors of DMC, Daman (Through C.O., DMC, Daman)

Copy for necessary action to :

1) All Head of Offices in Daman District.
2) The Superintendent of Police, Police Department, Daman.
3) The Superintendent of Police (HQ), Police Department, Daman.
4) The C.E.O., District Panchayat, Daman
5) The Deputy Collector (HQ), Daman.
6) The Deputy Collector (Gen) / Civil Supply Officer, Daman.
7) The Chief Officer, DMC, Daman.
8) The DMHS, Daman.
9) The Mamlatdar, Daman.
10) The B.D.O., Daman.
11) The Food Inspector, PHC, Daman.
12) The Senior Inspector (Wt.& Measures), Weight & Measures Department, Daman.
13) The SHO's, Police Department, Daman.
14) The President, District Industries Association, Daman.
15) The President, Wine Shop Association, Daman.
16) The President, Hoteliers Association, Daman.
17) The President, Transport Association, Daman.
18) All Sarpanch's of Gram Panchayats, Daman (Through BDO, Daman)
19) The Town Vending Association, Daman (Through C.O., DMC, Daman)
20) The Field Publicity Officer, Daman for vide publicity in local news papers and electronic media.

No.PCC/DDD/PWR-16/16-17/22
Office of the Member Secretary,
Pollution Control Committee,
Daman & Diu, Daman

Dated : 19/06/2019

NOTIFICATION

In supersession to earlier Notification No.PCC/DDD/Plastic (W, M&H) Rules,2011/11-12/664 dated 11/01/2012, and in exercise of the powers conferred by section 3, 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986) and in pursuance of the Government of India notification number G.S.R. 320(E) New Delhi, the 18th March, 2016 of the Plastic Waste Management Rule, 2016 and as per rule 16 of the said notification the U.T. Administration of Daman & Diu is hereby pleased to reconstitute the Union Territory Level Advisory Body to monitor the implementation of these rules comprising of the following members :

For the UT of Daman & Diu :

1)	The Secretary, Department of Urban Development	-	Chairman
2)	The President, District Panchayat, Daman (One Expert from Local Body)	-	Member
3)	The Chief Conservator of Forest, Daman & Diu	-	Member
4)	The Collector, Daman	-	Member
5)	The Chief Officer, Daman Municipal Council, Daman	-	Member
6)	Deputy Commissioner, Value Added Tax, Daman	-	Member
7)	The Principal, Government College, Daman (One Expert from the field of academic institution)	-	Member
8)	The President, Daman Industries Association, Daman (One Expert from the field of Industry)	-	Member
9)	The President, Plastic Association, Daman (Representative of Plastic Association)	-	Member
10)	Mr. Kairus S Dadachanji, Managing Director, Schott Kaisha, Daman (Drug Manufacturers Association)	-	Member
11)	Mr. Anil Arora, The General Manager, Ritzy Chemicals pvt ltd, Daman (Chemical Manufacturers Association)	-	Member
12)	The President, Lions Club, Daman (One expert from Non-Governmental involved in Waste Management)	-	Member
13)	The Director, Municipal Administration	-	Convener

By order and in the name of the Administrator of Daman, Diu

Member Secretary
Pollution Control Committee
Daman & Diu

To,

1) The Advisor to Administrator, Secretariat, Daman.
2) The Secretary (Urban Development), Secretariat, Daman
3) The Additional Secretary (Urban Development), Daman
4) The Collector, Daman
5) The Director, Municipal Administration, Daman
6) The Chief Conservator of Forest, Daman & Diu, Daman
7) The Deputy Commissioner, Value Added Tax, Daman
8) The Chief Officer, Daman Municipal Council, Daman
9) The Deputy Director (Planning and Statistics), Govt. Printing Press, Moti Daman with a request to publish the same in the official Gazette.

Action Plan for compliance of Bio-Medical Waste Management Rules, 2016

Pollution Control Committee

Daman & Diu and Dadra & Nagar Haveli

CONTENTS

1. Inventory of Healthcare Facilities (HCFs)

a. Current Status of Health Care Facilities situated in the U.T. of DD & DNH.

All healthcare facilities present in both Daman & Diu (DD) and Dadra & Nagar Haveli (DNH) have been classified into these categories- i) bedded hospitals, ii) non-bedded hospitals and iii) others.

The current status of existing healthcare facilities as per the records present with the Pollution Control Committee, DD & DNH is given in Table 1 below:

Sr. No.	HCF Category	No. of HCFs in Daman & Diu	No. of HCFs in Dadra Nagar Haveli
a.	Bedded Hospitals	15	21
b.	Non-bedded Hospitals	32	56
c.	Others (Veterinary hospitals/Research Organizations etc.)	8	8
		55	85
	Total	140	

Table 1: Existing HCFs in DD & DNH

b. Details regarding number of beds at HCFs in DD & DNH.

As per the applications received by respective HCFs for grant of authorization under BMWM Rules, 2016, the following are the details pertaining to the bedded facilities present in DD & DNH.

Sr. No.	Details	Number of beds in HCFs
a.	Govt. HCFs of Daman	253
b.	Govt. HCFs of Diu	150
c.	Private HCFs of Daman & Diu	60
	Total	**463**

Table 2-Details regarding number of beds at HCFs in Daman & Diu

Sr. No.	Details	Number of beds in HCFs
a.	Govt. HCFs of D.N.H	470
b.	Private HCFs of D.N.H.	128
	Total	**598**

Table 3-Details regarding number of beds at HCFs in DNH

c. Status of authorization of all Healthcare Facilities including non-bedded HCFs

A total of 140 HCFs exist in DD & DNH. Most of these have been covered and authorization has been issued to 48 of such units. A few applications are under process and action has been initiated against non-compliant HCFs leading to closure of almost 6 units.

A brief of the status of authorization of HCFs including non-bedded HCFs have been given in Table 4.

S. No.	Details	Govt. HCFs of Daman & Diu	Private HCFs of Daman & Diu	Total
1.	Total number of HCFs	10	45	55
2.	Total number of HCFs authorized	9	35	44
3.	Number of applications under process	0	4	4
4.	Total number of HCFs without authorisation	1	4	5
5.	Action taken against unauthorized HCFs	1	4	5
6.	Total number of notices given to unauthorized HCFs	1	4	5
7.	Total number of HCFs closed	0	6	6

Table 4-Status of existing HCFs in Daman & Diu

S. No.	Details	Govt. HCFs of Daman & Diu	Private HCFs of Daman & Diu	Total
1.	Total number of HCFs	13	72	85
2.	Total number of HCFs authorized	2	13	15
3.	Number of applications under process	11	3	14
4.	Total number of HCFs without authorisation	0	56	56
5.	Action taken against unauthorized HCFs	0	56	56
6.	Total number of notices given to unauthorized HCFs	0	5	5

Table 5-Status of existing HCFs in Dadra & Nagar Haveli

d. Total Bio-medical waste generation, treatment & disposal in the DD & DNH as per the current scenario.

The common biomedical waste treatment facility (CBMWTF) has been identified in Surat -M/s En-cler Biomedical Waste Pvt. Ltd.(approx. travel time by road is 2 hours). It submits an annual report for the treated waste which forms the basis of inventorisation of biomedical waste generated, treated and disposed.

The status of this waste as per the annual report of CBMWTF in 2017-18 is given in Table 6 as follows:

Sr. No.	Category of waste	Generation of waste	Treatment
1	Yellow Category (Includes Human and Animal anatomical waste, Soiled waste, Expired and discarded medicines, Chemical waste, Laboratory-microbiology waste)	5337 kg/month	Incinerated
2	Red Category (Contaminated waste recyclable)	4417 kg/month	Auto clave
3	White Category (Waste sharps)	184 kg/month	Shredder, needle tip cutter
4	Blue Category (Glass ware)	1028 kg/month	Disinfection or autoclaving

Table 6-Status of Total Bio-Medical Waste generation in the DD & DNH as per the CBMWTF Annual Report 2017-18.

It is seen that the total quantity of waste collected, generated and disposed is 131,592 kg/year, amounting to approximately 365 kg/day of biomedical waste.

However, this data is in the process of being cross-verified through annual reports submitted by the Department of Health & Family Welfare (DoHFW) in DD & DNH which is the implementing agency for BMWM Rules, 2016.

The status of biomedical waste generated as per the DoHFW is given in Table 7 as follows:

Category of Waste	Generation of waste in kg/year			
	Daman	**Diu**	**DNH**	**Total**
Yellow	2224 kg/year	764.5 kg/year	35634.36 kg/year	**38622.86 kg/year**
Red	3249 kg/year	579.5 kg/year	27736.8 kg/year	**31565.3 kg/year**

White	704 kg/year	329 kg/year	1060.14 kg/year	**2093.14 kg/year**
Blue	735 kg/year	415 kg/year	7340.94 kg/year	**8490.94 kg/year**

Table 7- Status of Total Bio-Medical Waste generation in the DD & DNH*

The waste that is generated at these health facilities of Daman and DNH are segregated at the point of generation itself and then it is sent to the CBMWTF (M/s En-cler Biomedical Waste Pvt. Ltd., Surat) for treatment and disposal**.** Similarly, that of HCFs in Diu is sent to the CBMWTF (M/s Girnar Bio-Medical Waste Services, Junagarh)

*Please note that these figures are only from those HCFs which have submitted annual reports. Therefore, the "waste, generated" is not matching with "waste, treated" data by CBMWTF.

2. Submission of Annual Reports to CPCB for the year 2017-18

- As per the Rule-13, Annual Report for the year 2017-18 under Bio-Medical Waste Management Rules, 2016 has already been compiled, reviewed and analyzed and sent to the Central Pollution Control Board (CPCB). A copy of Annual Report is also attached. (Annexure-1)
- As per the annual report submitted by the CBMWTF for the year 2017-18, a total of 181 facilities have been covered, including industries. Hence, it is seen that all HCFs are sending their waste to CBMWTF.
- **Presently, the information received from CBMWTF is being cross-verified with the information present with these facilities so that any discrepancy between "waste generated" and "waste recycled" is removed.**
- The annual report for the year 2018-19 will also be sent to CPCB on or before 31stJuly 2019 thereby complying with the deadline given under BMWM Rules, 2016.

3. Constitution of State or District Level Advisory Committees

A state level advisory committee has been formed as per the Rule 12 for the monitoring of implementation of the rules in health care facilities on dated 16/05/2017 (Annexure-2 is attached).

Accordingly, the members of the above committee are as follows:

a.	District Magistrate, Daman	: Chairman
b.	Representative from PCC	: Member
c.	Assistant Engineer, PWD, Daman	: Member
d.	Representative from municipal council	: Member
e.	Representative from Indian Medical Association	: Member
f.	CEO, M.s En-cler Bio Medical Waste, Surat	: Member
g.	Representative from registered NGOs	: Member
h.	Medical Officer, PHC, Daman	: Member Secretary

As seen above, there are a total 8 members in the committee. Wherein, District Magistrate, Daman is the chairman of the committee and Medical Officer, (PHC-Primary Health Centre), Daman is the Member Secretary of the Committee.

The District Level Monitoring Committee meeting has been conveyed on 25/09/2018 in the chairmanship of the Collector/District Magistrate, Daman to check various compliances and to oversee the biomedical waste management in the U.T. of Daman and Diu, difficulties faced on implementation of BMW Rules, 2016 and general points related to Bio-Medical Waste Management.Separate copy of the Notification of the District Level Monitoring Committee and Minutes of the meetings are attached as Annexure-2.

The meeting had detailed discussions on two important issues:

1. **Awareness strategies** to be adopted so that more HCFs come under the ambit of BMWM Rules, 2016
2. **Regulation and monitoring strategies** for existing identified HCFs

The HCFs were made aware of the guidelines and mandatory requirement of maintaining a register for biomedical waste was conveyed.

For DNH, it is to inform that at functional level a committee by the name of Biomedical Waste Committee is already in place at each HCFs.However, it is required to notify a committee as the District Level Monitoring Committeewhich has not been done yet, but will be complied with within one month as per rule 12 of the BMWM Rules,2016.

4. Implementation status of Barcode system

- In the DD & DNH, there are total approximately 140 Health Care Facilities including all bedded, non-bedded and small clinics. They are sending their Bio-Medical waste to the CBMWTF facility M/s En-clerBio-medical Waste Pvt. Ltd.,(the Common Bio-Medical Waste Treatment Facility-CBMWTF) at Surat (Gujarat) to collect, process & disposeoff the biomedical waste generated in the DD & DNH.
- The CBWTF has provided them **colour-coded bags** and containers and the waste is also transported in **dedicated vehicles** as specified in BMWM Rules, 2016.
- This CBMWTF falls under the jurisdiction of Gujarat State and hence, under the purview of Gujarat Pollution Control Board (GPCB).
- A meeting was conveyed under the chairmanship of Member Secretary, PCC (DD) with the CBMWTF facility M/s En-cle rBio-medical Waste Pvt. Ltd., Surat on 31/08/2018 and the directions have been given to kindly start with barcode system at the CBMWTF level itself.
- Individually, no health care facilities have started with barcoding of wastes.
- However, CBMWTF has not intimated anything about the launch of bar coded based waste management system.
- Once barcode system is implemented in the CBMWTF in Surat, it will automatically be implemented in the UT of DD and DNH.

5. Monitoring the Compliance of BMWM Rules, 2016 by Healthcare Facilities(HCFs)

Pollution Control Committee is in process to strengthen the monitoring of compliance of various provisions and conditions of authorization. There are total 140 HCFs under the jurisdiction of PCC, DD & DNH, including all bedded and non-bedded hospitals and others.

In a view to implement the new BMW Rules, 2016, PCC DD & DNH has issued a letter regarding implementation of these rules to all the Health Care Facilities of Daman Diu & Dadra Nagar Haveli for their information/awareness. (Annexure 3)

To strengthen the compliance of these rules, a sample "Inspection Report" has been formalized by Pollution Control Committee under Bio-Medical Waste Management Rules,2016. (Annexure-II).

As per the new inspection report format, the criteria of monitoring inspection within a stipulated time period along with the target to authorize all the HCFs framework is as follows:

Sr.No.	Area	Total Number of HCFs	Target to authorize all the HCFs within following stipulated time	Monitoring compliance at all the HCFs within following stipulated time
1	Daman & Diu	55	Within 30 days	Within 60 days
2	Dadra &Nagar Haveli	85	Within 60 days	Within 90 days

Table 8-Target and Monitoring Compliance at HCFs

As per the above, a compliance report of every HCF will be send to the CPCB before July 31, 2019.

6. Coverage of Common Biomedical Waste Treatment Facilities (CBWTFs) and Compliance of CBWTFs to new emission standards prescribed under BMWM Rules, 2016.

Presently, there are no Common Bio-Medical Waste Treatment Facilities (CBMWTF) in the U.T. of DD & DNH. There is no local treatment facility for the biomedical waste generation in the DD & DNH as the generation is approximately 350-370 kg/day. The biomedical waste generated is collected, processed & disposed offby M/s En-cler Bio-Medical Waste Pvt. Ltd., Surat.

All the HCFs of Daman & DNH send their biomedical waste to the CBMWTF- M/s En-cler Bio-Medical Waste Pvt. Ltd for the treatment at their own cost. This treatment facility is situated at Gokul Nagar, Near SMC Solid Waste Disposal site, Azad Nagar Road, Bhatar, Surat, Gujarat. This CBMWTF falls under the purview of the Gujarat Pollution Control Board, GPCB.

i. CBMWFT has obtained authorization from GPCB and which is valid up to: 31/05/2020.
ii. Hence, the compliance with respect to new emission standards may be provided by GPCB itself.
iii. As per the recent Annual Report of CBMWTF for the year 2017-18, it has covered total 181 HCFs of U.T. of DD & DNH.

Similarly, all biomedical waste from Diu is sent to M/s Girnar Bio-Medical Waste Services, Junagarh which is also under the purview of GPCB.

7. Action taken at State level for efficient compliance of Bio-Medical Waste Management Rules, 2016.

- Letters have been issued to all the HCFs for effective implementation of the Bio-medical Waste Management Rules, 2016 notified under the EPA, 1986 by the MoEF. (sample letter attached asAnnexure-3)
- For effective implementation of the BMWM Rules,2016 PCC has compiled the data and submitted the same in annual report to Central Pollution Control Board for the year 2017-18 (same is also attached Annexure-1)
- PCC has issued Notice of Direction (NOD) under Section-5 of Environment Protection Act, 1986 to HCFs who have not applied for authorization under Bio-Medical Waste Management Rules, 2016.
- PCC has granted authorization to Health Care Facilities who have submitted application **within 30 days** of application.
- Letter has been issued to Common Bio-medical Waste Treatment Facility (CBMWTF) regarding implementation of Bio Medical Waste Management Rule, 2016. A meeting was convened under the chairmanship of Member Secretary, PCC (DD) with CBMWTF, Surat on 31/08/2018. They were assured of **full cooperation from the administration and implementing agencies**. They were also instructed to inform if any HCF was not cooperating with them. Through this initiative, most HCFs are complying with the direction of the new rules.
- PCC has organized a **workshop on centralized bio-medical waste disposal**through environmental sound practices in collaboration with M/s En-cler (En-vision) Bio-Medical Waste Pvt. Ltd. on 01/09/2015 for all the HCFs located in Daman and DNH made aware categorization of biomedical waste and how it has to be handles from source to the facilities. The Member Secretary, PCC DD & DNH urged all the representative of the HCFs that all the statutory requirements are required to be followed to avoid any penal action by PCC. M/s En-cler biomedical waste Pvt. Ltd. made a presentation on the biomedical waste & its treatment facilities along with segregation of the waste as per color coding system.
- The health care facilities manage bio-medical waste from their own fund and no separate fund is allotted from PCC. PCC has previously allotted treatment equipments likeincinerator to Govt. Marwad Hospital,Nani Daman which was dismantled in 2013 becausenow they too aresending their biomedical waste to CBMWTF (Surat) facility.
- Identified violators were sent NOD/letters as per rules. This is still under process and discussed in detail later in the next point.

8. Steps to be taken for further compliances of the Bio-Medical Waste Management Rules, 2016.

a. Awareness & Training:

The main problem in the region in general is that the occupiers are not aware that they have to take authorization from PCC and for that PCC has also organized meetings with all the occupiers and guided them on how to apply for authorization.

PCC has also directed them to provide **training to the nursing staff as well as those who are engaged in the BMW handling regarding segregation of bio medical wastes**. However, a formal training as per rules is yet to be provided. This will be done within 2 months.

They were also directed to immunize health care workers and also to ensure and establish a barcode system irrespective of the CBMWTF.

PCC will also organize training programs to staff of health care facilities and SPCB on segregation, collection, storage, transportation, treatment and disposal of BMW within the next three months.

b. Action against violators:

As a part of taking action against the health care facilities for violation of BMWM Rules, 2016, PCC has issued NOD/letters to the identified HCFs as follows:

Sr. No.	Area	No. of NODs/Letters issued to violators
1	Daman & Diu	5
2	Dadra Nagar Haveli	56
	Total	61

Table 9-Action against the violators

Out of 61 letters/NOD given, 6 replies have been received. A reminder with strict warning is being sent to defaulters. If reply is still not received within 15 days, PCC will make conditional show cause notices absolute and impose penalty with the help of implementing agency i.e. Department of Health and Family Welfare (DoHFW), both in DD as well as DNH.

c. Levy of fees from Clinics/Dispensaries and HCFs in DD & DNH

At present, PCC is not levying any processing fees from the clinics/dispensaries and Health Care Facilities. These Health Care Facilities are also required to be visited to check the compliance of Bio-Medical Waste Management Rules, 2016.

Therefore, it was **proposed to levy processing fees** from the clinics/dispensaries and Health Care Facilities for granting authorization under Rule 10 of Bio-Medical Waste Management Rules, 2016

The proposed fee structures was as follows:

Sr. No.	Type of Health Care Facility	Fees in Rupees.
1	Clinics/ Dispensaries without beds	5,000/- (One time)
2	HCF having less than 50 beds	5,000/- per year
3	HCF having 50 and above beds but less than 200 beds	10,000/- per year
4	HCF having 200 and above beds	15,000/- per year

Table 10- Proposed fee structure

This proposal was placed before the PCC Committee meeting for necessary deliberations and decisions. During the committee meeting the Member Secretary briefed to the Committee regarding levy processing fees from the clinics/dispensaries and Health Care Facilities for granting authorization under Rule 10 of Bio-Medical Waste Management Rules,2016.

After detailed discussion, the committee resolved to maintain the status quo and continue the services of issuing authorization to HCFs free of cost till further decision. However, CPCB may look into this and give necessary guidance on the same.

d. Updation of Websites

PCC, DD & DNH has prepared a checklist for authorization and this is also placed on website: **pccdaman.info** along with all the forms and new Bio-Medical Waste Management Rules, 2016 for application.

Recently, PCC has also started new Online Consent Management and Monitoring Facility i.e. **ddnocmms.nic.in** which is fully functional.

After completion of online consent management system, PCC will start online portal for registration of Health Care Facilities. It will also start online authorization and application facilities for Biomedical waste Authorization on our online portal software- Online Consent Management and Monitoring System (OCMMS).

e. Way forward

PCCis processing authorization for grant and renewal, suspension or refusal/cancellation or of authorization under these rules within 30 days period time. This time bound disposal will continue and verification/inspections will be increased.

PCC has issued a letter to all the HCFs for the following compliances:

- Safe collection sheds, allocation of budget for such collection.
- Pre-treatment waste guidelines.
- Phasing out of plastic bags, gloves and blood bags.

PCC will ensure implementation of these rules in all health care facilities or occupiers along with the implementing authorities.

Conclusion

It is observed that most of the healthcare facilities and units have been sensitized to the new Biomedical Waste Management Rules, 2016. It has been tried to bring all these units under the ambit of PCC and inventorisation is almost completed.

Further, compliance with respect to annual reports and other periodic reports have been achieved but the reliance on data given by units and CBMWTF is to be reduced in the future by cross-verification of individual units by PPC and implementing agencies. This is being done now.

Further guidance to implement these rules in a better manner and also for the collection of the compensation which is to be recovered from the polluters for violations of this rule is also much needed from Central Pollution Control Board.

Annexure - 1

Annual Report for the year 2017-18

No. PCC/DMN/79/98-99/916
Office of the Member Secretary,
Pollution Control Committee,
First Floor, Udyog Bhavan,
Bhenslore, Nani Daman.
Daman.

Date:- 05/12/18

To,
Shri Prashant Gargava,
The Member Secretary,
Central Pollution Control Board,
Parivesh Bhavan, East Arjun Nagar,
New Delhi 110 032.

Sub:- Annual report on Bio Medical Waste Management for the year 2017-18 as per Bio Medical Waste Management Rules 2016– reg.

Ref:- Your letter No. B- 31011(BMW)(2.22)/2018/WMD-I/10239 dated 11/09/2018.

Sir,

With reference to your letter on the subject cited above kindly find enclosed herewith the annual report on Bio Medical Waste Management for the Year 2017-18 pertaining to the UT of Daman and Dadra Nagar Haveli as per the prescribed format for your needful please.

This is for your information please.

Yours faithfully,

Member Secretary,
Pollution Control Committee,
DD & DNH,
Daman

Copy to :- Shri B. Vinod babu, AD & DH WMD-I, Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, New Delhi 110 032.

Encl: As above

Annexure-III

SUMMARY SHEET ON BIO-MEDICAL WASTE MANAGEMENT SCENARIO IN THE STATE/UT

(1) Name of the SPCB/PCC & Contact person with Telephone No. /Mobile No. :Pollution Control Committee-DD & DNH, 0260-2262524.

(2) No. of HCFs :

S. No.	HCF catwegory	No. Of HCFs require authorisation under BMW Rules	No. Of HCFs does not require authorisation under BMW Rules
(a)	Bedded Hospitals	23	-
(b)	Non-bedded Hospitals	99	08
(c)	Others (Vetarinary Hospitals/Research Organisations etc.)	04	-

(3) Total No. of Beds in HCFs :760

(4) Status on Consents under Water Act & Air Act :
- a) No. of HCFs applied for Consents under Water & Air Acts :NIL
- b) No. of HCFs obtained Consents under Water & Air Acts :NIL
- c) No. of applications under consideration :NIL
- d) No. of applications rejected :NIL

(5) Status on Authorization under BMW Rules :
- a) No. of HCFs applied for Authorization :75
- b) No. of HCFs obtained Authorization :63
- c) No. of applications under consideration :05(Q/L)
- d) No. of applications rejected :NIL

(6) Details on On-Site treatment equipments installed by HCFs : (enclose details as annexure separately if required):

Sl. No.	No. of HCFs	On-site Deep Burial		On-site Incinerator		On-site Autoclave		On-site Microwave		On-site Hydroclave		On-site Shredder	
		Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day
1.	--	--	--	--	--	--	--	--	--	--	---	--	--

- a) Total Bio-medical waste generated & treated by HCFs (on-site/captive facilities(in Kg/day: NIL
- b) Total recyclable treated bio-medical waste sold off by HCFs in Kg/day :NIL
- c) Total treated Bio-medical waste disposed off by HCFs in Kg/day :NIL

(7) No. of On-Site Incinerator (s) in operation installed by HCFs :NIL
- a) With APCD :NIL
- b) Without APCD :NIL

(8) Details on Common Bio-medical Waste Treatment Facility (CBWTF) :
- a) Total No. of CBWTFs in operation :01
- b) Total No. of CBWTFs under construction :NIL
- c) Total No. of Incinerators installed by CBWTFs :01
  - I. With APCD :01
  - II. Without APCD :NIL

(9) Details of CBWTFs (enclose details as annexure separately if required) :

Sl. No.	Name of the CBWTF with complete address	No. of member HCFs	Incinerator		Autoclave		Microwave		Hydroclave		Shredder	
			Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day
1.	En - cler	169	01	200 Kgs/hr	01	125 Kgs/hr					04	400 kg/hr

- a) Total Bio-medical waste collected & treated by CBWTFs in Kg/day :322 kgs/day
- b) Total recyclable treated bio-medical waste sold off by CBWTFs in Kg/day :NIL
- c) Total Bio-medical waste disposed off by CBWTFs in Kg/day :322kgs/day

(10) Action taken against HCFs/CBWTFs for violation of provisions :
- a) No. of Show-cause notices issued to HCFs :26
- b) No. of Show-cause notices issued to CBWTFs :nil
- c) No. of HCFs closed during the year 2015 :nil
- d) No. of CBWTFs closed during the year 2015 :nil

(11) Details on Bio-medical Waste Management Scenario :
- a) Total Bio-medical Waste Generation in Kg/day :322 kgs/day
  - I. Incinerable :116 kgs/day
  - II. Recyclable (after autocalving followed by shredding) :206 kgs/day
  - III. Disposable in secured landfill/deep burial/sanitary landfill :NIL
- b) Total Bio-medical Waste Collected in Kg/day :322 kgs/day
- c) Total Bio-medical Waste Treated & Disposed in Kg/day :322 kgs/day

(12) Steps taken by SPCB/PCC for improvement in Bio-medical Waste Management scenario in the State/UT (pl. use Annexure for detail) during the year 2015 :

Note: Strike off whichever is not applicable

Annexure-II

Information on Common Bio-medical Waste Treatment Facilities (CBWTFs)
(for the Year 2017)

Name of the State Pollution Control Board (or) Pollution Control Committee:							: Pollution Control Committee-Daman					
Name of the Nodal Officer with contact telephone no. & mobile no.							: PCC, Daman (0260) 2262524, 2260975					
Sr. No.	Name & Address of the CBWTF with contact person name and telephone no.	Name of the cities/ areas covered by CBWTF	Total no. of HCFs being covered	Total no. of beds covered	Total Quantity of BMW collected, treated and disposed of (in Kg/day)	Cost of treatment of BMW charged by the CBWTF operator (.....Rs. per Kg or .....Rs per Day or .....Rs. per bed per day)	Treatment equipment/ facilities installed at CBWTF			Air Pollution Control Systems attached with the incinerator(s)	Method of Disposal of treated wastes (Incineration Ash/Sharps/Plastics)	Compliance Status
							Equipment	Nos.	Total installed capacityin kg/day			
1	En-Cler Bio medical Waste Pvt Ltd, Gokul Nagar, Nr. SMC Solid waste Disposal Site, Bhatar, Surat. 0261-2262516-17, Mr.Nirav Thakkar-CEO	Daman & DNH	169	760	322 kg/day	-	Incinerator:	1	200 kg/hr	-	Incineration Ash: -	No. of Show-cause notices/ Direction issued: -
							Autoclave:	1	125 kg/hr			
							Hydroclave:	-	-		Sharps: -	No. of Court cases: -
							Microwave:	-	-			
							Shredder:	4	400 kg/hr		Plastics: -	Others: -
							ETP:	-	-			
							Deep burial:	-	-			

Station: Daman
Date:

Signature of the authorised official & seal

Format for Submission of the Annual Report on Bio-medical Waste Management by SPCB/PCC (For the Year 2017-18)

Name of the State Pollution Control Boards/Pollution Control Committee	Pollution Control Committee, DD & DNH, Daman
Name of the Nodal Officer with contact telephone no. & mobile no.	PCC, Daman (0260) 2262524, 2260975

Hospitals & Nursing Homes (HCFs) in village/town/city as per Schedule VI	Total no. of HCFs irrespective of no. of patients treated	Total no. of Beds	No. of HCFs applied for Authorisation	No. of HCsF Granted Authorisation	No. of HCFs having own treatment and disposal facilities	Total no. of captive treatment equipment installed by the HCFs (i.e excluding CBWTF) (7)					No. of CBWTF (Please specify if a hospital treatment facility is also used by other HCF) (8)		No. of HCFs which are utilising CBWTFs (9)	Total quantity of BMW generated (kg/day) (10)	Total quantity of BMW treated (kg/day) (11)	No. of Facilities violated BMW Rules (12)		Total No. of Show Cause Notices/ Directions issued to defaulter Facilities (13)	
						No. of Incinerators		No. of Autoclave	No. of Microwave	No. of Hydroclave	No. of Shredder	In operation	Under construction				HCFs	CBWTFs	HCFs	CBWTFs
(1)	(2)	(3)	(4)	(5)	(6)	With APCD	Without APCD													
I. Bio-medical Waste Management scenario reported for the period upto 2010																				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II Annual Report on Bio-medical Waste Management scenario for the year 2017 (01.01.2017 to 31.12.2017)																				
A) HCFs in town with population of 30 lakhs and above	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B) HCFs in town with population below 30 lakhs: (i) with 500 beds and above	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NIL	NIL	NIL	NIL
ii) with 200 beds and above but less than 500 beds	01	300	01	01	NIL	NIL	NIL	NIL	NIL	NIL	NIL	01	NIL	01	Approx. 322 Kgs/day	Approx. 322 Kgs/day	NIL	NIL	NIL	NIL
iii) with 50 beds and above but less than 200 beds	04	225	03	03	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	04	-	-	NIL	NIL	NIL	NIL
iv) with less than 50 beds	18	235	11	08	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	18			26	NIL	26	NIL
C) All others institutions generating bio-medical waste not included in A) and B) above	98	NIL	NIL	42	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	98			NIL	NIL	NIL	NIL
Sub-total	121	760	15	54	-	-	-	-	-	-	-	01	-	121	-	-	26	-	26	NIL
Total (I + II)	As above	As above	As above	As above	As above	As above	As above	As above	As above	As above	As above	As above	As above	As Above	As above	As above	As above	As above	As above	As above

Station: Daman
Date:

Signature of the authorised official & seal

Annexure - 2

Notification of District Level Monitoring Committee and minutes of the meeting

UT ADMINISTRATION OF DAMAN & DIU AND DADRA & NAGAR HAVELI,

SECRETARIAT, FORT AREA, MOTI DAMAN

NOTIFICATION

PCC/DMN79/98-99/45 Dated:-16/05/2017

READ (1) Notification No. G.S.R. 343(E) dated 28/03/2016
(2) Letter No. B-31011 (BMW)/30/93/2014/HWMD/3701-6738 dated 25/10/2016 from the Central Pollution Control Board, Ministry of Environment and Forest and Climate Change, Government of India.

In exercise of the powers conferred by Rule 12 of the Bio-Medical Waste Management Rules, 2016, the Union Territory of Daman & Diu Administration is hereby please to constitute an District Level Monitoring Committee comprising of following members:

1.	District Magistrate, Daman	Chairman
2.	Representative from PCC	Member
3.	Assistant Engineer, PWD, Daman	Member
4.	Representative from municipal council	Member
5.	Representative from Indian Medical Association	Member
6.	CEO, M/s En- Cler Bio Medical Waste P. Ltd., Surat, Common Bio Medical Waste treatment facility.	Member
7.	Representative from registered non – governmental organizations working in the field of bio-medical waste management.	Member
8.	Medical Officer, PHC, Daman	Member Secretary

As and when required, the Committee shall advise the Union Territory Administration and the Prescribed Authority about the matters related to implementation of the Bio- Medical Waste Management Rules, 2016 in the Union Territory of Daman and Diu.

By order and in the name of
the Administrator,
Daman and Diu

Deputy Secretary (Environment),

Copy:-

1) All Secretaries, Administration of Daman/Diu.
2) The Chairman, Pollution Control Committee, DD & DNH.
3) The Collector, Daman/Diu.
4) The Director of Industries, Daman/Diu.
5) The Member Secretary, Pollution Control Committee, DD & DNH.
6) The Director, Medical and Public Health, Daman/Diu.
7) The Superintendent Engineer, PWD, Daman/Diu.
8) The Chief Officer, Municipal Council, Daman/Diu.
9) The President, Indian Medical Association, Daman/Diu.
10) The CEO, En-Cler Bio Medical Waste P. Ltd., Surat
11) The Manager, Government printing Press with a request to publish the same in the official Gazette of Administration of Daman/Diu.
12) N.I.C.

MINUTES OF THE DISTRICT LEVEL MONITORING COMMITTEE MEETING HELD AT COLLECTORATE, DAMAN ON 26TH SEPTEMBER AT 3.30 PM

A meeting of District level monitoring committee was held at Collectorate, Daman on 26th September, 2018 at 3.30 pm in the chamber of the the Collector, Daman.

The following Officers were present in the meeting:

Dr. Sangeeta Joshi	-	Member Secretary
Dr. Vaishya	-	IMA President
Shri Vaibhav Rikhari	-	CEO Municipality
Shri. Mayank Rana	-	AE, PWD
Shri. Jayesh	-	CEO En – Clear

The following points were discussed:

1. All Hospitals / Clinics / Veterinary Hospitals / Laboratory Clinics have to apply for authorization to pollution control committee.
2. An annual report has to be submitted by all the units by 15th June 2018.
3. PCC will give authorization by first week of October.
4. A register has to be maintained by all Health Care Facilities in a given format as per Bio Medical Waste Management Rules, 2016.
5. CEO, DMC was requested to spread awareness regarding separate disposal of sanitary napkins and diapers. Collection will be done by municipality staff and it will be handed over to the nearest Health Care Facility for disposal as bio medical waste.

(Dr Sangeeta Joshi)

Scanned by CamScanner

Annexure - 3

Sample letter reg Implementation of this rule to HCFs

No. PCC/~~DDD~~/DMN/79/98.99/931
Office of the Member Secretary,
Pollution Control Committee,
First Floor, Udyog Bhavan,
Bhenslore, Nani Daman

Date:- 21/02/2017

To,
M/s PHC,
Khanvel, DNH.

Sub:- Implementation of the Bio-Medical Waste Management Rules, 2016 notified under the Environment (Protection) Act, 1986 by the Ministry of Environment, Forests and Climate Change (MoEF & CC) – Steps taken for ensuring implementation of the BMW Rules, 2016 – reg.

Ref:- CPCB letter No. B-31011(BMW)(58)/2016/HWMD/22539 dated 01/02/2017.

Sir,

The Bio – Medical Waste Management Rules, 2016 have been notified under the Environment (Protection) Act, 1986 by the Ministry of Environment, Forests and Climate Change (MoEF & CC) and effective from 28/03/2016. In this connection, it is to inform you that some of the provisions are newly introduced when compared to the Bio – Medical Waste (Management & Handling) Rules, 1998 as amended and requires action in a time bound manner as given below:

1. Phasing out of chlorinated plastic bags, gloves and blood bags within two years;
2. Pre-treatment of laboratory waste, microbiology waste, blood bags and blood samples through on-site disinfection or sterilization;
3. Bar code system and GPS is required to be established, within one year, by the occupier or Operator of a CBWTFs whichever is applicable;
4. The liquid waste is required to be treated and disposed by all the occupier or operator of a CBWTF in accordance with the Water Act, 1974.

In this regard you are requested to take necessary action on above aspects for ensuring effective management of Bio- Medical Waste Management Rules, 2016 and submit report to this office at the earliest so as to send the same to CPCB.

Yours faithfully,

Member Secretary,
Pollution Control Committee,
DD & DNH,
Daman

No.PCC/DDD/BMW/19-20/ 433
Office of the Member Secretary,
Pollution Control Committee,
First floor, Udyog Bhavan,
Bhenslore, Nani Daman,
Daman
Date:- 17/07/19.

To,
Shri Prashant Gargava,
The Member Secretary,
Central Pollution Control Board,
Parivesh bhavan, East Arjun Nagar,
New Delhi 110 032.

Sub: Annual Report on Biomedical Waste Management for the year 2018-19 as per Bio medical Waste Management Rules 2016-reg

Sir,

With reference to the subject cited above kindly find enclosed herewith the annual report on Bio-medical Waste Management for the Year 2018-19 pertaining to the UT of Daman and Dadra Nagar Haveli as per the prescribed format.

This is for your information please. Same has been send via an Email also.

Yours Faithfully,

Rakesh
17/7/19

Member Secretary,
Pollution Control Committee,
DD&DNH,
Daman

Copy to: Shri B.Vinod babu, AD & DH WMD-I, Central Pollution Control Board, Parivesh bhavan, East Arjun Nagar, New Delhi 110 032.

Encl: As above

Format for Submission of the Annual Report on Bio-medical Waste Management by SPCB/PCC (For the Year 2018-19)

Name of the State Pollution Control Boards/Pollution Control Committee	**Pollution Control Committee, DD & DNH, Daman**
Name of the Nodal Officer with contact telephone no. & mobile no.	**PCC, Daman (0260) 2262524, 2260975**

Hospitals & Nursing Homes (HCFs) in village/town/city as per Schedule VI	**Total no. of HCFs irrespective of no. of patients treated**	**Total no. of Beds**	**No. of HCFs applied for Authori-sation**	**No. of HCsF Granted Authorisa-tion**	**No. of HCFs having own treatment and disposal facilities**	**Total no. of captive treatment equipment installed by the HCFs (i.e excluding CBWTF)**						**No. of CBWTF (Please specify if a hospital treatment facility is also used by other HCF)**		**No. of HCFs which are utilising CBWTFs**	**Total quantity of BMW generated (kg/day)**	**Total quantity of BMW treated (kg/day)**	**No. of Facilities violated BMW Rules**		**Total No. of Show Cause Notices/ Directions issued to defaulter Facilities**	
						No. of Incinerators		**No. of Autoclave**	**No. of Microwave**	**No. of Hydroclave**	**No. of Shredder**	**In opera-tion**	**Under construu-ction**				HCFs	CBWTFs	HCFs	CBWTFs
						With APCD	**Without APCD**													
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**						**(8)**		**(9)**	**(10)**	**(11)**	**(12)**		**(13)**	
I. Bio-medical Waste Management scenario reported for the period upto 2010																				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II **Annual Report on Bio-medical Waste Management scenario for the year 2017 (01.01.2017 to 31.12.2017)**																				
A) HCFs in town with population of 30 lakhs and above	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B) HCFs in town with population below 30 lakhs: (i) with 500 beds and above	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NIL	NIL	NIL	NIL
ii) with 200 beds and above but less than 500 beds	01	300	01	01	NIL	NIL	NIL	NIL	NIL	NIL	NIL	01	NIL	01	Approx. 331 Kgs/day	Approx. 331 Kgs/day	NIL	NIL	NIL	NIL
iii) with 50 beds and above but less than 200 beds	04	225	04	04	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	04			NIL	NIL	NIL	NIL
iv) with less than 50 beds	31	436	31	31	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	31			81	NIL	81	NIL
C) All others institutions generating bio-medical waste not included in A) and B) above	104	100	55	49	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	104			NIL	NIL	NIL	NIL
Sub-total	140	1061	106	85	-	-	-	-	-	-	-	01	-	140	331 kgs/month	331 kgs/month	81	-	81	NIL
Total (I + II)	As above	As above	As above	As above	As above	As above	As above	As above	As above	As above	As above	As above	As above	As Above	As above	As above	As above	As above	As above	As above

Station: Daman
Date:

Signature of the authorised official & seal

Annexure-II

Information on Common Bio-medical Waste Treatment Facilities (CBWTFs)
(for the Year 2018)

Name of the State Pollution Control Board (or) Pollution Control Committee:	**: Pollution Control Committee-Daman**
Name of the Nodal Officer with contact telephone no. & mobile no.	**: PCC, Daman (0260) 2262524, 2260975**

Sr. No.	Name & Address of the CBWTF with contact person name and telephone no.	Name of the cities/ areas covered by CBWTF	Total no. of HCFs being covered	Total no. of beds covered	Total Quantity of BMW collected, treated and disposed of (in Kg/day)	Cost of treatment of BMW charged by the CBWTF operator (.....Rs. per Kg or .....Rs per Day or .....Rs. per bed per day)	Treatment equipment/ facilities installed at CBWTF			Air Pollution Control Systems attached with the incinerator(s)	Method of Disposal of treated wastes (Incineration Ash/Sharps/Plastics)	Compliance Status
							Equipment	Nos.	Total installed capacityin kg/day			
1	En-Cler Bio medical Waste Pvt Ltd, Gokul Nagar, Nr. SMC Solid waste Disposal Site, Bhatar, Surat. 0261-2262516-17, Mr.Nirav Thakkar-CEO	Daman & DNH	181	675	331 kg/day	-	Incinerator:	1	200 kg/hr	Yes, for O2, CO, CO2 Continues online emission monitoring system installed	Incineration Ash: 21657 kg/Annum	No. of Show-cause notices/ Direction issued: -
							Autoclave:	1	125 kg/hr			
							Hydroclave:	-	-		Sharps: -	No. of Court cases: -
							Microwave:	-	-			
							Shredder:	4	400 kg/hr		Plastics: -	Others: -
							ETP:	1				
							Deep burial:	-	-			

Station: Daman
Date:

Signature of the authorised official & seal

Annexure-III

SUMMARY SHEET ON BIO-MEDICAL WASTE MANAGEMENT SCENARIO IN THE STATE/UT

(1) Name of the SPCB/PCC & Contact person with Telephone No. /Mobile No. :Pollution Control Committee-DD & DNH, 0260-2262524.

(2) No. of HCFs :

S. No.	HCF catwegory	No. Of HCFs require authorisation under BMW Rules	No. Of HCFs does not require authorisation under BMW Rules
(a)	Bedded Hospitals	36	-
(b)	Non-bedded Hospitals	88	-
(c)	Others (Vetarinary Hospitals/Research Organisations etc.)	16	-

(3) Total No. of Beds in HCFs :1061

(4) Status on Consents under Water Act & Air Act :

- **a) No. of HCFs applied for Consents under Water & Air Acts :NIL**
- **b) No. of HCFs obtained Consents under Water & Air Acts :NIL**
- **c) No. of applications under consideration :NIL**
- **d) No. of applications rejected :NIL**

(5) Status on Authorization under BMW Rules :

- **a) No. of HCFs applied for Authorization :105**
- **b) No. of HCFs obtained Authorization :81**
- **c) No. of applications under consideration :19(Q/L)**
- **d) No. of applications rejected :NIL**

(6) Details on On-Site treatment equipments installed by HCFs : (enclose details as annexure separately if required):

Sl. No.	No. of HCFs	On-site Deep Burial		On-site Incinerator		On-site Autoclave		On-site Microwave		On-site Hydroclave		On-site Shredder	
		Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day
1.	--	--	--	--	--	--	--	--	--	--	---	--	--

- **a) Total Bio-medical waste generated & treated by HCFs (on-site/captive facilities(in Kg/day: NIL**
- **b) Total recyclable treated bio-medical waste sold off by HCFs in Kg/day :NIL**
- **c) Total treated Bio-medical waste disposed off by HCFs in Kg/day :NIL**

(7) No. of On-Site Incinerator (s) in operation installed by HCFs :NIL

- **a) With APCD :NIL**
- **b) Without APCD :NIL**

(8) Details on Common Bio-medical Waste Treatment Facility (CBWTF) :

- **a) Total No. of CBWTFs in operation :01**
- **b) Total No. of CBWTFs under construction :NIL**
- **c) Total No. of Incinerators installed by CBWTFs :01**
  - **I. With APCD :01**
  - **II. Without APCD :NIL**

(9) Details of CBWTFs (enclose details as annexure separately if required) :

Sl. No.	Name of the CBWTF with complete address	No. of member HCFs	Incinerator		Autoclave		Microwave		Hydroclave		Shredder	
			Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day	Nos	Total installed capacity in Kg/day
1.	En - cler	181	01	200 Kgs/hr	01	125 Kgs/hr					04	400 kg/hr

- **a) Total Bio-medical waste collected & treated by CBWTFs in Kg/day :331 kgs/day**
- **b) Total recyclable treated bio-medical waste sold off by CBWTFs in Kg/day :NIL**
- **c) Total Bio-medical waste disposed off by CBWTFs in Kg/day :331 kgs/day**

(10) Action taken against HCFs/CBWTFs for violation of provisions :

- **a) No. of Show-cause notices issued to HCFs :92**
- **b) No. of Show-cause notices issued to CBWTFs :nil**
- **c) No. of HCFs closed during the year 2018 :01**
- **d) No. of CBWTFs closed during the year 2018 :nil**

(11) Details on Bio-medical Waste Management Scenario :

- **a) Total Bio-medical Waste Generation in Kg/day :331 kgs/day**
  - **I. Incinerable :178 kgs/day**
  - **II. Recyclable (after autocalving followed by shredding) :154 kgs/day**
  - **III. Disposable in secured landfill/deep burial/sanitary landfill :NIL**
- **b) Total Bio-medical Waste Collected in Kg/day :331 kgs/day**
- **c) Total Bio-medical Waste Treated & Disposed in Kg/day :331 kgs/day**

(12) Steps taken by SPCB/PCC for improvement in Bio-medical Waste Management scenario in the State/UT (pl. use Annexure for detail) during the year 2018 :

Note: *Strike off whichever is not applicable*

Annexure-IV

Steps taken by PCC for improvement in Bio-medical Waste Management scenario in the UT of Daman & DNH during the year 2018-19 are as follows:

a. The District Level Monitoring Committee meeting has been conveyed in the chairmanship of the Collector/District Magistrate, Daman to check various compliances and to oversee the biomedical waste management in the U.T. of DD, difficulties faced on implementation of BMW Rules, 2016 and general points related to Bio-medical waste management.
b. PCC has also give directions to the CBWTF reg to implement Barcode system as per the CPCB's guidelines.
c. Identified violators were sent NOD/letters as per rules.
d. PCC has also organized a meeting with all the HCFs and also present them a presentation and aware them about these Bio medical waste management Rule and also to inform regarding how to apply for authorization and guided them by PCC.
e. Last but not the least, PCC has also visited the CBWTF facility which is under the purview of GPCB and it is situated in Surat as per the suggestions received by the expert committee- CPCB during the PCC audit.

e- 21668/2019/DSEC-PER

31/7/2019

U.T. ADMINISTRATION OF DADRA & NAGAR HAVELI

SECRETARIAT,

SILVASSA.

ADM/DS/HEALTH/BMW2016/2019/ 393 Dated: 31 /07 /2019

NOTIFICATION

In exercise of the powers conferred by Rule 11 of the Bio-Medical Waste (Management and Handling) Rules, 2016, the Administrator of Union Territory of Dadra & Nagar Haveli is hereby pleased to re-constitute the Advisory Committee under Bio Medical Waste Management Rules, 2016 comprising of the following members.

1. The Secretary (Health), D&NH.	Chairman
2. Medical Superintendent, VBCH, D&NH.	Member
3. President, Indian Medical Association, Silvassa Chapter.	Member
4. Member Secretary, Pollution control committee, DD/ D&NH.	Member
5. Director, Urban Development, D&NH.	Member
6. Chief Officer, SMC, D&NH.	Member
7. Deputy Director, Animal Husbandry.	Member

As and when required, the Committee shall advise the Union Territory Administration and Prescribed Authority about the matters related to implementation of Bio Medical Waste (Management and Handling) Rules, 2016 in the U.T. of Dadra & Nagar Haveli.

By order and in the name of
the Administrator of
Dadra & Nagar Haveli.

Deputy Secretary (Health)

Copy to:

1) All Secretaries, Administration of Dadra & Nagar Haveli.
2) The Collector, Silvassa.
3) The Director of Industries, DNH.
4) The Chairman, Pollution Control Committee, DD & DNH.

Received on 850 dt. 07/08/19
POLLUTION CONTROL COMMITTEE
क्षेत्रीय कार्यालय / Regional Office
सिलवासा / Silvassa
Inward/आवक सं. 914 Dt./तारीख 05/08/19
Outward/जावक सं. ____ Dt./तारीख ____

Report on Bio Medical Waste Management, Department of Health and Family welfare, U.T of Dadra and Nagar Haveli

Definitions

"Bio-medical waste" means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps

“Health care facility” means a place where diagnosis, treatment or immunization of human beings is provided irrespective of type and size of health treatment system, and research activity pertaining thereto. In pretext to these guidelines these health care facilities includes District Hospitals, Sub Divisional Hospitals, Community Health Centres, Primary Health Centres and Sub centres

“Management” includes all steps required to ensure that bio- medical waste is managed in such a manner as to protect health and environment against any adverse effects due to handling of such waste;

Classification of Healthcare Waste

Health Care Facilities (HCFs) are primarily responsible for management of the healthcare waste generated within the facilities, including activities undertaken by them in the community. The health care facilities, while generating the waste are responsible for segregation, collection, in-house transportation, pre-treatment of waste and storage of waste, before such waste is collected by Common Bio-medical Waste Treatment Facility (CBWTF) Operator. Thus, for proper management of the waste in the healthcare facilities the technical requirements of waste handling are needed to be understood and practiced by each category of the staff in accordance with the BMWM Rules, 2016.
Waste generated from the healthcare facility is classified as:

- Bio Medical waste
- General waste
- Other Waste

Bio Medical Waste

Bio-medical waste means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps. Bio-Medical waste includes all the waste generated from the Health Care Facility which can have any adverse effect to the health of a person or to the environment in general if not disposed properly. All such waste which can adversely harm the environment or health of a person is considered as infectious and such waste has to be managed as per BMWM Rules, 2016.

The quantity of such waste is around 10% to 15% of total waste generated from the Health Care Facility. This waste consists of the materials which have been in contact with the patient's blood, secretions, infected parts, biological liquids such as chemicals, medical supplies, medicines, lab discharge, sharps metallic and glassware, plastics etc.
Bio Medical Waste Management Rules, 2016 categorises the bio-medical waste generated from the health care facility into four categories based on the segregation pathway and colour code. Various types of bio medical waste are further assigned to each one of the categories, as detailed below:

1. Yellow Category
2. Red Category
3. White Category
4. Blue Category

These categories are further divided as per the type of waste under each category as follows:

CATEGORY	TYPE OF WASTE
YELLOW	**Human Anatomical Waste** Humantissues,organs,bodypartsandfetusbelowtheviability period(aspertheMedicalTerminationofPregnancyAct1971, amended from time to time).
	Animal Anatomical Waste Experimental animal carcasses, body parts, organs, tissues, including the waste generated from animals used in experiments or testing in veterinary hospitals or colleges or animal houses.
	Soiled Waste Items contaminated with blood, body fluids like dressings, plaster casts, cotton swabs and bags containing residual or discarded blood and blood components.
	Discarded or Expired Medicine Pharmaceuticalwastelikeantibiotics,cytotoxicdrugsincludingall items contaminated with cytotoxic drugs along with glass orplastic ampoules, vialsetc.
	Chemical Waste Chemicals used in production of biological and used or discarded disinfectants

	Chemical Liquid Waste Liquid waste generated due to use of chemicals in production of biological and used or discarded disinfectants, Silver X -ray film developing liquid, discarded Formalin, infected secretions, aspirated body fluids , liquid from laboratories an d floor washings, cleaning, house - keeping and disinfectingactivities etc
	Discarded linen, mattresses, beddings contaminated with blood or body fluid, routine mask & gown.
	Microbiology, Biotechnology and other clinical laboratory waste (Pre-treated) Microbiology, Biotechnology and other clinical laboratory waste: Blood bags, Laboratory cultures, stocks or specimens of microorganisms, live or attenuated vaccines, human and animal cell cultures used in research, industrial laboratories, production of biological, residual toxins, dishes and devices used for cultures.
RED	Wastes generated from disposable items such as tubing, bottles, intravenous tubes and sets, catheters, urine bags, syringes without needles, fixed needle syringes with their needles cut, vaccutainers and gloves
WHITE	Waste Sharps including metals Needles, syringes with fixed needles, needles from needle tip cutter or burner, scalpels, blades, or any other contaminated sharp object that may cause puncture and cuts. This includes both used, discarded and contaminated metal sharps
BLUE	Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic wastes.

General Waste

General waste consists of all the waste other than bio-medical waste and which has not been in contact with any hazardous or infectious, chemical or biological secretions and does not includes any waste sharps. This waste consists of mainly:

(i) News paper, paper and card boxes (dry waste)

(ii) Plastic water bottles (dry waste)

(iii) Aluminium cans of soft drinks (dry waste)

(iv) Packaging materials (dry waste)

(v) Food Containers after emptying residual food (dry waste)

(vi) Organic / Bio-degradable waste - mostly food waste (wet waste)

(vii) Construction and Demolition wastes

These general wastes are further classified as dry wastes and wet wastes and should be collected separately.

This quantity of such waste is around 85 % to 90 % of total waste generated from the facility. Such waste is required to be handled as per Solid Waste Management Rules, 2016 and Construction & Demolition Waste Management Rules, 2016, as applicable.

Status of U.T of Dadra and Nagar Haveli

Department of Health and Family Welfare, UT of Dadra and Nagar Haveli has already adopted the Biomedical Waste Rules 2016 which includes 01 District Hospital, 01 Sub District Hospital, 02 CHCs, 08 PHCs, and 71 Sub Centres. The Waste that is generated at these health facilities is segregated at the point of generation itself. The department has engaged Common BMW Treatment Facility 'En-cler Biomedical Waste Pvt Ltd, Surat' for transportation and final disposal of BMW.

The Biomedical Waste Committee for each of these facilities is formulated and meetings and reviews are held on regular basis. The staff of the facilities including Consultants, Medical Officers, Paramedical Staff, Safai Karamcharis and the waste handlers are trained from time to time. The periodic Medical examination and immunization is also conducted for all the employees. The BMW Committee conducts Audit to check the compliance of the process on regular frequency.

Sl. No.	Particulars		
1	Name of the Organisation		Directorate Of Medical & Health Services
3	Total no. of Health Care Facilities / Occupiers		1 DH, 1 SDH, 2 CHC, 8 PHC, 71 Sub-Centers
4 .	Particulars of the Occupier	:	
	(i) Name of the authorised person (occupier or operator of facility)	:	Dr. V.K Das
	(ii) Name of HCF or CBMWTF	:	Directorate Of Medical & Health Services
	(iii) Address for Correspondence	:	Dr. V.K Das
	(iv) Address of Facility		VBCH Campus, Sayli road, Silvassa
	(v)Tel. No, Fax. No	:	0260-
	(vi) E-mail ID	:	silvbch@gmail.com
	(vii) URL of Website		http://vbch.dnh.nic.in/
	(viii) GPS coordinates of HCF or CBMWTF		
	(ix) Ownership of HCF or CBMWTF	:	Government
5.	Type of Health Care Facility	:	
	(i) Bedded Hospital	:	No. of Bed: **589**

6.	Details of CBMWTF	:	En-cler Biomedical Waste Pvt. Ltd
	(i) Number healthcare facilities covered by CBMWTF	:	12
	(ii) No of beds covered by CBMWTF	:	**589**
7.	Quantity of waste generated or disposed in Kg per annum (on monthly average basis)	:	Yellow Category : 2969.53 Red Category: 2311.4 White: 88.345 Blue Category : 611.745 General Solid waste:
	*Note: Health Institute wise breakup is attached below		
8	Details of the Storage, treatment, transportation, processing and Disposal Facility		
	(i) Details of the on-site storage facility	:	Available at all Health care Facilities
9	Do you have bio-medical waste management committee?		Yes
10	Details trainings conducted on BMW		Yes
	(i) Number of trainings conducted on BMW Management.		35
	(v) whether standard manual for training is available?		Yes
11.	Liquid waste generated and treatment methods in place. How many times you have not met the standards ina year?		Yes
12	Is the disinfection method or sterilization meeting the log 4		Yes

Health Care Facility wise including Sub-center Bio Medical Waste generation

Health Unit	Monthly Average (in Kgs)				Yearly Total(in Kgs)			
	Red	Yellow	Sharp Container	Blue	Red	Yellow	Sharp Container	Blue
VBCH	1672.4	2222.5	66.83	493.1	20068.8	26670	801.96	5917.2
Khanvel/Rudana	392	437	7.75	96	4704	5244	93	1152
Kilvani	26.84	37.98	1.8		322.08	455.76	21.6	0
Rakholi	33.75	46.58	2.33	12.16	405	558.96	27.96	145.92

Dadra	32.25	34.08	1.77	0.83	387	408.96	21.24	9.96
Amboli	20	30	0.29		240	360	3.48	0
Randha	27.5	42.3	3.9	2.6	330	507.6	46.8	31.2
Mandoni	40.66	47.39	1.275	1.185	487.92	568.68	15.3	14.22
Dudhani	33	37	0.1		396	444	1.2	0
Naroli	14.5	18.4	1.8	3.75	174	220.8	21.6	45
Dapada	**18.5**	**16.3**	**0.5**	**2.12**	222	195.6	6	25.44
Total	**2311.4**	**2969.53**	**88.345**	**611.745**	**27736.8**	**35634.36**	**1060.14**	**7340.94**

Format – A: for Submission of Annual Inventory on Hazardous Waste Management by Occupiers

Name of SPCB/PCC: Pollution Control Committee, DD & DNH **Year: 2017-18**

A-1 - Details on Hazardous Waste Generation

S. No.	Name if the District	Number of HW generating Industry	Authorized quantity of Hazardous waste (MT)				Quantity of Hazardous Waste generated per Annual Return within the State/UT (MT)				Quantity of Hazardous Waste imported during the year (MT)	Quantity of HW exported during the year (MT)
			Landfillable	Incinerable	Recyclable	Utilizable	Landfillable	Incinerable	Recyclable	Utilizable		
		1	2	3	4	5	6	7	8	9	10	11
1	Daman	106	648.64	612.581	1674.29	Nil	71.905	675.125	201.66	Nil	1381.409	Nil
2	Dadra Nagar Haveli	256	1034.497	856.661	6459.638	Nil	1341.27	988.308	778.1025	Nil	29512.9528	Nil

Format - A2: Details on Inter-state Movement of Hazardous Waste for recycling/utilization/disposal

S. NO.	Hazardous Waste	Hazardous Waste received from other state/UT		Hazardous Waste sent to other state/UT	
		Name of state/UT from which waste received	Quantity received (MT)	Name of state/UT where waste sent	Quantity sent (MT)
			12		13
1	For disposal at common secured landfill	NA	Nil	NA	Nil
2	For disposal at common incinerator	NA	Nil	NA	Nil
3	For recycling by Schedule IV recyclers	Maharashtra and Gujarat	20702.6929	NA	Nil
4	For utilization in co-processing (cement plants)	NA	Nil	Chhattisgarh	835.180
				Gujarat	116.940
5	For utilization under Rule 9 (other than co-processing)	Maharashtra	8810.2599	Nil	Nil

A3 - Details on Hazardous waste Recycling and Utilized

S. No.	Name of the District	Recycling/Utilization of hazardous waste (generated within the State/UT)				Recycling/Utilization of hazardous waste (received from other State/UT)			
		Quantity of waste Recycled (listed under Sch-IV Hazardous Waste) (MT)	Quantity utilized (MT)			Quantity of waste Recycled (listed under Sch-IV Hazardous Waste) (MT)	Quantity utilized (MT)		
			Co-processing in Cement Kiln	Other than co-processing	Captive utilization (other than column 15 & 16)		Co-processing in Cement Kiln	Under Rule-9 other than co-processing	Captive utilization (other than column 19 & 20)
		14	15	16	17	18	19	20	21
1	Daman	Nil	Nil	Nil	Nil	2910.31	Nil	Nil	2961.680
2	Dadra Nagar Haveli	Nil	Nil	Nil	Nil	11892.433	Nil	Nil	8810.2599

A4 - Details on Hazardous waste Disposed

S. No.	Name of the District	Disposal of hazardous waste (generated within the State/UT)				Disposal of hazardous waste (received from other State/UT)			
		Quantity Disposed in Secured Landfill (MT)		Quantity Disposed through Incinerator(MT)		Quantity Disposed in Secured Landfill (MT)		Quantity Disposed through Incinerator(MT)	
		Common	Captive	Common	Captive	Common	Captive	Common	Captive
		22	23	24	25	26	27	28	29
1	Daman	93.08	Nil	769.493	--	Nil	Nil	Nil	Nil
2	Dadra Nagar Haveli	2322.614	Nil	1125.883	--	Nil	Nil	Nil	Nil

A5 - Details on Hazardous waste Stored at occupier premises

S. No.	Name of the District	Total quantity of HW stored at occupier premises at the beginning of the financial year i.e. 01.04.2017 (MT)				Total quantity of HW stored at occupier premises during the financial year i.e. 1st April to 31st March 2018 (MT)			
		Landfillable	Incinerable	Recyclable	Utilizable	Landfillable	Incinerable	Recyclable	Utilizable
		30	31	32	33	34	35	36	37
1	Daman	258	78.6	--	1495.361	565.653	398.154		3667.338
2	Dadra Nagar Haveli	676	199.713	--	1836.432	1341.27	988.308	---	12102.143

Format-B: Annual inventory on Recycling/Utilization /Co-processing of hazardous waste:

Name of SPCB/PCC: Pollution Control Committee, DD & DNH **Year: 2017-18**

S. No	Type of Recycling Facilities	No. of facilities authorized for recycling/utilization/co-processing of HW	Total authorized capacity (MTA)	Quantity recycled/utilized/co-processed during the year (MT)
A	**Commonly Recyclable HW**			
1	Brass dross	4	7382.4	4778.1822
2	Zinc bearing wastes	4	10910	4835.3265
3	Copper bearing wastes	5	28187.6	5189.1723
4	Spent catalyst containing nickel, cadmium, zinc, copper, arsenic, vanadium and cobalt	Nil	Nil	Nil
5	Lead bearing waste including battery waste	Nil	Nil	Nil
6	E-waste	Nil	Nil	Nil
7	Paint and ink sludge/residues	Nil	Nil	Nil
8	Used oil	Nil	Nil	Nil
9	Waste oil	Nil	Nil	Nil
	Total			
B	**Utilization of HW under Rule 9**			
1	Recovery of solvent from spent solvents	Nil	Nil	Nil
2	Utilization of APCD dust/residue generated from LD furnace/EAF/Blast furnace for producing cold briquettes for use in Blast Furnace for production of Pig Iron.	Nil	Nil	Nil
3	Utilization of spent catalyst to recover Platinum, Iridium, Osmium, Palladium, Rhodium, Ruthium, Rhenium, Gold & Silver	Nil	Nil	Nil
4	Utilization of spent H2SO4 generated from pickling operations for manufacturing Ferrous Sulphate	Nil	Nil	Nil
5	Utilization of spent acid containing Molybdenum generated from filament industries for production of Molybdenum Trioxide by heating process	Nil	Nil	Nil
6	Utilization of spent HCL generated from steel rolling mills for producing Ferric chloride	Nil	Nil	Nil
7	Utilization of used anode butt to produce carbon pellets and high energy (HE) coke for use in steel	Nil	Nil	Nil

	furnace/foundries			
8	Utilization of used anode butt to produce carbon blended coke/electrode carbon paste/carburiser for use in steel or ferroalloy furnaces	Nil	Nil	Nil
9	Utilization of pre-processed used anode butt to produce green anodes through anode breaking process for use in aluminium smelters	Nil	Nil	Nil
10	Utilization of pre-processed used anode butt generated to produce carbon electrode paste.	Nil	Nil	Nil
11	Utilization of coal tar/tarry residue generated from coal gasifier for energy recovery in sodium silicate industry.	Nil	Nil	Nil
12	De-contamination of contaminated drums/containers	Nil	Nil	Nil
13	Utilization of process sludge and primary ETP sludge generated from pulp & paper industries for producing paper board/mill board/card board.	Nil	Nil	Nil
14	Captive utilization of aluminium dross generated from refining and casting house of aluminium smelter units to recover aluminium metal.	Nil	Nil	Nil
15	Utilization of aluminium dross generated from refining and casting house of aluminium smelter units to recover aluminium metal	Nil	Nil	Nil
16	Utilization of oil based iron sludge of ball & roller bearing for producing ferrous sulphate.	Nil	Nil	Nil
17	Utilization of mercury waste generated from various industry for recovering mercury.	Nil	Nil	Nil
18	Utilization of spent H_2SO_4 generated from dye & dye intermediates to produce gypsum suitable for use in cement plants	Nil	Nil	Nil
19	Utilization of spent fixer (hypo) solution generated from photography / x-ray films to recover silver metal	Nil	Nil	Nil
20	Utilization of Hydro fluoro silicic acid – Acidic scrubber solution	Nil	Nil	Nil

	generated during single super phosphate manufacturing industry recovered sodium silico fluoride (sodium fluorosilicate) for use in glass industry.			
21	Utilization of spent sulphuric acid para generated during nitro toluene ortho sulfonic acid/oxadiargyl anthrquinone manufacturing industry for production of ferrous sulphate	Nil	Nil	Nil
22	Utilization of vanadium sludge generated from alumina refineries for production of vanadium metal	Nil	Nil	Nil
23	Utilization of phenolic wastewater generate from coal gasifier condensate water for quenching of hot gases in After Burning Chamber of Direct Reduced Iron (DRI) kiln of sponge iron industry.	Nil	Nil	Nil
24	Utilization of chemical sludge (primary sludge) of ETP from pulp & paper industry for energy recovery in atmospheric fluidized bed combustion (AFBC) boiler/pressurised fluidized bed combustion (PFBC) boiler/ circulating fluidized bed combustion (CFBC) boiler for steam or electricity generation.	Nil	Nil	Nil
25	Utilization of spent carbon (carbon slurry) generated from urea manufacturing plant for quenching of carbon slurry in the reactor for manufacturing carbon black.	Nil	Nil	Nil
26	Utilization of spent acid containing Molybdenum compound generated from bulb filament manufacturing industries for manufacturing of Ammonium Molybdate.	Nil	Nil	Nil
27	Utilization of resin waste (mixture of bisphenol A and epichlorohydrin) generated from resin impregnation of electrical coil power / hydro equipments industries for manufacturing of high tension / low tension insulator.	Nil	Nil	Nil
28	Utilization of spent alumina generated during polymerization	Nil	Nil	Nil

	in SWING unit of petrochemical plant for manufacturing of refractory material like			
29	Utilization of spent ion exchange generated from demineralization (DM) plant for energy recovery in boiler for steam or power generation.	Nil	Nil	Nil
30	Utilization of spent ion exchange generated from demineralization (DM) plant for energy recovery in direct reduced iron (DRI) kiln of sponge iron industry.	Nil	Nil	Nil
31	Utilization of tungsten scrap generated from metal cutting operation (using tungsten carbide insert) mining tool buttons and worn out drills for manufacturing tungsten carbide powder	Nil	Nil	Nil
32	Utilization of spent pot lining generated during production of primary aluminium from alumina smelting industries for utilization as a supplementary resource for manufacturing of carbon mineral fuel.	Nil	Nil	Nil
33	Utilization of spent sulphuric acid and spent sodium thiosuphate generated during manufacturing of 4.4 Diaminobenzene Sulphanilide for insolation and purification of 2 NADSFA & 6-Acetyl APSA	Nil	Nil	Nil
34	Utilization of coal tar/tarry residue generated from coal gasifier units for utilization as supplementary fuel in furnace for energy recovery in Fuel manufacturing units.	Nil	Nil	Nil
35	Utilization of gasifier slag containing Nickel & spent catalyst containing Molybdenum generated from nitrogenous fertilizer industry for manufacturing of alloy steel ingots and stainless steel ingots.	Nil	Nil	Nil
36	Utilization of synthetic oil based mud/drill cutting generated from oil & natural gas exploration for road construction / oil recovery	Nil	Nil	Nil
37	Utilization of flue gas cleaning residue generated from bag filter connected to steel scrap melting	Nil	Nil	Nil

	induction furnace for recovery of zinc metal			
38	Utilization of spent sulphuric acid nad spent sodium thiosulphate generated during manufacturing of 4.4 Diaminobenzene Sulphanilide for Isolation and purification of 2-NADSFA & 6-Acetyl APSA for manufacturing of Nitrosyl sulphuric acid (NSA)	Nil	Nil	Nil
39	Utilization of spent phosphoric acid generated during manufacturing of Quinacridone Pigment for production of Di-basic Calcium Phosphate	Nil	Nil	Nil
40	Utilization of spent sulphuric acid generated during manufacturing of Vinyl Sulphone for production of H-acid	Nil	Nil	Nil
41	Utilization of waste Dichromate solution generated during manufacturing of Ibuprofen for production of Basic Chromium Sulphate	Nil	Nil	Nil
42	Utilization of used waste thinner generated during cleaning of paint feeding lines using solvents for manufacturing of industrial primer to be used as automotive paints.	Nil	Nil	Nil
	Total			
C	**Co-processing in Cement Plants**	Nil	Nil	Nil

Format – C : List of Authorized Recycler / Utilizers / Co-processors of Hazardous Waste

Name of SPCB/PCC: Pollution Control Committee, DD & DNH **Year : 2017-18**

S. No.	Name and Address of the Facility	Type of hazardous waste authorised for recycling	Authorized recycling / Utilization / Co-processing capacity (MTPA)	Quantity recycled / Utilized / Co-processed (MTPA)
Daman				
1	M/s RHJ Industries Pvt. Ltd., Plot No. 3, 4, 5, Bharat Indl. Estate, Bhimpore, Daman.	Copper druid, Copper Ash, Residues & cake, Copper dross, Copper oxide mill scale, Copper skimming, Copper reverts, Brass dross, Zinc dross, Zinc Ash & Residue	4350 MTPA	2961.680
2	M/s Dhakad Metal Corporation, 341/4, Bharat Indl. Estate, Bhimpore, Nani Daman.	Brass dross, Copper dross, Copper scrap, & Brass scrap	2700 MTA	0
3	M/s. Metal Gems, 113 to 120, Panchal Udhyog Nagar, Bhimpore, Daman.	Copper druid	15,000	0
Dadra Nagar Haveli				
1	M/s. Nico Extrusion Pvt. Ltd., Plot No. 4, Before Naroli Check Post, Naroli, Silvassa	Brass dross, Copper dross, Copper residues, Copper oxides, Mill scale & Copper druid	5760	6519
		Zn dross, Zn Ash & Skimming	3600	
2	M/s. Singhal Commodities Pvt. Ltd., 47/1/1/1, 47/1/1/2 & 47/1/3, Kherdi, Silvassa.	Copper dross, Brass dross, Zn dross	5670	2966.598

		Zn Ash & Residue, Copper reverts, cake & residues	5500	
3	M/s RHJ metals Pvt. Ltd., Sr. No. 47/1/4 & 47/1/1/3, Khrdi, DNH	Copper oxide mill scal, Copper rivert cake & residue, waste copper & copper alloy indispensible	1200	2406.835
		Brass dross, Zinc dross, Copper dross, Zinc residue, Zinc ash & skimming	5400	
4	M/s Oyster Industries Pvt. Ltd., Sr. No. 290/1, Near Sugar Factory, Surangi, DNH	Used waste tyres (B3140 of Sch-III) – 23760 MT/A	23760	8810.2599

Format – D1 : Annual Inventory w.r.t. Common TSDF

Name of SPCB/PCC: Pollution Control Committee, DD & DNH **Year : 2017 - 18**

S. No.	Name and Address of TSDF	Quantity in stock at the beginning of the year (MT)		Quantity of hazardous waste received (MT)			Quantity of hazardous waste disposed (MT)			Quantity pre-processed for utilization (MT)	Quantity on stock at the end of the year (MT)		Cumulative HW disposed in SLF by the end of the financial year (MT)	Capacity		
		Landfillable	Incinerable	For direct landfill	For landfill after treatment	For incineration	Quantity landfilled directly	Quantity landfilled after treatment	Quantity incinerated		Landfillable	Incinerable		Incinerator (KCal)	Incinerator (T/H)	Landfill (MT/A)
1.	Green Gene Enviro Protection & Infrastructure (D & NH) Pvt Ltd. Survey No. 9/1, Village Mota Randha, Silvassa, UT-D&NH, Pin Code-396230	0	44.664	2136.775	180.400	1620.891	2045.186	277.428	1125.833	0	458.369	539.722	1864.245	2.5MKcal/hr.	0.5 T/H	02 Lacks MT/A

Format – D2 : Annual Inventory w.r.t. Common TSDF

Name of SPCB/PCC: Pollution Control Committee, DD & DNH

S. No.	Name address of captive facility	Type of facility (landfillable/incinerable/both)	Capacity		HW disposed during the year	Cumulative HW disposed till the end of financial year
			Incinerator (T/H)	Landfill (MT/A)		
1	M/s Green Gene Enviro Protection & Infrastructure (D & NH) Pvt Ltd., Survey No.9/1, Village Mota Randha, Silvassa, UT-D&NH, Pin Code-396230	Both	2.5 MKcal/hr.	02 Lacks MT/A	3448.447 MT	31982.796 MT

MINUTES OF THE 1ST MEETING OF THE "STATE LEVEL COMMITTEE" IN COMPLIANCE OF THE ORDER OF THE NGT (PB), DELHI IN OA NO. 606/2018 DATED 16/01/2019.

A meeting of the State Level Committee was held on 20/02/2019 at 16:00 Hrs in the Conference Hall, Secretariat, Daman under the chairmanship of the Advisor to the Administrator, UT of DD & DNH to discuss about the progress of compliances made on various agenda points mentioned as Annexure-I. The following were present during the meeting:

1. Shri S. S. Yadav, IAS, Advisor to Administrator, UT of DD & DNH.
2. Dr. K. Ravichandran, IFS, Secretary, Environment & Forest / Chief Conservator of Forest, UT of DD & DNH.
3. Shri Sandeep Kumar Singh, IAS, Collector, Daman / Member Secretary, PCC, Daman & Diu.
4. Ms. Sonalika Jiwani, IAS (P), Assistant to Collector, Daman.
5. Shri Vaibhav Rikhari, Chief Officer, DMC, Daman.
6. Shir D. R. Damania, BDO, Daman.
7. Shri P. M. Makvana, Extension Officer, Village Panchayat, District Panchayat, Daman.

Member Secretary, Pollution Control Committee welcomed the Chairman & the members of the committee and explained about purpose of the meeting. Thereafter, agenda wise discussion was held & the following was decided as under.

1) Status of compliance of Solid Waste Management Rule, 2016:

It was informed that

- UT Administration of Daman & Diu has notified a UT Level Advisory Body, and put in place a Solid Waste Management Policy for effective implementation of the Solid Waste Management Rules, 2016 in the Union Territory of Daman & Diu and Dadra & Nagar Haveli.
- In compliance to the Solid Waste Management Rule, 2016, ULB wise action plan has been prepared.
- More than 35 waste pickers have been registered and integrated in solid waste management system.
- In Daman, a compost plant has been installed with an input capacity of 5 MT.
- New tenders had been floated and finalized which covers collection, segregation, processing, and disposal to recyclers of waste in Daman.
- The sewage treatment plant of capacity 4.21 MLD has already been constructed at Moti Daman. Sewage networking project in Nani Daman is undergoing and All the wards and areas located along the Daman Ganga River will be joined with the existing sewage treatment plant at Moti Daman. Once the sewage networking

in other areas are completed, the work on establishment of a sewage treatment plant of 16 MLD capacity for Nani Daman area will be taken up.

The Chairman asked the DMC to expedite the works in ward No. 3 and 13 covering the areas located along the Damanganga river and connect with the Sewage treatment plant at Moti Daman at the earliest. The Chariman also asked the DMC and District Panchayats to ensure that 100 % collection, segregation of solid wastes at house hold level and ensure all the organic wastes are sent to compost plant/yard.

2) **Status of compliance of Plastic Waste management Rule, 2016**:

It is mentioned that U.T. Administration of Daman & Diu had completely banned on usage of plastic carry bags and constituted the State Level Advisory Body for effective implementation of the Plastic Waste Management Rules, 2016. The estimated plastic waste generation is Approx.1944 Tons/Annum and 219 registered plastic manufacturing/ recycling industries in DD & DNH.

The Chairman asked to go for enforcement drive in all market places and strictly enforce the rules. He also asked the DMC and PCC to organize more awareness programmes to encourage the use of cloth bags and paper bags and discourage the use of single use plastics.

3) **Status of compliance of Bio medical Waste Management Rules, 2016**:

The Member Secretary, PCC informed about the details of category of wastes, quantity generated and the treatment proposed for different biomedical wastes as under.

Sr. No.	Category of waste	Generation (kg/month)	Treatment
1	Yellow Category (Includes Human and Animal anatomical waste, Soiled waste, Expired and discarded medicines, Chemical waste, Laboratory-microbiology waste)	4859	Incineration
2	Red Category (Contaminated waste recyclable)	3918	Auto clave
3	White Category (Waste sharps)	355	Shredder needle tip cutter
4	Blue Category (Glass ware)	529	Disinfection or autoclaving

Further, the committee is informed that:

a) UT Administration of DD & DNH had authorized M/s. En-cler (En-vision) Bio-Medical Waste Pvt. Ltd. to collect and transport all the generated biomedical waste from the UT of Daman and Dadra Nagar Haveli to the Common Biomedical Waste Treatment Facility situated at Gokul Nagar, Near Surat

Municipal Corporation Solid Wastes Disposal Site, Azad Nagar Road, Bhatar, Surat, Gujarat.

b) M/s. En-cler (En-vision) Bio-Medical Waste Pvt. Ltd. is authorized to operate Common Biomedical Waste Treatment Facility at Surat by the Gujarat Pollution Control Board.

c) UT Level Advisory Committee is constituted under Rule No. 12 of the Bio-medical Waste Management Rules, 2016.

The chairman pointed out that instances have been noticed that some hospitals are not disposing of the biomedical wastes properly and as per Rules. The Director, Medical Health Service, DD & DNH has been asked to monitor all the hospitals & ensure proper disposal of biomedical wastes generated by the hospitals in DD & DNH.

4) Status of the Action Plan in compliance vide order dated 20.09.2018 in the News Item published in "The Hindu" authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB (Original Application No. 673/2018).

In this regard, it was informed that UT Administration, DD & DNH has constituted the "River Rejuvenation Committee (RRC)" for the preparation of an Action Plan for Damanganga River. The committee will also monitor the execution of the activities proposed in the Action plan on polluted river stretch of River Damanganga.

The action plan on the polluted river stretch of River Damanganga has been prepared and was presented before the at CPCB, Delhi on 12/02/2019. CPCB provided some suggestions & the same are being incorporated. The final Action Plan on Damanganga River will be submitted at the earliest.

5) Status of functioning of Committees constituted in News Item Published in "The Times of India' Authored by Shri Vishwa Mohan Titled "NCAP with Multiple timelines to Clear Air in 102 Cities to be released around August 15" dated 08.10.2018.

It was informed that the issues pertaining to the status of monitoring air quality in non-attainment cities and Daman, Diu, and Dadra Nagar Haveli does not fall under the non-attainment cities.

However, the Pollution Control Committee, DD & DNH is monitoring the ambient air quality by establishing Ambient Air Quality Monitoring (AAQM) stations at six locations under National Ambient Air Quality Monitoring programme (NAMP) through the MoEF & CC recognized laboratory, M/s Unistar Environment & Research Labs P. Ltd., Vapi, Gujarat.

The location include 03 in Daman at (i) Mashal Chowk, Nani Daman (Residential cum Commercial), (ii) M/s Prima Plastic, Village Kadaiya, Nani Daman (Industrial area), (iii) Makat Faliya/Ambavadi, Moti Daman (Rural area) and 03 in DNH at (i) M/s Chetan Guest House, Piperia, Silvassa (Residential cum Commercial), (ii) Baldevi, Dandul Faliya, Silvassa, DNH (Rural area) & (iii) M/s Shivom Industries, Village Khadoli, Silvassa, DNH (Industrial area).

Total eight (08) parameters are analyzed which include Particulate Matter (PM_{10}), Particulate Matter ($PM_{2.5}$), Oxide of Nitrogen (NOx), Sulphur Dioxide (SOx), Carbon Monoxide (CO), Ammonia, Ozone and Lead. The said parameters are within the limit in all six (06) locations except for Particulate Matter (PM). The Particulate Matter (PM_{10}) is slightly above the prescribed limit at four (04) locations due to heavy vehicle transportation and dusty road.

The UT administration is taking efforts to increase the green cover in the form of Road side/Avenue plantation, median plantation and plantation in Forest/Government land to reduce the level of (PM_{10}) in atmosphere.

In addition, PCC, DD & DNH is also analyzing parameters like Benzene (C6H6), Benzo (a) Pyrene (BaP), Arsenic (As) and Nickel (Ni), they are Below Detection Limit (BDL) since May, 2018 at all six locations mentioned above.

The analyzed data for all six locations are sent through e-mail on monthly basis to CPCB, Delhi regularly.

Further, PCC, DD & DNH is not allowing any industry to generate high Sulphur in order to improve the air quality and banned the use of coal, lignite & pet coke as fuel in the UT of Daman, Diu and Dadra Nagar Haveli. Only agro based briquettes, LDO, FO, diesel are allowed as fuel in Boiler, Thermic Fluid Heater & D.G. Set, etc.

It is decided that the PCC and Industries department to persuade the industries to develop green cover along the boundaries and also in the vacant plots in industrial premises so as to reduce the level of Particulate Matter (PM_{10})

6) **Status of Action Plan with regard to identification of polluted industrial clusters in O.A. No. 1038/2018, News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels" dated 13.12.2018.**

It was informed that, CPCB has developed Comprehensive Environmental Pollution Index (CEPI) to find out an index value to characterize quality of the environment. This index is developed with an objective to assess the environment quality in the country.

The CPCB has revised CEPI concept in concurrence with MoEF & CC and subsequently issued directions to SPCB/PCC having Critically Polluted Areas (CPAs) for adoption of the revised CEPI concept. The UT of Daman & Diu and Dadra Nagar Haveli does not fall under Critically Polluted Areas as per CPCB report.

However, the pollution in Damanganga River is cause of concern. Efforts are on monitor the pollution level in Damanganga River by collecting water samples at drainage points & some locations at River joint sampling is collected & analyzed by PCC, CPCB, & GPCB regularly. All the Industries have installed the ETP to treat the industrial waste waster and STPs have been established in Hotels and Resorts. The functioning of ETPs and STPs needs to be closely monitored to ensure desired outcome.

7) **Status of the work in compliance of the directions passed in O.A. No. 173 of 2018, Sudarsan Das v. State of West Bengal & Ors. Order dated 04.09.2018.**

It was informed that Hon'ble NGT issued an order dated 04/09/2018 in O.A. No. 173 of 2018 in the Sudarsan Das v. State of West Bengal & Ors. where in the NGT has directed to impose fine on erring industry on basis of Polluter Pay Principle & Precautionary Principle. The details of amount so collected & utilized so far have to be furnished to Hon'ble NGT. In this connection, it is informed that no amount is collected so far from the industries in DD & DNH based on Polluter Pay Principle. The same will be implemented henceforth on erring industries.

8) **Total amount collected from erring industries on the basis of 'Polluter Pays' principle, 'Precautionary principle' and details of utilization of funds collected**.

No amount collected from the industries on the basis of Polluter Pay Principle or Precautionary principle.

9) **Status of the identification and development of Model Cities and Towns in the State in the first phase which can be replicated later for other cities and towns of the State.**

It was informed to that the identification of model cities and towns will be decided in the next meeting.

The Chairman of the Committee in his closing remarks directed the concerned authority viz. Municipal council of Daman, Diu & Silvassa and District Panchayat, Daman, Diu and DNH to prepare & update the status report, take necessary steps to implement the various activities envisaged in relation to solid waste management, plastic waste management, biomedical waste management and action plan on

Damanganga River. Also, asked the PCC to take appropriate actions and interventions wherever necessary and implement the directions of Hon'ble NGT.

It was been decided to fix the next meeting during last week of month. All the agencies have been directed to submit an updated report well in advance.

The meeting ended with vote of thanks to the Chair.

Member Secretary,
Pollution Control Committee,
Daman & Diu,
Daman.

No. PCC/DDD/NGT-606(2018)(DMN)/18-19/96
Date:- 01/04/19

To,
All Concerned.

Minutes of the meeting held on 13.05.2019 at 05.00 p.m. under the chairmanship of Advisor to the Administrator in Secretariat, Daman to discuss issues regarding Solid Waste Management Rules.

Place: Secretariat, Daman.

Dated: 13.05.2019

The State Level Committee was constituted under the chairmanship of Advisor to the Administrator as per the directions of the National Green Tribunal in the OA No.606/2018 vide order dated 16.01.2019. The second meeting of the Committee was held on 13.05.2019 and the following members were present in the meeting:

1. The Secretary (Finance), DD & DNH, Daman.
2. The Secretary (E&F), DD & DNH, Daman.
3. The Secretary (Urban Development), DD & DNH, Daman.
4. The Collector, Daman.
5. The Chief Officer (DMC), Daman/Diu.
6. The Chief Executive Officer (DP), Daman/Diu.

The Committee went through the status report submitted to the National Green Tribunal and the directions passed by the NGT in the matter of "Compliance of Municipal Solid Waste Management Rules, 2016; OA No.606/2018 vide order dated 11.04.2019.

The following decisions were taken in the meeting:

1. **Rule 22 of the Solid Waste Management Rules, 2016:**

The status of the Rule-22 of Solid Waste Management Rules, 2016 was reviewed and both the districts were directed to comply the following time line:

Sl. No.	Activity	Time limit from the date of notification of rules	
1	Identification of suitable sites for setting up solid waste processing facilities.	**Daman:** Land already identified.	**Diu:** Land has to be identified in 10 days.

2	Identification of suitable sites for setting up common regional sanitary landfill facilities for suitable clusters of local authorities under 0.5 million population and for setting up common regional sanitary landfill facilities or stand alone sanitary landfill facilities by all local authorities having a population of 0.5 million or more.	**Daman:** Land already identified.	**Diu:** Land has to be identified in 10 days.
3	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities.	**Daman:** Land Acquisition has been started.	**Diu:** To be informed in 10 days.
4	Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source.	Directions have to be issued by the local bodies.	
5	Ensure door to door collection of segregated waste and its transportation covered vehicles to processing or disposal facilities.	Already started in Municipal areas and District Panchayat. But, its effectiveness has to be ensured.	
6	Ensure separate storage, collection and transportation of construction and demolition wastes.	Locations have to be identified. A helpline number can be circulated for collection and disposal.	
7	Setting up solid waste processing facilities by all local bodies having 100000 or more population.	N/A	
8	Setting up solid waste processing facilities by local bodies and census towns below 100000 population.	**Daman:** On going	**Diu:** To be started by 1st June, 2019.

9	Setting up common or stand alone sanitary landfills by or for all local bodies having 0.5 million or more population for the disposal of only such residual wastes from the processing facilities as well as untreatable inert wastes as permitted under the Rules.	N/A	
10	Setting up common or regional sanitary landfills by all local bodies and census towns under 0.5 million population for the disposal of permitted waste under the rules.	**Daman**: Already existing.	**Diu:** To be identified.
11	Bio-remediation or capping of old and abandoned dump sites.	**Daman:** Not required	**Diu:** A solution has to be devised in 15 days.

2. **Rule 24 of the Solid Waste Management Rules, 2016 (Annual Report):**

The Chairman of the Committee directed all the Local Bodies to submit pending reports within one week for the year 2017-18 & 2018-19. The Pollution Control Committee will there after submit the report of 2017-18 by 23.05.2019.

3. **Performance audit to be done on 18 parameters :**

In the order passed by the NGT, the Local Bodies will initiate measures to identify an agency to conduct performance audit which has to be completed by August, 2019 and actions have to be initiated from 1st September, 2019 on the basis of the report. The Local Bodies will have to keep notice of the Daman & Diu Waste Management and Sanitation Policy prepared as per the directions passed by the Supreme Court of India.

Action by: C.E.O., District Panchayat, Daman / Diu.
C.O., DMC, Daman / Diu.

4. **Bio-medical Waste Management Rules, 2016:**

a) The Chairman of the Committee directed the PCC to take action against the health care facilities which are not registered by 31.05.2019.

Action by: PCC, Daman & Diu

b) The State Level Advisory Board as per rules has to be formed immediately.

Action by: DMHS

c) The District Level Monitoring Committee has to be constituted for Diu District.

Action by: PCC, Daman & Diu

d) The Director Medical and Health Services will take necessary action to comply the directions prescribed under Rule-6 of the Bio-Medical Management Rules, 2016.

Action by: DMHS

e) It was also directed in the meeting that a monthly report from CVMWTF has to be obtained regarding the category wise disposal of the bio-medical wastes.

Action by: PCC, Daman & Diu

f) It was observed that an action plan has been prepared and the concerned departments have initiated action to timely comply with the action points.

g) A clarification has to be sought whether sanitary pads & diapers are covered under Municipal Solid Wastes or Biomedical wastes.

Action by: PCC, Daman & Diu

h) Timely report has to be submitted to the CPCB.

Action by: PCC, Daman & Diu

5. Plastic Waste Management Rules, 2016

a) The Local Bodies have to activate the Flying Squads to keep a strong vigil and ensure ban on stocking, distribution, selling and use of any type of carry bags and plastic sachets/pouches used for packing, storing or selling of Gutkha, tobacco and pan masala.

b) It was observed that Rule-5, 6 & 7 of the Plastic Waste Management Rules, 2016 are not being implemented in letter and spirit by the Local Bodies. Therefore the Local Bodies are hereby instructed to initiate action for the compliance of the said rules and submit action taken of the District Level Committee as well as State Advisory Board within two weeks.

c) It was observed that none of the Local Bodies have submitted the report in Form-V to the Department of Urban Development as well as to the Pollution Control Committee. Therefore the Local Bodies are hereby directed to submit all the due reports within next 10 days.

d) It was observed that the action plan has been prepared by the PCC and different time lines have been mentioned therein. The Local Bodies are directed to adhere to these time lines for the implementation of the action points in a timely manner.

Sr. No.	Particulars	Timeline
1	Constitution of State Level Monitoring Committee under Plastic Waste Management Rules, 2016.	May 2019
2	To bring the remaining Plastic Manufacturing units under the ambit of Plastic Waste Management Rules, 2016 in the UT of Daman, Diu and Dadra Nagar Haveli and closing the unregistered units.	October 2019

3	Constitution of Squads for vigilance purpose and ensure ban on stocking, distribution, selling and use of any carry bag <50 micron thickness and plastic sachets/pouches used for packing, storing or selling of gutkha, tobacco and pan masala by Urban Development Department.	Flying squads already constituted. To be ensured by October 2019.
4	Development and setting up of infrastructure for segregation, collection, storage, transportation of plastic waste and channelization of recycled plastic waste fraction to recyclers with valid registration.	Door-to-door collection started by the local bodies. Segregation and proper disposal of plastic waste to be ensured by December 2019.
5	Creating awareness among the stakeholders and IEC activities.	On-going
6	Prevention of open burning of plastic wastes.	July 2019
7	Amendment of bylaws by the local bodies for implementation of Plastic Waste Management Rules, 2016.	July 2019
8	Segregation of dry and wet waste by the Local Bodies.	Implemented in the urban local bodies. To be implemented in all Panchayats by April 2020.
9	Decentralized Composting Plant.	Existing in ULBs at Daman and Silvassa. Other local bodies by April 2020.

10	Setting up of Material Recovery Facility prior to processing of Solid Waste.	July 2019

e) PCC, Daman & Diu has to ensure that action is initiated against the unregistered plastic manufactures within one month.

Action by: PCC, Daman & Diu

6. **River Action Plan for Damanganga River:**

a) It was observed that drain wise action plan has been prepared for Damanganga river wherein it is mentioned that STP of different capacities have to be installed by the Daman Municipal Council & District Panchayat, Daman so that no untreated water is discharged into the river directly.

Action by: Chief Officer (DMC), Daman & CEO (DP), Daman.

b) It was brought to the notice of the Chairman that the department of Town & Country Planning was preparing a road map for installation of sewage treatment plant in Daman. The DMC has already installed an STP at Moti Daman and it is in process of installation of the same in the Nani Daman area. But, no concrete steps has been taken for the rural areas and therefore the department of Urban Development is directed to initiate action for development of sewage network and installation of STP in the rural areas.

Action by: Secretary (UD)
Member Secretary (Town & Country Planning)

c) The PCC will ensure that zero level discharge has to be achieved by the industries so that there is no discharge of industrial waste water in the river. It was brought to the notice of the Committee that the major industries are following these norms but there are few smaller units where domestic waste water is discharged in the storm water drain which has to be checked so that no untreated water is directly discharged in the river.

Action by: PCC, Daman & Diu

7. **<u>Construction and Demolition Waste Rules, 2016:</u>**

a) The Local Bodies will prepare a plan for timely implementation of Schedule-III of the rules.

Action by: Chief Officer (DMC), Daman/Diu & CEO (DP), Daman/Diu.

b) The PCC will initiate action for formulation of policy to be made by the State Government for the UT of Daman & Diu.

Action by: PCC, Daman & Diu

8. The District Magistrate, Daman & District Magistrate, Diu will take fortnightly meetings and ensure compliance in their respective jurisdictions.

9. Next meeting of the Committee will be held on 12th June, 2019 at 05.00 p.m. conference hall, Secretariat, Moti Daman.

Rakesh
10/7/19

(Rakesh Minhas), IAS
Member Secretary,
Pollution Control Committee / State Level Committee
(Waste Management),
Daman.

E-69196
NO. PCC/DDD/NGT-606(2018)DMN/2018-19/252 Dated: 11/07/2019.

To,

1. The Advisor to Administrator, DD & DNH, Daman.
2. The Secretary (Finance), DD & DNH, Daman.
3. The Secretary (E&F), DD & DNH, Daman.
4. The Secretary (Urban Development), DD & DNH, Daman.
5. The Collector, Daman.
6. The Chief Officer (DMC), Daman.
7. The Chief Officer (DMC), Diu
8. The Chief Executive Officer (DP), Daman/Diu.

Minutes of the meeting held on 13.05.2019 at 05.00 p.m. under the chairmanship of Advisor to the Administrator in Secretariat, Daman with the District Magistrates of Daman & Diu to discuss issues regarding Solid Waste Management Rules.

Place: Secretariat, Daman.

Dated: 13.05.2019

The Advisor to Administrator held a first meeting with the District Magistrates of Daman and Diu as per the directions of the National Green Tribunal in the OA No.606/2018 vide order dated 11.04.2019.

During the meeting following directions were issued :-

1. The District Magistrate will coordinate with the local bodies to initiate action under Rule 22 & Rule 24 of the Solid Waste Management Rules, 2018.
2. The District Magistrates will hold fortnightly meeting with the local bodies to oversee the progress of compliance by the local bodies the matter of Solid Waste Management Rules, Plastic Waste Management Rules and Bio Waste Management Rules.
3. The District Magistrates will ensure that all the matter discussed in the State Level Committee meeting is complied with.

The meeting ended with vote of thanks to the chair.

Rakesh
10/7/19

(Rakesh Minhas), IAS
Member Secretary,
Pollution Control Committee,
Daman.

5/MEMSECPCC/2019
No.PCC/DDD/NGT-673/2018/18-19
Office of the Member Secretary,
Pollution Control Committee,
DD & DNH,
Daman.

Dated: 08/01/2019.

NOTIFICATION

As per the order issued by the Hon'ble National Green Tribunal (Principal Bench), New Delhi dated 20th September, 2018 in Original Application No. 673/2018 in the matter of news item published in "The Hindu" Titled "More river stretches are now critically polluted: CPCB", UT of Daman & Diu is directed to prepare action plan for bringing the polluted river stretch to be fit at least for bathing purpose (i.e. BOD < 3 mg/l and FC < 500 MPN/100 ml) within six months from the date of finalization of the action plan and as per the directions mentioned in para 50 (ii) of the order, the U.T. Administration of Daman & Diu is hereby pleased to constitute the "River Rejuvenation Committee" (RRC) to prepare, monitor and execute the action plan. The committee will comprise of the following members;

Sr. No.	Designation	Member
1	Director, Municipal Administration	Chairman
2	Deputy Director, Industries	Member
3	Conservator of Forest, Department of Environment & Forest	Member
4	Member Secretary, Pollution Control Committee, DD & DNH.	Member

Member Secretary
Pollution Control Committee,
Daman and Diu,
Daman

To,

Copy to,

1) The Secretary, Department of Urban Development, Daman.
2) The Additional Secretary (Urban Development), Daman.
3) The Chief Conservator of Forest, DD & DNH.
4) The Collector, Daman.
5) The Collector, DNH.
6) Chief Officer, Daman Municipal Council, Daman.
7) Chief Officer, Diu Municipal Council, Diu.
8) The Assistant Director (Official Language), Daman with a request to get the Notification translated in Hindi language.
9) Guard file.

Central Pollution Control Board

(Ministry of Environment, Forest & Climate Change, Govt. of India)

Parivesh Bhawan, East Arjun Nagar,

Delhi – 110032

****

Minutes of 4th meeting of the Task Team for ensuring compliance to Hon'ble NGT (PB), New Delhi order dated 20.09.2018 and 19.12.2018 in OA No 673/2018 in the Matter of News Item Published in 'THE HINDU' Titled "More river stretches are now critically polluted: CPCB" held on 28.03.2019 in Committee Room, 4th Floor, CPCB, Delhi

Fourth meeting of the Task Team was held on 28th March, 2019 in CPCB, under the Chairmanship of Sh. A. Sudhakar, AD, CPCB for reviewing the revised action plans received from SPCBs/PCCs viz. Daman, Diu and Dadra Nagar Haveli, Delhi, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Meghalaya, Odisha and Telangana for rejuvenation of identified polluted river stretches in compliance to Hon'ble NGT orders dated 20/09/2018 and 19/12/2018. List of participants is Annexed **(Annexure-I).**

Sh. A Sudhakar, AD & DH, WQM-I, CPCB, informed that the Member Secretary has to leave for Ahmedabad, he may not attend today's meeting and thereafter welcomed the members of the Task Team. He reiterated that as per Hon'ble NGT vide its order dated 19.12.2018 directed all States/PCCs to display their water quality on their website and States/PCCs not displaying water quality in spite of several communications will be declared as defaulter in the final report to be submitted before Hon'ble NGT and requested Sh. J.C. Babu, AD, CPCB to brief about the updates w.r.to action plans received from all SPCBs/PCCs, web-link display pertaining to water quality of polluted river and constitution of River Rejuvenation Committee by all the States/UTs for ensuring compliance to the Hon'ble NGT orders dated 20/09/2018 and 19/12/2018.

Sh. J.C.Babu, AD, CPCB, informed that the Action plans have been received from most of the State Boards except Manipur, Assam and U.P. (river Hindon). Updated status on State-wise action plans received is given at **Annexure-II**. The web-link displaying water quality data of the identified polluted river stretches at the web-site of SPCB /PCC viz., Manipur, Sikkim, Tamil Nadu and Delhi is yet to be received and its details are given at **Annexure-III.** As regards to the constitution of River Rejuvenation Committee (RRC) by the State Governments or UT Administrations, Jharkhand State is the only State which is yet to communicate about the constitution of its RRC. State-wise status of constitution of RRC is given at **Annexure –IV**.

Thereafter, Sh. Rohit Kakkar, Advisor, CPHEEO/MoHUA raised issues regarding allocating funds from the concerned Ministry under Central Govt. for implementation of the action plans provided (i) All States must quote realistic budget estimates to obtain financial aid from the concerned Ministry, for commissioning of STPs/CETPs; and (ii) For rejuvenation of Polluted river stretches apart from STPs/CETPs & their performance, action plans be proposed for setting up of aerators, by respective Departments, for improvement of river water quality to maintain bathing water quality criteria.

Task Team decided that any State deleting any of the stretches from the present list of polluted stretches (as given in Hon'ble NGT order dated 20/09/2018) may file their reply before the Hon'ble NGT separately describing the rationale behind the same and may delete only if NGT directs

accordingly. The Revised Action Plans in respect of P-I & P-II which were not recommended earlier viz., Damanganga (Daman, Diu and Dadra Nagar Haveli), Yamuna (Delhi), Devika (Jammu & Kashmir), Betwa and Chambal (Madhya Pradesh), 9 P-I & 6 P-II Polluted river stretches (Maharashtra), Umkhrah & Umshympri (Meghalaya), Gangua (Odisha) were reviewed as per Hon'ble NGT orders dated 20/09/2018 and 19/12/2018 by the Task Team members.

Main Decision of the Task Team on the action plans for rejuvenation of polluted river stretches are as follows:

S.No	Name of the river	Observations/Suggestions of the CPCB Task Team	Recommendations of the CPCB Task Team
1	Damanganga (Daman, Diu and Dadra Nagar Haveli)	Strict enforcement w.r.to industrial effluent discharge is suggested. All industrial units should be asked to achieve ZLD status and no industrial wastewater partial/ fully treated be allowed to discharge in the River	***Recommended subject to conditions.***
2	Yamuna (Delhi)	DPCC submitted only the Executive summary with time line. Action plan wise budget is not given. NMCG representative suggested that since Delhi has huge no. of industries and action plan does not cover all the industries operating in Delhi. Therefore, all the licensed industries having registered GST No and Aadhar No. may be interlinked for estimating total no of industries and detailed gap analysis w.r.to industrial effluent as well as hazardous waste management.	***Not Recommended. The action plans submitted by Delhi Govt. needs to be revised and resubmitted by the Delhi Govt.***
3	Devika, Jammu & Kashmir:	Revised action plan was reviewed and it was observed that action plan for rejuvenation of River Devika is already being implemented under AMRUT Scheme.	***Approved subject to achievable water quality and timelines and other aspects as per Hon'ble NGT order dated 20.09.2018 & 19.12.2018***
4	Betwa and Chambal, Madhya Pradesh	In case of action plans for river Betwa, detailed gap analysis w. r. to Industrial pollution control need to be included wherever applicable. In case of action plan for river Chambal, ground water quality is exceeding the limit prescribed under IS 10500-2012 at few locations for parameters such as TDS, Chlorides, Total Hardness (including Calcium and Magnesium Hardness), Sulphates as well as Mercury content. Also, observed fluoride content is higher than the acceptable limit at few locations. Such contaminated ground water should not be	***Action plans Recommended subject to conditions.***

S.No	Name of the river	Observations/Suggestions of the CPCB Task Team	Recommendations of the CPCB Task Team
		allowed for drinking purpose and such ground water sources should be capped or closed and alternate arrangements need to be made by the local/urban bodies wherever applicable.	
5	9 polluted river stretches of P-I category & 6 polluted river stretches of P-II category- in Maharashtra	Revised action plan reviewed and the action plan requires action plan wise budget estimates with break up and organization responsible for implementation of action plan.	***Recommended subject to conditions.***
6	Umkhrah & Umshympri Meghalaya:	Since only the executive summary was submitted highlighting responsible agency for the particular task, therefore action plan needs to be revised including all the aspects viz., detailed gap analysis w.r.to Industrial, sewage and municipal solid waste management along with budget estimate and timelines and other aspects as per the Hon'ble NGT orders dated 20.09.2018 and 19.12.2018 also be included.	***Not recommended***
7	Gangua (Odisha	Revised action plans reviewed and it was observed that action plan covering aspects w.r.to Flood Plain Zone protection and its management, rain water harvesting, ground water recharge aspect, maintaining E-Flows and water shed management, good irrigation practices setting up of Bio-diversity parks including removal of encroachment and plantation on both sides of river to be included in the action plan.	***Recommended for subject to conditions***

Task Team also suggested CPCB to review the action plans submitted by the States/UTs in respect of P-III to P-IV category polluted river stretches and also to communicate the observations to the respective States/UT for incorporating necessary suggestions & for initiating further action for ensuring compliance to Hon'ble NGT orders dated 20.09.2018 and 19.12.2018.

Comments on the 'draft Criteria for identification of polluted river locations' provided by SPCBs/PCCs were also discussed and the Task Team suggested for its finalization based on the comments received from various stakeholders.

The Meeting ended with vote of thanks to the Chair.

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Annexure –I

LIST OF PARTICIPANTS

4th Task Team meeting for Scrutiny of Action Plans for Restoration of Polluted River Stretches in compliance to Hon'ble NGT (PB) New Delhi order dated 20th September, 2018 & 19th December, 2018 in O.A.No.673/2018 in the matter of News Item published in 'The Hindu' titled "More River Stretches are Now Critically Polluted: CPCB"

Venue: Committee Room, 4th Floor, CPCB, Delhi **Date: 28th March, 2019**

S.No.	NAME	DESIGNATION	ORGANISATION	EMAIL	Mobile No.
1	Sh. A.Sudhakar	DH, WQM-I	CPCB	asudhakar.cpcb@nic.in	8800326699
2	Sh. Rohit Kakkar	Dy. Advisor	CPHEEO/ MoHUA	rohit.kakkar@nic.in	8750622900
3	Sh. R. M. Bhardwaj	Consultant	NMCG, MoWR, RD &GR	rmbhardwaj@gmail.com	9868211284
4	Sh. J.C.Babu	Scientist E, WQM-I	CPCB	jcb.cpcb@nic.in	
5	Dr. Deepali Agarwal	RA	CPCB	cpcb.nwmp@gmail.com	
6	Ms. Deepty Goyal	JRF	CPCB	cpcb.nwmp@gmail.com	

Annexure-II

State-wise Identified Polluted Rivers and the Status of Action Plans received by CPCB in compliance to Hon'ble NGT Orders dated 20.09.2018 and 19.12.2018 in OA No. 673 of 2018 (as on 27.03.2019)

Name of the State / UT	Total No. of Identified Polluted River stretches (PRS)	Priority I Identified Polluted River stretches		Priority II Identified Polluted River stretches		Priority – III to V Identified Polluted River stretches		Total Action Plans Received
		No. of P-I PRS	Action Plans received w.r.to P-I	No. of P-II PRS	Action Plans received w.r.to P-II	No. of P-III to P-V	Action Plans received w.r.to P-III to P-V	
AP	5	0	0	0	0	5	5	5
Assam	44	3	0	1	0	40	1	1
Bihar	6	0	0	0	0	6	6	6
Chhattisgarh	5	0	0	0	0	5	5	5
DD & DNH	1	1	1	0	0	0	0	1
Delhi	1	1	1	0	0	0	0	1
Goa	11	0	0	0	0	11	4	4
Gujarat	20	5	5	1	1	14	14	20
Haryana	2	2	2	0	0	0	0	2
HP	7	1	1	1	1	5	5	7
J & K	9	0	0	1	1	8	8	9
Jharkhand	7	0	0	0	0	7	7	7
Karnataka	17	0	0	0	0	17	17	17
Kerala	21	1	1	0	0	20	0	1
MP	22	3	3	1	1	18	0	4
Maharashtra	53	9	9	6	6	38	38	53
Manipur	9	0	0	1	0	8	0	0
Meghalaya	7	2	2	0	0	5	5	7
Mizoram	9	0	0	0	0	9	0	0
Nagaland	6	1	1	0	0	5	5	6
Odisha	19	1	1	0	0	18	8	9
Puducherry	2	0	0	0	0	2	2	2
Punjab	4	2	2	0	0	2	2	4
Rajasthan	2	0	0	0	0	2	2	2
Sikkim	4	0	0	0	0	4	4	4
Tamil Nadu	6	4	4	0	0	2	2	6
Telangana	8	1	1	2	2	5	5	8
Tripura	6	0	0	0	0	6	6	6
UP	12	4	3	0	0	8	6	9
Uttarakhand	9	3	3	1	1	5	5	9
West Bengal	17	1	1	1	1	15	15	17
Grand Total	**351**	**45**	**41**	**16**	**14**	**290**	**177**	**232**

Annexure-III

States displaying Water Quality of Identified Polluted River Stretches (as on 27.03.2019)

S No	State	Link
1.	Andhra Pradesh	http://appcb.ap.nic.in/water-quality-status-of-polluted-river-stretches-of-andhra-pradesh/
2.	Goa	http://goaspcb.gov.in/Media/Default/NWMP/polluted_river_stretches_data2017-18.pdf
3.	Gujarat	https://gpcb.gujarat.gov.in/webcontroller/viewpage/water-quality-of-polluted-river-stretches-in-gujarat
4.	Madhya Pradesh	http://210.212.156.39/File_upload/view_WQI%20River_report.aspx
5.	Jammu & Kashmir	https://jkriverrejuvenation.com/2019/02/07/level-of-bod-evaluated-on-different-identified-polluted-river-stretches-in-jammu-region-during-the-year-2018q1-q4/
6.	Uttarakhand	http://ueppcb.uk.gov.in/pages/display/168-water-quality-of-polluted-river-stretch
7.	West Bengal	http://emis.wbpcb.gov.in/waterquality/showwqprevdatachoosedist.do
8.	Punjab	http://ppcb.gov.in/attachments/environmental%20data/stretchesdec2018.pdf
9.	Nagaland	http://npcb.nagaland.gov.in/analysis-report-of-national-water-quality-monitoring-programme-for-december-2018/#
10.	Haryana	http://hspcb.gov.in/watqual.html
11.	Kerala	https://www.keralapcb.nic.in/cmsadmin/fileUploads/NWMP_August_2018_up_13-02-2019.pdf
12.	Assam	https://pcbassam.org/wqi.php
13.	Karnataka	https://www.kspcb.gov.in/1water%20data.pdf
14.	Rajasthan	http://rspcbmis.environment.rajasthan.gov.in/laboratory/lab_SampleMonitoring_NWMPreport.aspx
15.	Telangana	https://tspcb.cgg.gov.in/pages/envdata.aspx
16.	Maharashtra	http://mpcb.gov.in/river_streches/River_streches.php
17.	Odisha	http://ospcboard.org/environmental-monitoring-data
18.	Daman, Diu And Dadra Nagar Haveli	https://daman.nic.in/websites/Pollution-Control-Committee/2019/Water-Quality-Data-of-the-Damanganga-River-2015-2018.pdf
19.	Himachal Pradesh	http://hppcb.nic.in/NGT/WQPRS.pdf
20.	Puducherry	https://dste.py.gov.in/ppccmain.htm
21.	Tripura	https://tspcb.tripura.gov.in/ngt673.html
22.	Uttar Pradesh	http://www.uppcb.com/water-quality-data-stretches.htm
23.	Bihar	http://forestonline.bih.nic.in/rrc/Background.aspx
24.	Jharkhand	http://jspcb.nic.in/quicklink/water-quality-status-of-polluted-river-stretches-of-jharkhand.php
25.	Mizoram	https://mpcb.mizoram.gov.in/page/polluted-river-data-2019
26.	Meghalaya	http://megspcb.gov.in/Monthly%20Water%20Quality%20Data%20of%20Identified%20Polluted%20River%20Stretches%20in%20Meghalaya.html
27.	Chhattisgarh	http://enviscecb.org/Data/Revised%20Action%20Plan%20for%20Rejuvenation%20of%20River_28_01_19.pdf

- **States not displaying Water Quality of Identified Polluted River Stretches**
  1. Delhi
  2. Manipur
  3. Sikkim
  4. Tamil Nadu

Annexure-IV

State-wise status regarding Constitution of 'River Rejuvenation Committee (RRC) in compliance to Hon'ble NGT Orders dated 20.09.2018 and 19.12.2018 in the matter of OA No. 673 of 2018 (as on 27.03.2019)

S. No.	STATE/UNION TERRITORY	Total No. of Identified Polluted River Stretches (P-I) to P-V)	Status of RRC Constitution	Date of Constitution
1	ANDHRA PRADESH	5	Yes	05.12.2018
2	ASSAM	44	Yes	24.12.2018
3	BIHAR	6	Yes	31.12.2018
4	CHHATTISGARH	5	Yes	22.11.2018
5	DAMAN, DIU AND DADRA NAGAR HAVELI	1	Yes	08.01.2019
6	DELHI	1	Yes	22.10.2018
7	GOA	11	Yes	21.11.2018
8	GUJARAT	20	Yes	29.11.2018
9	HARYANA	2	Yes	8.11.2018
10	HIMACHAL PRADESH	7	Yes	17.11.2018
11	JAMMU & KASHMIR	9	Yes	15.10.2018
12	JHARKHAND*	7	-	*
13	KARNATAKA	17	YES	24.11.2018
14	KERALA	21	Yes	12.12.2018
15	MADHYA PRADESH	22	Yes	01.11.2018
16	MAHARASHTRA	53	Yes	13.12.2018
17	MANIPUR	9	Yes	05.03.2019
18	MEGHALAYA	7	YES	24.01.2019
19	MIZORAM	9	YES	05.12.2018
20	NAGALAND	6	Yes	06.12.2018
21	ODISHA	19	Yes	12.11.2018
22	PUDUCHERRY	2	Yes	13.11.2018
23	PUNJAB	4	Yes	20.11.2018
24	RAJASTHAN	2	Yes	06.11.2018
25	SIKKIM	4	YES	23.01.2019
26	TAMIL NADU	6	Yes	26.12.2018
27	TELANGANA	8	Yes	29.11.2018
28	TRIPURA	6	Yes	01.11.2018
29	UTTAR PRADESH	12	Yes	14.12.2018
30	UTTARAKHAND	9	Yes	05.12.2018
31	WEST BENGAL	17	Yes	07.01.2019
	Grand Total	**351**		

* ***Information is not available with CPCB***

Action Plan for Damanganga River

U.T. Administration of Daman & Diu

List of Tables

List of Figures

1. Introduction:

The Damanganga River originates from Sahyadri Hills near Valveri village in Nasik district of Maharashtra. The river flows a distance of ~131.30 km from East to West along with its tributaries and passing through the hilly areas of Maharashtra, Gujarat and Union Territories (UT) of Dadra & Nagar Haveli (DNH) and Daman & Diu (DD) before draining into the Arabian Sea. The river basin is situated in the Western Ghats region between 19°51' to 20°28'N latitude and 72°50' to 73°38'E longitude. The Madhuban Dam, constructed on the upstream of the river in Gujarat state is the major water resource. The stretch of the river from Madhuban Dam upto its confluence with the Arabian sea is ~41.56 km. Large, medium and small scale industries are located along the stretch of the river in the industrial cluster of Dadra & Nagar Haveli, Vapi (Gujarat) and Daman. Domestic wastewater from the catchment area is also discharged into the river.

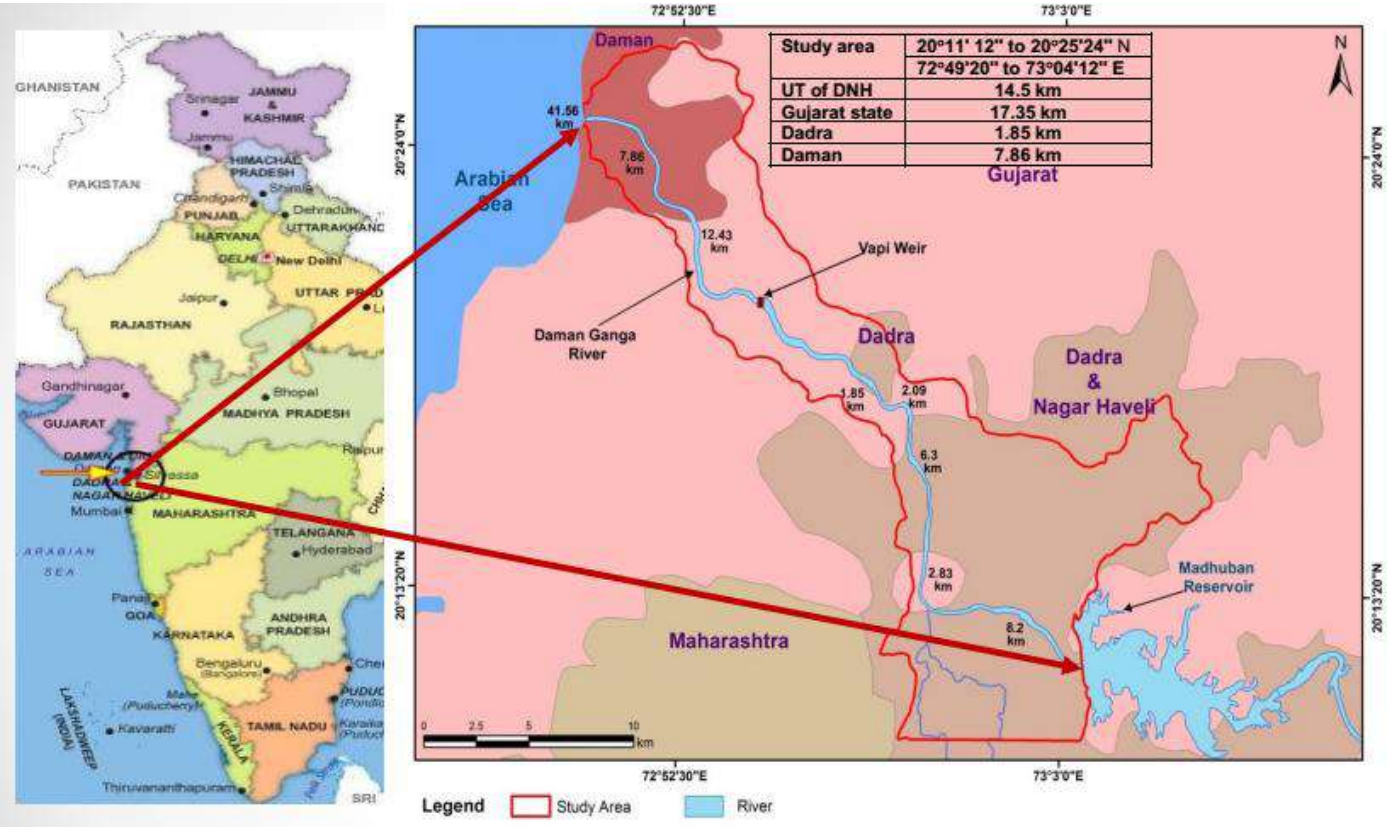


Fig 1: Location of River Damanganga

The level of pollution in the river is of major concern from the point of view of healthy flow of stream and the flora and fauna supported by the river. The major sources of wastewater discharges into Damanganga River through various drains include the disposal of industrial effluents from the industrial units/clusters in DNH, Vapi (Gujarat), and Daman as well as domestic sewage from towns/cities and settlements along the bank of the river. The major industrial effluents discharged into river and its estuary are from the Common Effluent Treatment Plant (CETP) of the GIDC, Vapi and Gujarat Heavy Chemicals Limited (GHCL), Bhilad. The treated effluent from CETP, Vapi is discharged into the river, downstream of the check dam constructed on the river at Vapi. The river water downstream of CETP, Vapi discharge location is highly coloured, an indicator of sever pollution, which persists till the confluence of the river with Arabian sea.

The UT Administration of Daman, Diu and Dadra & Nagar Haveli through CSIR National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur conducted a study on the pollution status of Damanganga River for the river stretch of ~42 km starting from Madhuban Dam to its confluence with Arabian Sea at Daman and prepare a feasibility report for delineating pollution abatement strategies for rejuvenation of the river. This action plan is prepared largely on the base of NEERI report and the monitoring carried out by the PCC subsequently from time to time.

2. Identifying Issues:

The major source of wastewater discharged into River Damanganga is through various drains including the disposal of industrial effluents from the industrial units / clusters in Dadra Nagar Haveli, Gujarat Industrial Development Corporation (GIDC), Vapi and Daman as well as untreated domestic sewage from the towns/ cities and settlements along with the bank of the river.

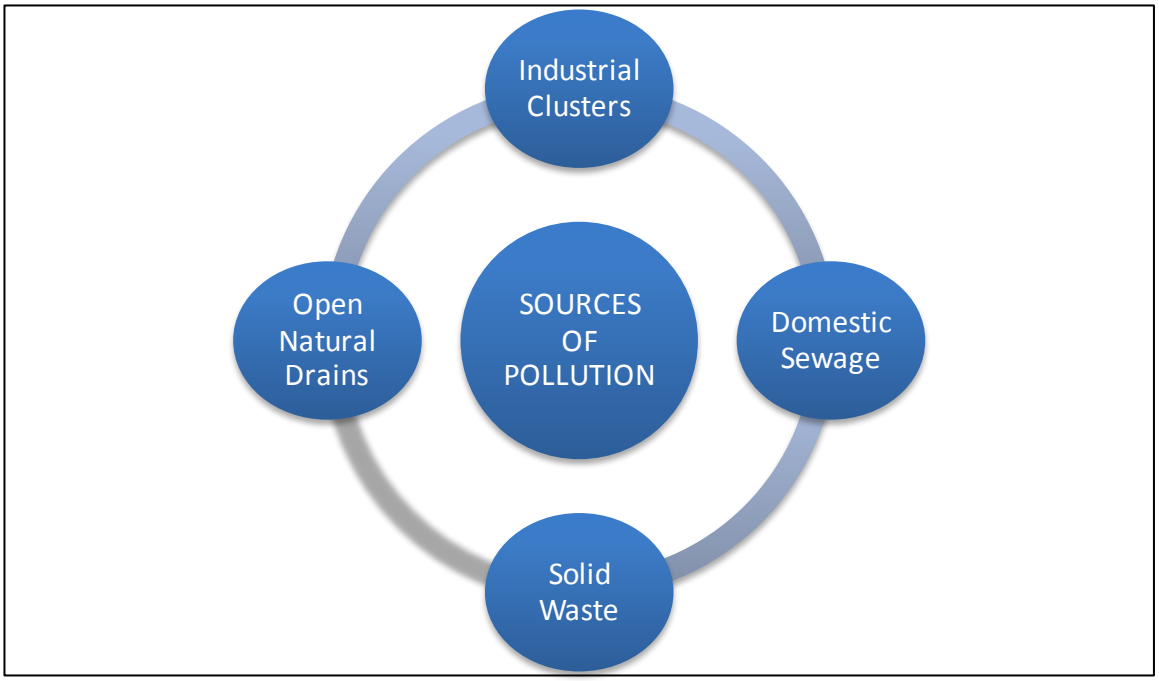


Fig. 2 : Major Sources of Pollution of River Damanganga

The major industrial effluents discharged in to river Damanganga and its estuary are the Common Effluent Treatment Plant (CETP), Vapi, Gujarat; and Gujarat Heavy Chemical Limited (GHCL), Bhilad, Gujarat. There was a discharge of industrial effluent from Khemani Distilleries Pvt. Ltd., Kachigam, Daman, which was discontinued and the pipeline was removed from the river. In addition to this, they have upgraded andinstalled a Zero Liquid Discharge (ZLD) system, hence thereis no discharge from their plant into Damanganga River now.

It is widely observed that the river water downstream of the CETP, Vapi discharge location has a high colour intensity that persists further downstream till the confluence of the river with Arabian Sea. Dumping of solid waste on the bank of river and nearby open natural drains (which ultimately meets the river) is also a major problem.

3. Municipal Sewage Generation and Treatment:

Much of the water quality deterioration is caused by disposal of sewage from the townships of Silvassa (DNH), Vapi (Gujarat), Daman and nearby settlements of the River Damanganga. The domestic wastewater generated from the towns is disposed directly into the river, without any treatment. But, it is of particular importance that in the above mentioned townships, projects on establishment of sewage treatment plants are under process. Once established, they will considerably decrease the prevalence of major pollutants which are presently being dumped into the River untreated.

Table 1: Status of STPs near River Damanganga

Sr. No	District/Town	Total Sewage Generation	Details of Sewage Treatment Plant
1	Dadra Nagar Haveli (DNH)	-	13 MLD near River Damanganga is under construction
2	Vapi, Gujarat (Vapi Nagarpalika)	-	1. Capacity - 14 MLD. Under Construction at Namdha village, will be completed by December, 2019. 2. Capacity - 29 MLD. Under planning stage (Land allotment issue)
3	GIDC Notified Area	-	1. Capacity – 10 MLD 2. Capacity – 05 MLD Both are under planning stage and have land allotment issue.
3	Daman, Daman Municipal Council	7.5 MLD	1. 4.2 MLD at Moti Daman. (Started in January, 2019). 2. 16 MLD at Nani Daman, (Under planning stage).

4 Status of Industrial Wastewater:

No industrial units are permitted to discharge treated or untreated wastewater within or outside their premises. For the compliance of this condition, regular monitoring of wastewater generating industries is carried out. Regular sampling of treated and un-treated wastewater is also carried out to check the adequacy of the installed effluent treatment plant (ETP).

Industries, situated in Daman and Dadra Nagar Haveli are strictly directed to reuse or utilize the wastewater generated within the premises. If any industry fails to comply the directions and consent conditions, strict actions taken on immediate bases.

In spite of this, there are two major industrial discharges present in river Damanganga, 1) Common Effluent Treatment Plant (CETP), Vapi, Gujarat; and 2) Gujarat Heavy Chemical Limited (GHCL), Bhilad, Gujarat.

Table2: Status of industrial wastewater discharged in River Damanganga.

Sr. No.	Location detail	Flow per day (in MLD)
1	Treated effluent discharge from CETP, Vapi, Gujarat	55-60
2	Treated effluent discharge from ETP of GHCL, Vapi, Gujarat	2.5

Fig. 3: Industrial discharge in River Damanganga

Table 3: Quality of industrial Wastewater discharged in River Damanganga.

Sr. No	Year	Location detail	Parameters			
			pH	BOD	COD	FC
1	Aug-18	Treated effluent discharge from CETP, Vapi, Gujarat	7.49	52	290	350
	Sep-18		7.36	131	434	240
	Oct-18		7.24	42	262	220
	Nov-18		7.41	48	282	94
	Dec-18		7.53	32	242	1600
2	Aug-18	Treated effluent discharge from ETP of GHCL, Vapi, Gujsarat	7.5	44	276	540
	Sep-18		7.34	38	183	350
	Oct-18		7.53	12	46	920
	Nov-18		7.42	65	316	220
	Dec-18		7.83	38	152.2	1600

5 Drain Outfalls in River Damanganga:

The towns/ cities and settlements located nearby the river are discharging untreated sewage to the river. There are three major towns located on the bank of River Damanganga, UT of Dadra Nagar Haveli (DNH); Vapi, Gujarat; and UT of Daman.

Based on the reconnaissance survey of the river stretch, 20 drains were identified in River Damanganga along the 41.56 km stretch from Madhuban Dam to its confluence with Arabian sea. Out of these 20 drains, 05 fall in UT of DNH, 07 fall in Gujarat (Vapi), and 08 fall in Daman. Details of drains along with its flow is provided in Table-4.

Fig. 4: Drain from Nani Daman, Near Bus Stand

Fig. 5: Drain near Kabra Industrial Estate

Table 4: Status of drain-out fallsin River Damanganga.

Sr. No	District/ Town	Location number	Location detail	Flow per day(in MLD)
1.	Dadra Nagar Haveli (DNH)	D-01	Drain from Rakholi industrial Estate, Silvassa, DNH	43
2.		D-02	Drain from Masat village, Silvassa, DNH	06
3.		D-03	Drain from near Govt. industrial estate, Masat Ambapadia village, Silvassa, DNH	66
4.		D-04	Drain from Govt. Industrial Estate, Piparia Silvassa, DNH	65
5.		D-05	Drain from Piparia Industrial Estate, Piparia Silvassa, DNH	161
6	Gujarat (Vapi)	D-06	Drain from Lawachha village flowing adjacent to Rameshwari temple, Lawachha	31
7		D-07	Drain from Dadra at Dungra village, Vapi, Gujarat	6
8		D-08	Drain from Borigaon village opp. Dungra village, Gujarat	1
9		D-09	Pipe discharge at Vapi weir, Vapi, Gujarat	
10		D-10	Drain from Nani Sulpad, Khanki Phalia, Vapi, Gujarat	57
11		D-12	Drain from Nahuli village flowing adjacent to industry Neestech Pvt. Ltd, Vapi,	1.12
12		D-13	Drain from Vapi Industrial Area, Vapi, Gujarat	19
13	Daman	D-14	Drain from Shree Ganesh Industrial Estate and Daman Industrial Estate, Daman	
14		D-15	Drain from Kabra Industrial Estate, 50 m u/s of Zari Cause Way, Daman	
15		D-16	Drain from Kachigam village, Daman	
16		D-17	Drain from Nalia Pardi village Daman, Tribute Jharia Ashram School, Daman	Seasonal
17		D-18	Pipe discharge from Khemani Distillery, Daman.	Removed
18		D-19	Drain from Makat Falia village, Daman	Seasonal
19		D-20	Drain from Varkhund village, Daman (Somnath Industrial Estate, Bhenslore Industrial Estate, Ringanwada Industrial Estate)	2.43
20		D-21	Drain from Nani Daman Near bus stand, Daman	
21		D-22	Drain from Moti Daman near Rajiv Gandhi bridge, Daman	

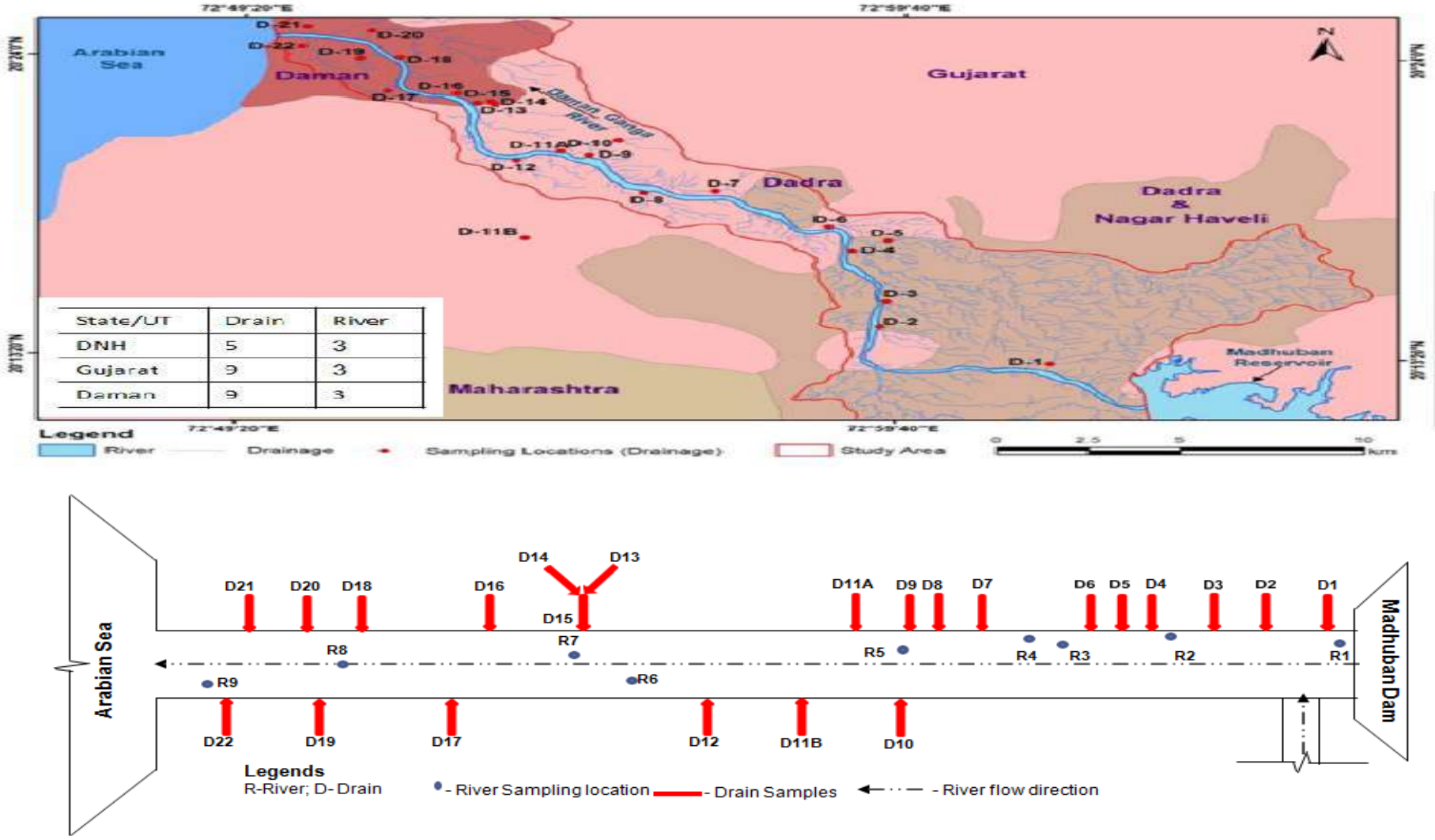


Fig. 6: Location of Drain out-fall in Damanganga River

Table 5: Status of water quality of drains

Sr. No	District / Town	Location number	Location detail	Parameters				Remarks
				pH	BOD	COD	FC	
1.	Dadra Nagar Haveli (DNH)	D-01	Drain from Rakholi industrial Estate, Silvassa, DNH	7.4	<1	<5	120	Low Concentration wastewater Drains
2.		D-02	Drain from Masat village, Silvassa, DNH	7.5	6	31	540	
3.		D-03	Drain from near Govt. industrial estate, Masat Ambapadia village, Silvassa, DNH	7.98	<1	<5	240	
4.		D-04	Drain from Govt. Industrial Estate, Piparia Silvassa, DNH	7.46	18	63	350	
5.		D-05	Drain from Piparia Industrial Estate, Piparia Silvassa, DNH	7.47	<1	<5	140	
6	Gujarat (Vapi)	D-06	Drain from Lawachha village flowing adjacent to Rameshwari temple, Lawachha.	7.46	< 1	<5	350	
7		D-07	Drain from Dadra at Dungra village, Vapi, Gujarat.	7.58	11	45	34	
8		D-08	Drain from Borigaon Village opp. Dungra village, Gujarat.	7.9	<1	<5	240	
9		D-09	Pipe discharge at Vapi weir, Vapi, Gujarat.	6.96	10	42	350	
10		D-10	Drain from Nani Sulpad, Khanki Phalia, Vapi, Gujarat	7.28	18	48	280	
11		D-12	Drain from Nahuli Village flowing adjacent to industry Neestech Pvt. Ltd, Vapi,	7.39	<1	<5	49	
12		D-13	Drain from Vapi Industrial Area, Vapi, Gujarat.	7.41	6	23	110	
13	Daman	D-14	Drain from Shree Ganesh Industrial Estate and Daman Industrial Estate, Daman.	7.47	<1	<5	430	
14		D-15	Drain from Kabra Industrial Estate, 50 m u/s of Zari Cause Way, Daman.	6.86	190	622	1600	High Concentration wastewater drain
15		D-16	Drain from Kachigam Village, Daman.	7.38	5	22	350	Low Concentration wastewater Drains

16		D-17	Drain from Nalia Pardi village Daman, Tribute Jharia Ashram School, Daman.	-	-	-	-	Seasonal drain
17		D-18	Pipe discharge from Khemani Distillery, Daman.	-	-	-	-	Removed
18		D-19	Drain from Makat Falia Village, Daman.	-	-	-	-	Seasonal drain
19		D-20	Drain from Varkhund village, Daman (Somnath Industrial Estate, Bhenslore Industrial Estate, Ringanwada Industrial Estate).	7.12	14	62	170	Medium Strength wastewater drain
20		D-21	Drain from Nani Daman Near bus stand, Daman.	7.13	58	199	79	
21		D-22	Drain from Moti Daman near Rajiv Gandhi bridge, Daman.	6.87	22	80	170	

Table 6: All the Twenty-three drains have been categorized into low, medium & high strength wastewater based on their characteristics:

Drain Discharge	Strength of Effluent/Wastewater
D-01 to D-10, D-12, D-13, D-14 & D-16	Low strength wastewater
D-20, D-21 & D-22	Medium strength wastewater
D-17 & D-19	Seasonal Drains
D-18	Removed
D-11A, D-11B and D-15	High strength wastewater

6 Prioritization of Polluted Stretch based on Present River Water Quality:

To access the water quality of river and impact of various drains on River Damanganga, samples were collected on monthly bases.

Under the **National Water Quality Program (NWMP)**, water quality of River Damanganga was assessed at 09 different locations from Madhuban Dam to its confluence with the Arabian sea at Moti Daman Jetty. Based upon the assessed river water quality it had been identified that the polluted stretch of Damanganga River begins after Vapi Weir, Vapi, Gujarat till the river confluence with the Arabian sea at Moti Daman Jetty, Daman.

Based upon the assessed water quality of Damanganga River during the period of 2017 to 2018, river stretch after Vapi Weir, Vapi, Gujarat had been categorized as **Priority - III** (length - 9.06 km) polluted stretch till discharge of distillery (Daman) in Damanganga River and afterwards as **Priority – II** (length - 4.25 km) polluted stretch. Priority wise categorization of polluted stretch of Damanganga River had been described through Table No. 7, 8, 9 & 10 and Figure no. 07, based upon the assessed water quality from the period of 2017 to 2018.

Damanganga River receives 07 drains after Vapi Weir (Gujarat) till discharge point of Distillery (at Daman) which cause the deterioration of the river water quality to Priority - III polluted stretch (however, discharge line of the distillery was completely removed and achieved ZLD) i.e. D-11A (Treated effluent discharge from CETP, Vapi, Gujarat), D-11B (Treated effluent discharge from ETP of GHCL, Vapi, Gujarat), D-12 (Drain from Nahuli village flowing adjacent to industry Neestech Pvt. Ltd, Vapi), D-13 (Drain from Vapi Industrial Area, Vapi, Gujarat), D-14 (Drain from Shree Ganesh Industrial Estate and Daman Industrial Estate, Daman), D-15 (Drain from Kabra Industrial Estate, 50 m u/s of Zari Cause Way, Daman) & D-16 (Drain from Kachigam village, Daman).

Further in downstream, Damanganga River receives another 03 domestic wastewater drains after discharge point of Distillery (at Daman) till Moti-Daman Jetty (Daman) which causes further deterioration of the river water quality to Priority - II polluted stretch i.e. D-20 (Drain from Varkund village, Daman), D-21 (Drain from Nani Daman Near bus stand, Daman) and D-22 (Drain from Moti Daman near Rajiv Gandhi bridge, Daman).

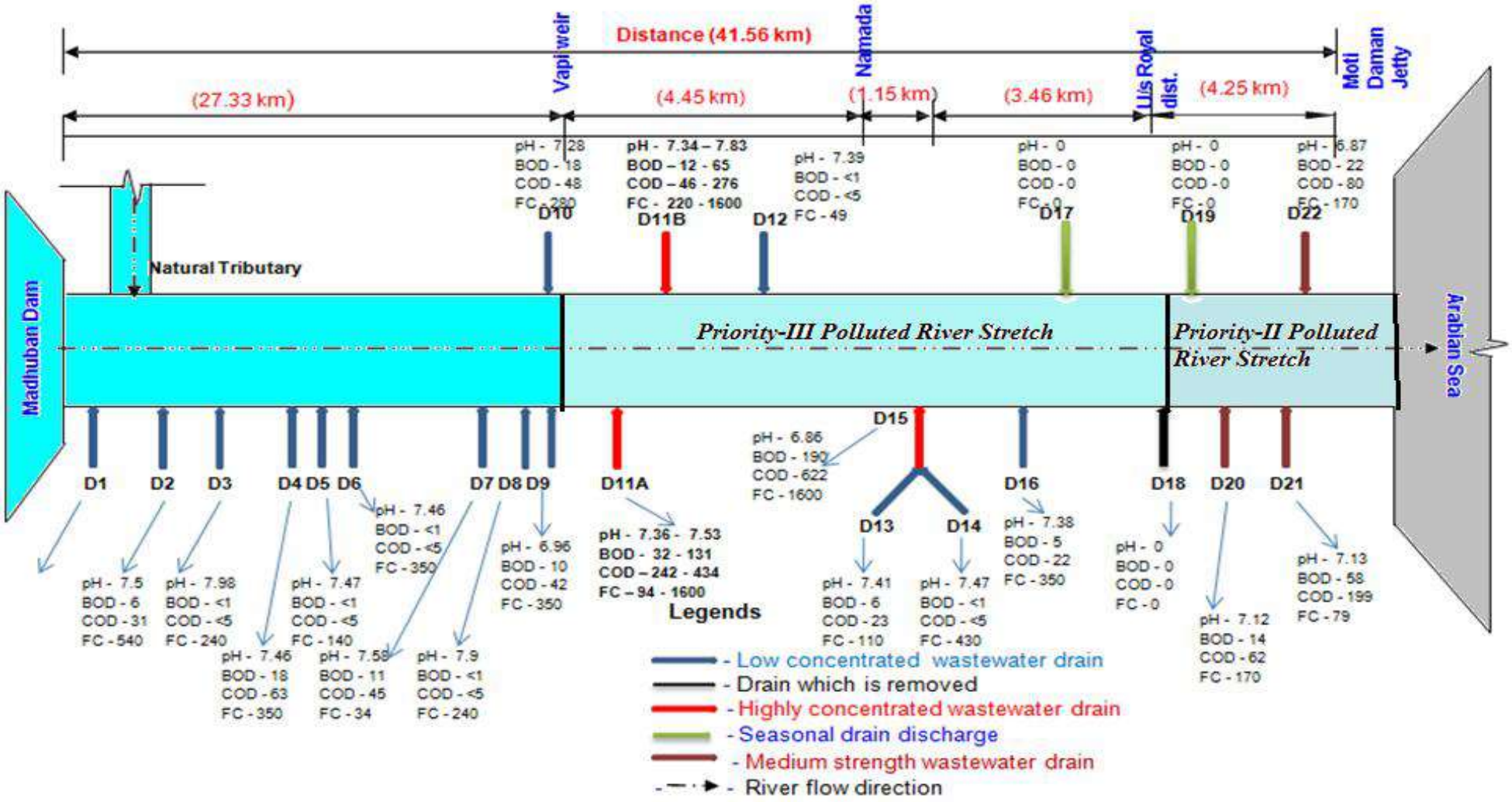
Table 7: Priority wise categorization of polluted stretch of Damanganga River based upon the water quality during the year 2017														
Sampling Location	**Parameter**	**1/17**	**2/17**	**3/17**	**4/17**	**5/17**	**6/17**	**7/17**	**8/17**	**9/17**	**10/17**	**11/17**	**12/17**	**Priority**
Madhuban Dam (DNH)	**COD**	10	5	5	5	20	5	5	5	5	12	5	5	Does not fall under polluted stretch criteria
	BOD	1	1	1	1	5	1	1	1	1	3	1	1	
	DO	6	6.7	6.4	6.6	6.3	6.4	6.95	6.8	6.4	5.6	7.7	5.5	
	FC	23	17	150	17	17	12	130	10	7.8	10	17	350	
Naroli Bridge (DNH)	**COD**	5	5	5	5	10	5	5	5	5	5	5	5	Does not fall under polluted stretch criteria
	BOD	1	1	1	1	1	1	1	1	1	1	1	1	
	DO	5.8	6.6	5.6	5.8	7.25	6	6.2	6.4	5.9	5.6	8	5.6	
	FC	170	94	240	100	1600	210	17	1600	17	1.8	94	76	
Lawacha Temple (Gujarat)	**COD**	18	5	5	16	10	8	5	5	5	14	28	5.4	Does not fall under polluted stretch criteria
	BOD	4	1	1	3	1	1	1	1	1	3	5	**8**	
	DO	5.2	6.9	6.4	5.8	5.7	6.2	6.4	6.5	5.8	5.8	6	1	
	FC	170	49	540	50	1600	540	49	49	14	170	140	240	
Surat Beverages (DNH)	**COD**	5	5	5	5	10	5	5	5	5	5	9	5	Does not fall under polluted stretch criteria
	BOD	1	1	1	1	1	1	1	1	1	1	1	1	
	DO	5.8	6.6	6.2	5.8	4.5	5.6	5.9	5.75	6.2	5.6	5.6	6.1	
	FC	110	430	240	430	920	32	50	130	12	120	350	920	
Vapi Weir (Gujarat)	**COD**	14	5	5	16	20	14	5	5	10	24	19	6	Does not fall under polluted stretch criteria
	BOD	4	1	1	4	6	3	1	1	2	**8**	1	1	
	DO	6.2	6.8	6.2	6.4	6.7	6.6	7.2	7.1	6.8	6.4	4.6	5.5	
	FC	540	46	350	540	920	40	120	50	31	63	79	240	

Table 8: Priority wise categorization of polluted stretch of Damanganga River based upon the water quality during the year 2018														
Sampling Location	**Parameter**	**1/18**	**2/18**	**3/18**	**4/18**	**5/18**	**6/18**	**7/18**	**8/18**	**9/18**	**10/18**	**11/18**	**12/18**	**Priority**
Madhuban Dam (DNH)	**COD**	5	5	5	9	5	5	5	5	8	5	10	<2	Does not fall under polluted stretch criteria
	BOD	1	2	1	2	1	1	1	1	3	1	2	<1	
	DO	6.1	5.8	5.2	6.3	4.5	6.4	5.9	4.9	5.6	5.8	5.1	6.7	
	FC	94	84	33	130	170	26	33	70	79	33	79	2	
Naroli Bridge (DNH)	**COD**	5	5	10	5	5	5	5	5	10	5	14	8.1	Does not fall under polluted stretch criteria
	BOD	1	1	3	1	1	1	1	1	1	1	3	1.3	
	DO	7	6.2	5.4	6	5.1	6.1	6.2	5.6	5.6	6.4	5.7	6	
	FC	120	46	49	140	140	170	46	49	920	1600	110	27	
Lawacha Temple (Gujarat)	**COD**	18	12	9	5	5	5	5	5	5	10	12	7	Does not fall under polluted stretch criteria
	BOD	6	5	2	1	1	1	1	1	1	3	4	1.2	
	DO	6.1	6.2	4.8	5.9	5.2	6.4	6.2	5.7	5.9	5.4	6.1	6.7	
	FC	120	33	79	350	280	70	34	64	41	26	280	40	
Surat Beverages (DNH)	**COD**	5	10	8	12	5	18	5	11	5	5	5	8	Does not fall under polluted stretch criteria
	BOD	1	3	2	5	1	4	1	4	1	1	1	1.1	
	DO	5.2	6.3	5.4	5.8	7	5.5	6.5	5.1	5.8	5.4	6	6.3	
	FC	220	120	94	79	220	140	70	84	170	350	34	60	
Vapi Weir (Gujarat)	**COD**	8	7	5	18	5	6	5	10	16	20	21	<2	Does not fall under polluted stretch criteria
	BOD	2	2	1	4	1	2	1	3	5	6	3	<1	
	DO	6	5.8	5.4	5.9	5.7	6.1	5.5	6.2	5.6	5.9	4.9	6.5	
	FC	180	70	170	540	220	58	64	34	920	170	140	50	

Table 9: Priority wise categorization of polluted stretch of Damanganga River based upon the water quality during the year 2017														
Sampling Location	**Parameter**	**1/17**	**2/17**	**3/17**	**4/17**	**5/17**	**6/17**	**7/17**	**8/17**	**9/17**	**10/17**	**11/17**	**12/17**	**Priority**
Namdha Village (Gujarat)	**COD**	48	27	31	24	13	15	5	15	5	36	97	80	**Priority - III**
	BOD	**12**	**10**	**10**	**8**	1	4	1	1	1	**10**	**25**	**19**	
	DO	4.4	6.8	6.2	7.2	8.6	6.6	5.55	5.7	6.2	5.9	3.2	5.6	
	FC	48	23	130	250	240	21	23	33	33	22	120	**540**	
At Zari Causeway (Daman)	**COD**	98	59	65	62	53	44	9	45	18	72	232	53	**Priority - III**
	BOD	**24**	**17**	**18**	**18**	**13**	**12**	1	**8**	5	**28**	**60**	**12**	
	DO	5.8	4.8	4.2	5.2	4.2	5.6	6.6	6.4	5.8	6.2	4.9	6	
	FC	94	79	**1600**	**720**	**920**	**920**	49	440	210	13	130	240	
At D/s discharge of Distillery (Daman)	**COD**	18	16	28	-	53	44	-	64	58	28	102	26	**Priority - III**
	BOD	5	1	**10**	-	**15**	**12**	-	**17**	**20**	**8**	**33**	5	
	DO	5.2	5.9	6.2	-	5.35	5.8	-	5.95	5.8	5.6	5.1	3.6	
	FC	280	170	240	-	540	130	-	240	220	34	170	240	
Moti Daman Jetty (Daman)	**COD**	32	16	20	46	80	56	24	28	36	42	206	160	**Priority - II**
	BOD	**10**	4	1	**12**	**22**	**16**	**8**	4	**10**	**15**	**58**	**46**	
	DO	5.2	5.8	5.9	5.2	5.4	6.2	6.8	6.75	5.4	5.4	4.4	5.6	
	FC	26	17	170	440	**510**	240	**540**	240	17	12	**920**	240	

Table 10: Priority wise categorization of polluted stretch of Damanganga River based upon the water quality during the year 2018														
Location	**Parameter**	**1/18**	**2/18**	**3/18**	**4/18**	**5/18**	**6/18**	**7/18**	**8/18**	**9/18**	**10/18**	**11/18**	**12/18**	**Priority**
Namdha Village (Gujarat)	**COD**	64	48	53	10	20	5	28	5	28	46	70	28	**Priority - III**
	BOD	**14**	**12**	**15**	1	1	1	6	1	**8**	**19**	**24**	2.7	
	DO	4.9	5.6	6	6.6	5.8	6.4	5.6	5.95	5.6	6.1	5.5	4.5	
	FC	350	140	**920**	240	70	220	46	120	79	**920**	220	1600	
At Zari Causeway (Daman)	**COD**	42	68	74	80	70	16	12	11	28	50	38	32	**Priority - III**
	BOD	**18**	**20**	**28**	**19.1**	**18.5**	4	3	2	**9**	**14**	**8**	2.9	
	DO	5.2	6	5.2	5.9	6.6	6.4	6.6	6.1	6.4	5.8	6.1	3.5	
	FC	94	70	49	70	350	84	46	170	26	170	90	1600	
At D/s discharge of Distillery (Daman)	**COD**	31	44	-	25	29	8	-	-	44	-	-	19	**Priority - III**
	BOD	**10**	**14**	-	**6**	**8**	3	-	-	**12**	-	-	1.6	
	DO	4.4	5.6	-	5.9	6.8	6.6	-	-	6.2	-	-	5.9	
	FC	220	70	-	33	350	130	-	-	240	-	-	26	
Moti Daman Jetty (Daman)	**COD**	120	156	378	76	13	22.6	66	202	53	80	62	21	**Priority - II**
	BOD	**34**	**48**	**108**	**20**	2.01	6	**14**	**64**	**10**	**22**	**18**	1.8	
	DO	6.1	5.2	6.4	5.9	7.2	6.2	5.8	5.7	5.4	6.1	5.8	6.1	
	FC	280	220	140	70	10	46	49	220	130	94	41	50	

Fig. 7: Priority wise categorization of polluted stretch of Damanganga River



This is the most important source of information that is being considered while prioritising the areas where action has to be taken first for rejuvenation of the polluted stretch of Damanganga River.

Table 11: Drains contributing in Priority-III and Priority – II polluted stretch of Damanganga River

Sr. No	District/ Town	Location Code	Location detail	Wastewater Flow in MLD	Drains in Polluted stretch
1	Gujarat (Vapi)	D-11A	Treated effluent discharge from CETP, Vapi, Gujarat	55 – 60	Priority – III
2		D-11B	Treated effluent discharge from ETP of GHCL, Vapi, Gujarat	2.5	
3		D-12	Drain from Nahuli Village flowing adjacent to industry Neestech Pvt. Ltd, Vapi,	1.12	
4		D-13	Drain from Vapi Industrial Area, Vapi, Gujarat	19	
5	Daman	D-14	Drain from Shree Ganesh Industrial Estate and Daman Industrial Estate, Daman		
6		D-15	Drain from Kabra Industrial Estate, 50 m u/s of Zari Cause Way, Daman		
7		D-16	Drain from Kachigam village, Daman		
8		D-17	Drain from Nalia Pardi village Daman, Tribute Jharia Ashram School, Daman	Seasonal	
		D-18	Pipe discharge from Khemani Distillery, Daman.	Removed	Priority – II
9		D-19	Drain from Makat Falia Village, Daman	Seasonal	
10		D-20	Drain from Varkhund village, Daman (Somnath Industrial Estate, Bhenslore Industrial Estate, Ringanwada Industrial Estate)	2.43	
11		D-21	Drain from Nani Daman Near bus stand, Daman.		
12		D-22	Drain from Moti Daman near Rajiv Gandhi bridge, Daman.		

7 Plan of Action:

a. Strategies for pollution abatement in River Damanganga:

The aim is to restore the natural flow of River Damanganga by multiple interventions. Thus, ecological river restoration will be the foremost aspect of Damanganga River management. Restoration of any degraded river can be done by reconstructing the structure and function of the pre-disturbance of the ecosystem. It is also to note that river restoration will only be sustainable if it is undertaken within a process-driven and strategic framework with inputs from a wide range of specialists. Such an approach needs to be reviewed constantly.

For practical purposes, post and current human intervention should be taken into account to achieve a more natural sustainable river habitat/rich status. Any planning and design should interface between the urban area and the course of the river to ensure that it can be protected and restored as a natural resource.

We propose five criteria for admeasuring the success with which the entire plan of action, with special emphasis on an ecological perspective, is delivered. First, the design of an ecological river restoration project is based on a specified guiding image of a more dynamic, healthy river that could exist at the site. Secondly, the river's ecological condition must be **measurably** improved. Thirdly, the river system must be more self-sustaining and resilient to external perturbations so that only minimal follow-up maintenance is needed. Fourthly, during the action phase, no lasting harm should be inflicted on the ecosystem. Fifthly, both pre- and post-assessment must be completed and data made publicly available.

The CPCB has carried out water quality assessment activities, on long term basis, has provided information on the segment of rivers that are not meeting water quality criteria and have been identified as polluted. Monitoring locations not meeting the water quality criteria have been identified as polluted and sources of the pollution are identified for intervention to contain the discharges.

As per direction from CPCB, river water is considered to be fit for bathing when it meets the criteria of having Bio-chemical Oxygen Demand (BOD) - 3.0 mg/l or less, Dissolved Oxygen (DO) – 5 mg/l or more, and Faecal coliform bacteria – 500 MPN/100 ml or less. In this action plan, the ultimate aim will be to reach to this level of BOD in all stretches of river with careful interventions within a span of two years.

Fig. 8: (Source: **Standards for ecologically successful river restoration, British Ecological Society**)

Keeping the above in mind, the strategies for developing management plan for Damanganga River are:

- Implementing specific measures for the progressive reduction of discharge and solid waste disposal into the river and the cessation or phasing-out of discharges and solid waste disposal into the river.
- Preventing further deterioration, protecting and enhancing the status of aquatic ecosystems by improving water quality of the river.
- Promoting the concept of “sustainable water” based on long-term protection of available water resources.
- Integration of urban growth with existing natural systems in order to create a sustainable and holistic development of the adjoining areas.

b. Strategies for Priority – III Polluted River Stretch :

- As shown in Fig. 7, Priority – III stretch (length 9.06 km) covers 07 drains i.e. D-11A, D-11B, D-12, D-13, D-14, D-15 & D-16 from which 04 drains (D-11A, D-11B, D-12, D-13) fall in Vapi, Gujarat state and 03 drains (D-14, D-15, D-16) fall in Daman district.
- Action plan and strategy for the 04 drains from Gujarat will be worked out by GPCB and Gujarat Government.
- Remaining 03 drains in Daman District will be monitored on monthly basis.
- Wastewater generating industries from these industrial areas have already installed effluent treatment plant.
- Major industrial areas i.e. Kabra Industrial area, Shree Ganesh Industrial Area, Premier Industrial Estate, will be monitored on monthly basis.

Table 12: Action Plan for rejuvenation of the Priority – III polluted stretch of Damanganga River

Sr. No	District/ Town	Location Code	Location detail	Action Plan	Financial Closure Budget	Targeted Time Period	Implementing Agency
1	Daman	D-14	Drain from Shree Ganesh Industrial Estate and Daman Industrial Estate, Daman.	Sewage networking project is under process. STP of capacity 54 MLD (approx) will be planned.	To be planned	June, 2020	District Panchayat, Daman
2		D-15	Drain from Kabra Industrial Estate, 50 m u/s of Zari Cause Way, Daman.				
3		D-16	Drain from Kachigam village, Daman.				
4		D-17	Drain from Nalia Pardi village Daman, Tribute Jharia Ashram School, Daman.	Seasonal	-	-	-

**The Drains D-11A, D-11B, D-12, D-13 are fall in Gujarat State. Action plan for the same will be prepared by Gujarat State.

c. Strategies for Priority – II Polluted River Stretch :

- As shown in Fig. 7, Priority – II stretch (length 4.25 km) covers 03 drains i.e. D-20, D-21, D-22.
- For the drains, D-21 and D-22, sewage treatment plant of capacity 4.21 MLD had been installed and operational at Moti Daman.
- To cover the gap in sewage treatment, another sewage treatment plant of capacity 16 MLD in proposed at Nani Daman area, which will cover the entire Nani Daman area and nearby rural area.
- The drain, D-20 carries domestic wastewater as well as industrial wastewater from the Somnath, Ringanwada, and Dabhel area.
- The industries located in these area are not allowed to discharge treated or un-treated wastewater outside their industrial premises and strictly directed to utilise generated wastewater within the premises only. Regular checks and inspections are carried out to ensure the same. These will be intensified further.
- **Inventorization** will be taken on priority basis in these areas to make sure that there is no discharge of treated or untreated wastewater to nearby drainage line.

Table 13: Action Plan for rejuvenation of the Priority – II polluted stretch of Damanganga River

Sr. No	District / Town	Location Code	Location detail	Action Plan	Financial Closure Budget	Targeted Time Period	Implementing Agency
1	Daman	D-18	Pipe discharge from Khemani Distillery, Daman.	Removed	-	-	-
2		D-19	Drain from Makat Falia Village, Daman.	Seasonal	-	-	-
3		D-20	Drain from Varkhund village, Daman (Somnath Industrial Estate, Bhenslore Industrial Estate, Ringanwada Industrial Estate)	Sewage networking project is under process. STP of capacity 54 MLD (approx) will be planned.	To be planned	June, 2020	District Panchayat, Daman
4		D-21	Drain from Nani Daman Near bus stand, Daman.	Proposed STP of 16 MLD capacity. Sewage networking project in Nani	For now, total budget allotted for STP and	Sewage networking project is scheduled to	Daman Municipal Council

				Daman area is undergoing.	Sewage Networking project is around 30 Crore.	be completed by 31/12/2020 and construction of STP will be completed 31/12/2020.	
5		D-22	Drain from Moti Daman near Rajiv Gandhi bridge, Daman.	The STP of 4.21 MLD capacity has already been constructed at Moti Daman and it will take care all the sewerage being generated in the nearby areas of Nani Daman and Moti Daman.			Daman Municipal Council

8 Implementation:

a. Interception of sewage and industrial effluent discharges:

For abatement of pollution in the River Damanganga, inflow of untreated wastewater into the river is proposed to be intercepted. Under any circumstances the raw wastewater (both domestic and industrial) will not be allowed to get discharged into the river.

To accomplish this, the drains having the worst water quality parameters are identified and accordingly a priority list has been made so as to target them first. (Refer to Table 5) It is seen that drain D15 (Drain from Kabra Industrial Estate, 50 m u/s of Zari Cause Way, Daman) is having the worst quality parameters and hence, industries and establishment all along this drain will be of primary focus. The Action Plan as specified earlier will be strictly adhered to monitored and properly documented so as to ensure maximum compliance.

b. Establishment of sewage network including rehabilitation of old sewerage system:

The status of sewerage system can also lead to pollution when the river watershed areas have inadequate or not properly maintained or no sewerage system. Therefore, the existing sewerage system facilities have to be improved to reduce the risk of sewage seepage into the river, especially during rainy season. Provision

should be made to capture entire sewage generated within the watershed areas. For effective interception of wastewater and to bring untreated sewage / effluent to the treatment plant, it is imperative that a **comprehensive sewerage network plan** including augmentation of existing sewerage systems be delineated so that all discharges in the catchment area be tapped and conveyed to the proposed wastewater treatment facilities. Taking advantage of the natural slope the wastewater conveyance system should preferably be based on gravity flow, whenever possible. Detailed status of sewage networking system connected with wastewater treatment plants are given under point c below.

c. Establishment of new wastewater treatment plants including upgradation of existing facilities:

The gap between wastewater generation and its proper management has to be reduced by establishing new wastewater treatment plants and adopting appropriate treatment technology in the proposed treatment plants. This will facilitate the removal of organics, inorganics, solids, nutrients, pathogens and other toxic pollutants including heavy metals from the wastewater/effluent. Treated water can either be used for horticulture or in industrial process or for any other purposes to achieve the clean water goal.

The Daman Municipal Council, Daman has proposed Sewerage Networking and Sewerage Treatment Plant for Moti Daman & Nani Daman. The households of Moti Daman are 4500 and the quantity of sewerage generated is around 1.5 MLD. To process all the sewerages (liquid waste), all the households in Moti Daman have been joined to a Sewerage Networking System and the length of the sewerage networking is 18 KM for the Moti Daman, Daman Municipal Council area. The work of Sewerage Networking in Moti Daman has already been completed. Apart from this, a Sewerage Treatment Plant of 4.21 MLD capacity has been constructed for processing of liquid waste and is operational.

The households of Nani Daman are 15500 and the quantity of sewerage generated around 06 MLD. On similar lines, to process all the sewerages (liquid waste) in this area as well, a **Sewerage Networking System based on vacuum system** is being started in Nani Daman area as a pilot project in two wards, which are adjacent to

Damanganga River. Ward no. 3 & 15 have been taken in first phase of the project and the Sewerage Networking length is 8 KM and the sewer line has connected to STP Moti Daman. Rest of the Nani Daman Municipal area will also be covered subsequently and the sewerage system for Nani Daman area is scheduled to be completed by March 2020. Liquid waste processing system a stake of all sewerage which is controlling pollution of Damanganga River.

d. Management of Industrial Effluent:

Industrial pollution can be controlled through proper planning of industrial areas based on environmental impact assessment. The large scale industries should treat their effluent within the industrial premises aiming at zero liquid discharge. The small and medium scale industrial units shall provide individual effluent treatment facility.

However, tapping and monitoring of these units is a challenge that will be taken up as a part of this Action Plan. Inventorisation and management of waste generated in these units will be taken up on priority basis to make sure that they are connected to the sewerage network system. In addition to this, stricter penalties for violations will be charged and especially those industries lying in the worst polluted zone will be held accountable in case of any irregularity found at their end.

e. Treatment and tapping of discharges:

It was observed that the domestic sewage, agricultural & storm water runoffs and partially treated or untreated industrial effluent were directly discharged into the river through different open drain discharges. These drain discharges imperil the river water. Details of various drain out-falls in River Damanganga are mentioned in Table 4.

This is the most challenging activity as it requires a multi-pronged approach involving active participation of communities, industries as well as administrative stakeholders. Awareness programmes are already going on in densely populated *chawls* and residential areas for reducing dumping of waste in drains. Open drains in these areas which are susceptible to any kind of solid waste have now been covered and are discharged only into notified nalas or septic tanks. Similarly, NGOs are teaming

up with PCC to raise awareness about plastic and e-waste and its collection. These efforts will help reduce non-biodegradable and toxic wastes in the river.

With respect to storm water, there are no specific guidelines or manual provided by CPCB. But, for the optimization of the performance of wastewater treatment plants it is required to construct a separate line for the storm water run-off and domestic/ municipal wastewater line, which meets to its treatment system without access load. It will help to eliminate sewer over flow which in turn helps to prevent pollution specifically in a heavy rain and flood plain zones. Much work is needed to be done in this regard but this has to be parallel with the development of STPs. This direction was well taken by implementing agencies and necessary storm water drains have been proposed in annual budgets. However, complete coverage will take another 2 years.

Collaboration meeting of implementing agencies namely, District Panchayat and Daman Municipal Council with the Pollution Control Committee will also help to achieve this objective. On similar lines, co-ordination meetings between implementing agencies in Gujarat, Dadra & Nagar Haveli and Daman & Diu with regional committee of PCC will also help.

f. Ban on deleterious anthropogenic activities and disposal of municipal waste or solid waste dumping into the river or on the bank:

- Washing of clothes, utensils, vehicles and bathing by the nearby communities in the River Damanganga, these activities have to be stopped immediately because it contributes inorganic, organics, detergents and biological contaminants to the river water. Presence of detergent causes significant foaming at turbulence site which may hamper the oxygen diffusion rate and also affect various aquatic biological processes.
- Disposal of garbage, semi-solid and solid wastes into river leads to significant depletion of dissolved oxygen and affects biotic community in the river. Therefore, disposal of such waste into river and its tributaries including drain discharges should be restricted. This waste must be scientifically treated and disposed off to secured landfill.

- Awareness drives have been carried out extensively in densely populated areas along the river. It has also covered proper disposal of garbage and sewage. It is being monitored proactively with the help of citizens initiatives.

Time-Based Activity Chart and Action Points as Suggested by the CPCB for Damanganga River Action Plan		
Sl. No.	**Activity**	**Status**
1	Mapping of every municipal sewer and every natural drain meeting to the River Damanganga.	On-going. It will take one week to complete the mapping.
2	Strengthening of inspection and monitoring of wastewater generating industrial units.	Completed. Action taken against 35 units (Approx.) including closure direction.
3	Industries will not be allowed to discharge treated effluent as well as domestic wastewater outside their own premises.	Clear directions have been issued to all the industries. However, zero discharge will take some time as many small unit clusters are present which need sewerage networking for domestic wastewater.
4	Strict enforcement with respect to industrial effluent discharge norms / All industrial units should be asked to achieve ZLD status and no industrial wastewater partial/	All the trade effluent generating industries in the UT of Daman and Dadra & Nagar Haveli shall be directed to achieve Zero Liquid Discharge or to install mechanism for reutilizing the treated effluent in process/ gardening/ flushing based upon the concentration of effluent, manufacturing process, product, developed green belt area in the industrial premises and location of the industry with reference

	fully treated be allowed to discharge in the River.	to the general effluent standards.
5	Adoption of good irrigation practices /utilization of treated sewage to minimize abstraction of groundwater or use of surface water:	**Daman:** The total No. of households in Moti Daman and Nani Daman are 4500 and 15500 respectively. The quantum of sewage generated in Moti Daman is about 1.5 MLD. The quantum of sewage generated in Nani Daman is about 06 MLD. The Sewage Treatment Plant (STP) with 4.21 MLD capacity has already been constructed at Moti Daman and is operational since February, 2019. Rest of the Nani Daman Municipal area will also be covered subsequently and the sewerage system for Nani Daman area is scheduled to be completed by December 2020 with a separate STP of 16 MLD capacity at Nani Daman. Action Plan for the use of treated wastewater from STP by Daman Municipal Council has already been prepared and shared with the CPCB. **Dadra Nagar Haveli:** The Silvassa Municipal Council, Dadra Nagar Haveli has proposed underground Sewerage Networking and Sewage Treatment Plant for Silvassa-Amli Town in two phases. Phase-I covers the core area of the Silvassa. All the households are joined to a Sewerage Networking System and the length of the sewerage networking is 29.51 KM. 85% of the work of Sewerage Networking in phase – I has already been completed. Sewage Treatment Plant (STP) with a capacity of 13 MLD has already been constructed for processing of liquid waste.

		Survey for the quantity of sewage generation (liquid waste) from the existing household is not completed yet. Phase-II covers the remaining areas, which are on the periphery of the core area. The length of the sewerage networking is about 30.67 KM. STP with a capacity of 11 MLD will be constructed near the existing STP of capacity 13 MLD. Action Plan for the use of treated waste water from STP by Silvassa Municipal Council has already been prepared and shared with the CPCB.
6	Properly channelizing all the wastewater generated from residential settlements to its treatment facility.	Sewage system in being laid down. Will take one year to be fully integrated.
7	Stopping dumping of solid waste nearby river bank and drainage line.	Awareness Programmes and community mobilisation is being carried out. The intensity will have to be increased. The District Panchayat and Daman Municipal Council are the nodal agencies for carrying out these activities on a regular basis.
8	Flood Plain Zone protection and its management.	Forest department had constructed 29 check dams in the catchment area of Damanganga River for flood plain zone protection. Detailed status of these Check dams will be collected from the Forest Department, DNH.
9	Rainwater harvesting /ground water recharge aspects.	All the upcoming construction and industrial projects shall be issued a strict guideline/instruction for providing a suitable rain water harvesting system to reduce dependency over ground water resource or to recharge the ground water table.
10	Maintaining E-flows and Watershed Management	Minimum environmental flow (e-flow) for the river that has to be maintained at various locations. Uninterrupted flow of water in any river is important

		to keep it clean through its natural ecological functions and processes. Any dam or structure meant for diversion of river flows for the purpose of irrigation 10 %, hydro-power and domestic or industrial use will have to maintain the minimum E-flow. Regular cleaning of the various drains joining the river shall be done at a fixed interval, for this all the local bodies shall be directed to carry out regular cleaning of all the drains in their respective areas.
11	Setting up of bio diversity parks including removal of encroachment, plantation on both sides of the river.	Following bio diversity parks had been setup in the Damanganga River catchment area: 1. Nakshtra Van 2. City Park 3. Butterfly Garden Direction shall be issued to all the local bodies for removal of encroachment from the river basin area. All necessary initiatives shall be taken by the local bodies and forest department to increase the plantation on both side of the river by creating awareness programs.

Action plan of Municipal Solid Waste Management

Sr. No.	Activity	Status	
		Daman	**Dadra & Nagar Haveli**
1.	Notify buffer zone for the solid waste processing and disposal facilities of more than five tons per day in consultation with the PCC.	31th October, 2019	31st May, 2019
2.	Clearing existing dumps/landfills sites.	30th December, 2019	31st December, 2020
3.	Door to Door Collection.	100% implemented	31st March,2019
4.	Source Segregation.	30st June, 2019	31st March,2019
5.	Processing of waste.	100% processing will be achieved till July, 2019	100% processing will be achieved till March 2019
6.	Computerization of waste collection process.	GPS already installed in vehicles, Vehicles are compartmentalized	31st May, 2019
7.	Develop Scientific Landfill Site.	30th October, 2019	31st December, 2020
8.	Penalty provisions.	Implemented	Implemented

-- The End --