

**National Mission for Clean Ganga**  
**Submission of Monthly Progress Report in the NGT Matter OA No. 673 of**  
**2018 for the month of May, 2021**  
**(in compliance to NGT order dated 24.09.2020)**

**For the UT of Dadra Nagar Haveli (DNH) and Daman & Diu**

**Overall status of the State:**

|             |  |  |
|-------------|--|--|
| <b>I.</b>   | <b>Total Population</b>                                  | <p>Daman Population :</p> <ul style="list-style-type: none"> <li>- Urban : 50,000</li> <li>- Rural : 147000</li> </ul> <p>Diu Population :</p> <ul style="list-style-type: none"> <li>- Urban : 24000</li> <li>- Rural : 28000</li> </ul> <p>Silvassa (DNH) Population :</p> <ul style="list-style-type: none"> <li>- Urban : 98265</li> <li>- Rural : 239385</li> </ul> |
| <b>II.</b>  | <b>Estimated Sewage Generation (MLD)</b><br>:            | <p>Daman : 7.5 MLD</p> <p>Dadra Nagar Haveli : 10.5 MLD</p> <p>Diu : 3.2 MLD</p>   |
| <b>III.</b> | <b>Details of Sewage Treatment Plant</b>                 |  |
|             | Existing no. of STPs and Treatment Capacity (in MLD)     | 02 Nos of STPs. In Daman there is 4.21 MLD and in Dadra Nagar Haveli, 13 MLD STP is operational.   |
|             | Capacity Utilization of existing STPs                    | In Daman, STP operational on 100 % load. In Dadra Nagar Haveli, 2.10 MLD sewage is being received.   |
|             | MLD of sewage being treated through Alternate technology | In rural areas, sewage is treated and disposed through Soak pit and Septic tank.   |
|             | Gap in Treatment Capacity in MLD                         | In Daman, additional 16 MLD STP is planned and in Diu, DPR for 7 MLD STP is approved.  |
|             | No. of Operational STPs                                  | 02 Nos.  |

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|---------------------------|-----|
| No. of Non-complying STPs | Nil |
|---------------------------|-----|

**Details of each existing STP in the State**

| No. | Location           | Existing STP Capacity | Capacity Being Utilized | Operational Status of STP | Compliance Status of STP |
|-----|--------------------|-----------------------|-------------------------|---------------------------|--------------------------|
| 1   | Daman              | 4.21 MLD              | 4 MLD                   | Operational               | Complied                 |
| 2   | Dadra Nagar Haveli | 13 MLD                | 2.10 MLD                | Operational               | Complied                 |

**Details of under construction STPs in the State**

| No. | Location | Capacity of the plant in MLD | Physical Progress in % | Status of I&D or House sewer connections | Completion Timeline |
|-----|----------|------------------------------|------------------------|--|---------------------|
|     | Nil      | --                           | --                     | --                                       | --                  |

**Details of proposed STPs in the State**

| No. | Location | Capacity of the STP proposed in MLD | Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded) | Likely Date of Completion |
|-----|----------|-------------------------------------|---|---------------------------|
| 1   | Daman    | 16 MLD                              | At DPR Stage  | 2021                      |
| 2   | Diu      | 7 MLD                               | Tender will be float by this month                                    | 2021                      |

| <b>IV.</b> | <b>Details of Industrial Pollution :</b>                                     |  |
|------------|--|--|
|            | No. of industries in the State   | 7387   |
|            | No. of water polluting industries in the State                               | 262  |
|            | Quantity of effluent generated from the industries in MLD                    | 6542.74 KLD  |
|            | Quantity of Hazardous Sludge generated from the Industries in TPA            | 1071.34 MT/Annum   |
|            | Number of industrial units having ETPs                                       | 262  |
|            | Number of industrial units connected to CETP                                 | Not Applicable   |
|            | Number and total capacity of ETPs (details of existing/ under construction / | 262 Nos of ETPs and Total Capacity of ETPs – 11409.2 KLD |

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|  | proposed)  |   |
|  | Compliance status of the ETPs  | Complied  |
|  | Number and total capacity of CETPs<br>(details of existing/ under construction / proposed) | Nil<br>There is no CETP in UT of Dadra Nagar Haveli and Daman & Diu |
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- Status of compliance and operation of the CETPs : Not Applicable

| Town               | No. of industries | Industrial discharge | Status of ETPs | Status of CETPs (existing, under construction & proposed) |
|--------------------|-------------------|----------------------|----------------|---|
| Daman              | 3379              | Nil                  | Complied       | Nil   |
| Dadra Nagar Haveli | 3973              | Nil                  | Complied       | Nil   |

| <b>V.</b> | <b>Solid Waste Management</b>  |  |
|-----------|--|--|
|           | Total number of Urban Local Bodies and their Population  | 03 Nos<br>Daman Municipal Council, Silvassa Municipal Council, and Diu Municipal Council   |
|           | Current Municipal Solid Waste Generation   | Daman Municipal Council- 24 TPD<br>Silvassa Municipal Council - 49 TPD<br>Diu Municipal Council - 14 TPD   |
|           | Number, installed capacity and utilization of existing MSW processing facilities in TPD (bifurcated by type of processing eg- Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, decentralized pit composting), biomethanation, MRF etc | i. Daman Municipal Council – 01 No. Compost Plants of 100 MT/Day.<br>ii. Silvassa Municipal Council – 01 No. Compost Plants of 150 MT/Day.<br>iii. Diu Municipal Council - MoU is signed with Ultra Tech Cements (Narmada Cement Jafarabad Works). |
|           | Action plan to bridge gap between Installed Capacity and Current Utilization   | Nil  |

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|  | of processing facilities (if Gap > 20 %)  |  |
|  | No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)                      | Nil  |
|  | Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source  | <p>i. Daman Municipal Council :</p> <ul style="list-style-type: none"> <li>- No. of Wards – 15</li> <li>- No. of wards having door to door collection – 15,</li> <li>- No. of wards practicing segregation at source – 09 (60 %).</li> </ul> <p>ii. Silvassa Municipal Council :</p> <ul style="list-style-type: none"> <li>- No. of Wards – 15</li> <li>- No. of wards having door to door collection – 15,</li> <li>- No. of wards practicing segregation at source – 15.</li> </ul> <p>iii. Diu Municipal Council :</p> <ul style="list-style-type: none"> <li>- No. of Wards – 13</li> <li>- No. of wards having door to door collection – 13,</li> <li>- No. of wards practicing segregation at source – 13.</li> </ul> |
|  | Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)                     | Nil, No additional MSW treatment facilities proposed and under construction.   |
|  | No. and area (in acres) of un-controlled garbage dumpsites and sanitary landfills                                       | Nil, No un-controlled garbage dumping and sanitary landfills.  |
|  | No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers                                    | Nil  |
|  | No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from | <p>No. of drains – 13 nos</p> <ul style="list-style-type: none"> <li>- Phyto-remediation and Bioremediation proposal for the identified drain has</li> </ul>   |

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|  | falling into the rivers | <p>been received from NEERI and the same is under process.</p> <p>- Survey has been carried out by the officials of NEERI for all the 13 drains of DNH &amp; DD.</p> |
|--|-------------------------|--|

**Status of ULB wise Management of Solid Waste**

| ULB                        | Total MSW generation in TPD | Total MSW being processed in TPD | Existing MSW facilities   | Utilization Capacity of the existing MSW facilities | Proposed MSW Facilities & Completion Timeline |
|----------------------------|-----------------------------|----------------------------------|---|---|---|
| Daman Municipal Council    | 24 TPD                      | 24 TPD                           | <p>100 % collection and segregation carried out, Composting plant of capacity 100 MT/Day is operational.</p> <p>Recycled waste is being sent to Cement factories at Kodinar and Rujula, Gujarat and Dhar, Madhya Pradesh.</p> | 100 %   | Nil   |
| Silvassa Municipal Council | 49 TPD                      | 49 TPD                           | <p>100 % collection is carried out.</p> <p>Integrated Solid Waste Management Facility is installed and have a Windrow Composting plant of 150 MT/Day is operational</p>   | 100 %   | Nil   |
| Diu Municipal Council      | 14 TPD                      | 14 TPD                           | <p>100 % collection is carried out. MoU is signed with Ultra Tech Cements (Narmada Cement Jafarabad Works). municipal solid</p>   | 100 %   | Nil   |

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|  |  |  | wastes are being lifted by the industry directly from the dumpyard |  |  |
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| <b>VI.</b>   | <b>Bio-medical Waste Management :</b>                                     |  |
|              | Total Bio-medical generation  | 350 kg/day   |
|              | No. of Hospitals and Health Care Facilities                               | 209 nos.   |
|              | Status of Treatment Facility/ CBMWTF                                      | There is no CBMWTF in the UT. Pollution Control Committee has authorized CBMWTF, M/s En-clar Biomedical Waste Pvt. Ltd., Surat for collection, transportation, treatment and disposal. |
| <b>VII.</b>  | <b>Hazardous Waste Management</b>   |  |
|              | Total Hazardous Waste generation  | 4629 MT/Annum  |
|              | No. of Industries generating Hazardous waste                              | 822 Nos  |
|              | Treatment Capacity of all TSDFs :   | Capacity of Landfill site – 02 Lakh M/Annum,<br>Capacity of Incinerator – 2.5 MKcal/Hr   |
|              | Avg. Quantity of Hazardous waste reaching the TSDFs and Treated           | Avg. 4396.075 MT/Annum of Hazardous waste disposed   |
|              | Details of on-going or proposed TSDF                                      | Nil  |
| <b>VIII.</b> | <b>Plastic Waste Management:</b>  |  |
|              | Total Plastic Waste generation  | 1947.7 TPD   |
|              | Treatment / Measures adopted for reduction or management of plastic waste | Use, Sell and Storage of plastic carry bags are banned in the UT. Authorization given plastic scrap dealers and recyclers by the local bodies and Pollution Control                    |

|  |  |            |
|--|--|------------|
|  |  | Committee. |
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**IX. Details of Alternate Treatment Technology being adopted by the State/UT :**

- 12 nos Septic tank emptier vehicles in Daman District and 08 nos in DNH District to clean and collect the sewage from septic tank of individual households and transport it to sewage treatment plant.
- Phyto-remediation and Bioremediation proposal for the identified drain has been received from NEERI and the same is under process. Survey has been carried out by the officials of NEERI for implementation of in-situ treatment.
- 04 Panchayats have been proposed for standalone modular STP i.e. Damanwada, Magarwada, Pariyari and Patlara. District Panchayat, Daman. DPR is prepared and placed before the UT Level Committee.
- **In DNH, total 4870 households have been connected to the sewerage transportation scheme so far against 24,105 households.**

**X. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment :**

Polluting sources are identified. 13 nallahs / drains have been identified for Phyto remediation and Bioremediation measures. NEERI has submitted a proposal on Phyto remediation and Bioremediation measures for in-situ treatment of drains. The work is being initiated for in-situ treatment of the drain near Rajiv Gandhi Setu, Daman. Another drain near Kabra Industrial Estate, Kachigam, Daman is proposed for in-situ treatment.

**XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT:**

Secretary, Urban Development for municipal area and Secretary, Rural Development for rural areas are the Nodal Authority for compliance in the UT of Dadra Nagar Haveli and Daman & Diu.

**XII. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:**

The Advisor to the Administrator held meeting on regular basis with Urban Development, Rural Development and Pollution Control Committee and asked to comply with the directions related to Solid Waste Management, Sewage

Management, Plastic Waste Management, Bio-medical Waste Management and Hazardous Waste Management

**XIII. Latest water quality of polluted river, its tributaries, drains with flow details of polluted river :**

- The data for the month of February, 2021 is as under :

1. DO : 4.6 – 6.8 mg/l
2. BOD : less than 1 to 2.8 mg/l
3. Total Coliform : 26 to more than 1600 MPN/100 ml
4. Fecal Coliform : 5 to 1600 MPN/100 ml
5. Fecal Streptococci : 2 to 321 MPN/100 ml

**XIV. Ground water regulation:**

- In the UT of Dadra Nagar Haveli and Daman & Diu, 67 bore well and 33 open wells have been successfully recharged through rooftop recharging system in 14 Gram Panchayats of Daman district.
- Additional location for recharge of ground water is being identified in each Gram Panchayats and each Gram Panchayats have taken the Rain Water Harvesting / Recharge work under their respective Action Plan.
- In industrial area, all the industries were directed to obtain No Objection Certificate (NOC) from Central Ground Water Authority (CGWA).

**XV. Good irrigation practices being adopted by the State:**

- Farm ponds have been created for ground water rejuvenation. Terrace cultivation is being practiced in the undulating terrains of DNH.
- Farm ponds have been maintained to check and reduce runoff.
- Training programs carried out for awareness on micro irrigation projects for Farmers.

**XVI. Rain Water Harvesting:**

- 7 Conventional RWH structures were built under Adarsh Gram Panchayat by PWD, District Panchayat, Daman.
- 67 Nos. of rooftop rain water harvesting structures have been installed to recharge bore wells and 33 Nos. of open wells in 14 Panchayats of Daman district.



- 2 Ponds have been successfully recharged.
- Gram Panchayats have undertaken the Rain Water Harvesting / Recharge work under their respective Action Plan. All the government premises located in Panchayat areas are being implemented RWH systems in their premises.
- All new industrial units and construction projects shall provide suitable rainwater harvesting system to reduce dependency over ground water resource or to recharge the ground water table.
- Check dams and percolation tanks have been constructed to reduce runoff and improve the ground water recharge and erosion.

**XVII. Demarcation of Floodplain and removal of illegal encroachments :**

- The illegal encroachments along the drains / nallahs have been removed by the District Administration.
- Regular inspections by Municipal Council / District Panchayat are being carried out to check the free flow of water & ensure no obstacles.

**XVIII. Maintaining minimum e-flow of river :**

Minimum environmental flow for the river is maintained at various locations. Developed the Riverfront area along Damanganga river stretch in Silvassa.

**XIX. Plantation activities along the rivers :**

- Tree plantations were carried out along the nallah and inlets in upstream area and along the river.
- Mangrove plantation in 36 Ha in Diu and 4 Ha in Daman along Damanganga river near Moti Daman have been taken up.
- Plantation near the check dams have been carried out in Dadra Nagar Haveli. Necessary initiatives are being taken by the local bodies and forest department to increase the plantation on both the sides of the river by creating awareness programs. Regular plantation have been carried out at various locations in Dadra Nagar Haveli.

**XX. Development of biodiversity park :**

Following bio-diversity parks had been setup in the Damanganga River catchment area:

1. Nakshatra Van.
2. City Park.

3. Butterfly Garden
4. Precedent Garden.

**XXI. Reuse of Treated Water :**

Treated water from STP is being reused daily for works such as road washing, horticulture, soil compaction, irrigation etc.

**XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards :**

- There is only one river Damanganga in the UT of Dadra Nagar Haveli and Daman & Diu, which is under Priority I as per the NGT order. Actions are already proposed and steps towards achieving bathing quality are taken.
- Polluted river stretches are divided in five priority category i.e. I, II, III, IV, V depending upon the BOD level:
  - i. Criteria for Priority I : BOD concentration 30 mg/l or more.
  - ii. Criteria for Priority II : BOD between 20 – 30 mg/l
  - iii. Criteria for Priority III : BOD between 10-20 mg/l
  - iv. Criteria for Priority IV : BOD between 6-10 mg/l
  - v. Criteria for Priority V : BOD between 3-6 mg/l
- Now, the quality of the river is improved and all the monitoring locations have BOD - 3 mg/l or less. Therefore, the river Damanganga does not falls under Polluted River Stretch as categorized in NGT order (i.e. Priority I, II, III, IV, V)

**XXIII. Status of Preparation of Action Plan by the 13 Coastal States :**

- Integrated Coastal Zone Management plan for Daman & Diu is proposed under ENCORE project funded by World Bank and MoEF&CC.
- Monitoring study was carried out for the beaches namely Jampore and Devka beach in Daman through NIO, Mumbai and there is no evidence of deterioration of environment quality of beaches in Daman & Diu.
- The Ghoghla beach in Diu is among the 8 beaches in the country awarded with Blue Flag Certification.
- India has also bagged 3<sup>rd</sup> prize under the International Best Practices in pollution abatement in coastal regions.

- The National Centre for Coastal Research, Chennai has been requested for preparation of action plan for Management of Coastal areas of Daman and Diu as per directions of CPCB.
- National Institute for Coastal Research, Mumbai has carried out monitoring of Jampore and Devka beach in UT of Daman in 2018. As per the report, it is concluded that there is no evidence for significant deterioration of environmental quality of the beaches investigated except for high Faecal Coliform counts which is common in coastal waters of India.

**XXIV. Regulation of Mining Activities in the State/UT:**

There is no mining activity carried out in the UT of Dadra Nagar Haveli and Daman & Diu.

**XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring.**

Regular monitoring and inspections are being carried out to identify the polluters and any law violators in the UT. For violations, appropriate directions / notices are being issued with environmental compensation based on polluter pay principle.