

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

For the State of Nagaland

Overall status of the State:

I. Total Population: 22.8 lakhs

Urban Population (6,58,008) & Rural Population separately (16,21,992)

II. Estimated Sewage Generation (MLD): 44.3 MLD

III. Details of Sewage Treatment Plant:

- Existing no. of STPs and Treatment Capacity (in MLD): **25.43 MLD under construction at Dimapur**
- Capacity Utilization of existing STPs: **Nil**
- MLD of sewage being treated through Alternate technology: **Nil**
- Gap in Treatment Capacity in MLD: **Nil**
- No. of Operational STPs: **Nil**
- No. of Complying STPs: **Nil**
- 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 |
|------------|----------|-----------------------|-------------------------|---------------------------|--------------------------|
| Nil | | | | | |

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 |
|----------|----------------|---------------------------------------|---|---|----------------------------------|
| 1 | Dimapur | 25.43 MLD (under Construction) | Construction of STP 100% completed | Sewer 78.76 % (under Construction) | 30th June 2021 |

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 |
|------------|----------|-------------------------------------|---|---------------------------|
| Nil | | | | |

IV. Details of Industrial Pollution:

- No. of industries in the State: **1023 nos**
- No. of water polluting industries in the State: **5 nos**

- Quantity of effluent generated from the industries in MLD: **102 KLD**
- Quantity of Hazardous Sludge generated from the Industries in TPD: **10 TPA**
- Number of industrial units having ETPs: **3 nos & 2 units under process**
- Number of industrial units connected to CETP: **NIL**
- Number and total capacity of ETPs (details of existing/ under construction / proposed) : **3 nos of 102 KLD capacity. 2nos of ETP 30 KLD is under process**
- Compliance status of the ETPs: **All the ETPs are in operational and functioning properly.**
- Number and total capacity of CETPs (details of existing/ under construction / proposed):**Nil**
- Status of compliance and operation of the CETPs

| Town | No. of industries | Industrial discharge | Status of ETPs | Status of CETPs (existing, under construction & proposed) |
|------------|-------------------|----------------------|----------------|---|
| Nil | | | | |

V. Solid Waste Management:

- Total number of Urban Local Bodies and their Population: **32 ULBs with 6,02,468 population**
- Current Municipal Solid Waste Generation: **304.3 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 : **1 nos, Kohima Municipal Council has set up a scientific landfill at Lerie, Kohima of 50 TPD capacity processing plant and a plastic recycling unit is also installed at the same site. Dimapur town, generating about 100 TPD, bioremediation has initiated since 2019 for the treatment of legacy waste and fresh solid waste.**
- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%) :**NA**
- 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

| Sl.no | Town | Number of administrative wards | House- to- house collection | Segregation |
|-------|------------|--------------------------------|-----------------------------|-------------|
| 1 | Kohima | 19 | Yes, 50% | Yes |
| 2 | Dimapur | 23 | Yes, 100% | Yes |
| 3 | Mokokchung | 18 | Yes, 55% | No |
| 4 | Phek | 11 | Yes, 85% | No |
| 5 | Wokha | 15 | Yes, 4% | Yes |
| 6 | Mon | 11 | Yes, 50% | No |
| 7 | Zunheboto | 13 | Yes, 90% | Yes 50% |
| 8 | Tuensang | 13 | Yes, 100% | No |
| 9 | Kiphire | 11 | Yes, 100% | No |
| 10 | Peren | 9 | Yes, 25% | No |
| 11 | Longleng | 11 | No | Yes 20% |

| Sl.no | Town | Number of administrative wards | House- to- house collection | Segregation |
|-------|--------------|--------------------------------|--|-------------|
| 12 | Noklak | 9 | Yes, 15% | No |
| 13 | Medziphema | 9 | No, however, point to point collection is being done | No |
| 14 | Chumukedima | 11 | Yes, 80% | Yes 60% |
| 15 | East Dimapur | DNA | DNA | DNA |
| 16 | Tuli | 11 | Yes, 28% | Yes 85% |
| 17 | Changtongya | 11 | Yes | Yes 30% |
| 18 | Longkhim | 9 | No | Yes |
| 19 | Mangkolemba | 9 | No | No |
| 20 | Bhandari | 9 | No | No |
| 21 | Tening | 9 | No | No |
| 22 | Jalukie | 9 | No | No |
| 23 | Pfutsero | 11 | Yes, 85% | No |
| 24 | Tseminyu | 9 | Under the process for implementation | Yes |
| 25 | Naginimora | 9 | No | No |
| 26 | Tizit | 9 | No | NIL |
| 27 | Shamator | 11 | No | No |
| 28 | Pungro | 9 | No | No |
| 29 | Tobu | 9 | No | No |
| 30 | Aboi | 9 | No | No |
| 31 | Meluri | 9 | No | No |
| 32 | Chozuba | 9 | No | Yes |

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology) : Nil
- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills:
31 nos of dumpsites and 1 (one) sanitary landfill at Kohima.
- No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers:
1 no. at Dimapur (29 bighas) near River Dhansiri. Bioremediation has been done since 2019 for the treatment of legacy waste and fresh solid waste.
- No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers:
River Dhansiri : 2 major drains namely, Lengri nullah & Hospital nullah connects river Dhansiri at the downstream.
River Chathe: 1 major drain, Sugar mill nullah joins river chathe.

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 |
|-----|-----------------------------|----------------------------------|-------------------------|---|---|
| 32 | 304.3 TPD | 132.05 | 1 at Kohima | 50 TPD processing facilities with landfill life of 25 years | Nil |

VI. Bio-medical Waste Management:

- Total Bio-medical generation: **645 kg/day**
- No. of Hospitals and Health Care Facilities: **726 HCFs including clinics**
- Status of Treatment Facility/ CBMWTF: **There are three captive treatment plants i.e. at Phek, Mokokchung and Dimapur. All district hospitals and bedded hospitals have deep burial, sharp pits, and microwave and autoclave facilities for treatment and disposal of biomedical wastes. However, there is no CBMWTF available.**

VII. Hazardous Waste Management:

- Total Hazardous Waste generation: **29.03 MTA**
- No. of Industries generating Hazardous waste: **3 units (oil sludge and spent oil) inventory under progress. This spent oil is transported to Assam for bioremediation by the Indian Oil Corporation.**
- Treatment Capacity of all TSDFs : **Not available**
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated : **Not available**
- Details of on-going or proposed TSDF: **Not available**

VIII. Plastic Waste Management:

- Total Plastic Waste generation: **565 TPA**
- Treatment/ Measures adopted for reduction or management of plastic waste:
 - (i) **The Govt. of Nagaland vide gazette notification no. dated 17th June 2019 notified “Total ban on all single-use plastics in Nagaland”**
The following Single-use plastic products shall be totally banned in the state:
 - a) **All plastic carry bags, with or without handles, irrespective of thickness and size**
 - b) **Plastic cutlery including plates, plastic cups, straws, stirrers, etc**
 - c) **Cutlery and other decorative made of Styrofoam (thermocool)**
 - d) **Polythene**
 - e) **Nylon**
 - f) **Poly Vinyl Chloride (PVC)**
 - g) **Poly- Propylene and**
 - h) **Poly-styrene**
 - (ii) **Polymer bitumen road is constructed in limited ways using plastic wastes.**

IX. Details of Alternate Treatment Technology being adopted by the State/UT
Phytoremediation and Faecal Sludge and Septage Management Plants are proposed for all the ULBs.

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

In progress as mentioned in IX.

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

- 1. OSD, Environment & Forests**
- 2. Deputy Director, Industries & Commerce**
- 3. Member Secretary, NPCB**

- XII.** Details of meetings carried under the Chairmanship of Chief Secretary in the State/UT:
Regular meeting is being taken under the Chairmanship of Chief Secretary to review action taken in relation to various NGT matters such as Sewage Treatment, Municipal Solid Waste Management, Biomedical Waste Management, Plastic Waste etc.
- XIII.** Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;
Enclosed
- XIV.** Ground water regulation:
Water Resources Department under the State Plan carry out activity wherein wells are dug for ground water extraction. Sensitization programme for ground water is also under implementation.
- XV.** Good irrigation practices being adopted by the State:
Water Resources Department has been carrying out activities under the Minor Irrigation Schemes wherein diversion, protection wall and line & unlined canals are constructed under the Ministry of Water Resources.
- XVI.** Rain Water Harvesting:
Rain water harvesting is very popular in the State and is available in almost every house. Rain water harvesting is also maintained by Government department buildings, schools and at colleges.
- XVII.** Demarcation of Floodplain and removal of illegal encroachments:
Information will be sought from Department of Water Resources, Nagaland State Disaster Management Authority and District Administration/ Revenue Department
- XVIII.** Maintaining minimum e-flow of river:
Environment flow is being assessed regularly by the Water Resources Department.
- XIX.** Plantation activities along the rivers:
Tree plantation work done by Department of Environment, Forests and Climate Change and agri allied departments.
- XX.** Development of biodiversity park:
10 community reserves has been notified in Dimapur district which falls in the upstream catchment area of the River Dhansiri and Chathe with a total area of 23.025 Sq.km. Botanical Garden and Puliebadze wildlife sanctuary are located in Kohima. There are no areas in flood plain of Dimapur suitable for Biodiversity Parks.
- XXI.** Reuse of Treated Water:
As per the directive of the hon'ble National Green Tribunal, the treated water shall be reuse for the following:

- (a) Treated Water from STP is proposed to be utilized for irrigating the agricultural farms lying within the vicinity of the STP.**
- (b) Sprinkling the road construction sites to control dust pollution**
- (c) Flushing/cleaning of the sewage drains**
- (d) Fire hydrants**

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

Chathe River is proposed. Action plan of Chathe River has been submitted to CPCB.

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

Not applicable

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

Regulated by District Administration; Geology & Mining Department as per Nagaland Minor Mineral Concession Rules 2004 (NMMCR).

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

Polluters and law violators are issued show cause notices/ Closure Notices.



(K. Hukato Chishi, IFS)
Member Secretary

ANALYSIS REPORT OF NATIONAL WATER QUALITY MONITORING PROGRAMME FOR MAY 2021

| FIELD OBSERVATION AND PARAMETERS | STATION CODE | | | | |
|-------------------------------------|-----------------------|------------------------|-------------------------|-------------------------|----------------------|
| | Dhansiri Up Stream | Dhansiri Mid Stream | Dhansiri Down Stream | Dhansiri Down Stream | Chathe Mid Stream |
| Date of collection | 18-05-21 | 18-05-21 | 18-05-21 | 18-05-21 | 18-05-21 |
| Time | 7:15AM | 10:28AM | 9:40AM | 9:06AM | 2:55PM |
| Visible Effluent Discharge | Nil | Nil | Nil | Nil | Nil |
| Use of Water in Down Stream | Fishing | Fishing | Fishing | Fishing | Fishing |
| | Bathing | Bathing | Bathing | Bathing | Bathing |
| Weather | Clear | Clear | Clear | Clear | Clear |
| Depth of water body (in cm) | 88 | 84 | 79 | 76 | 58 |
| Human Activities | Bathing | Bathing | Fishing | Fishing | Bathing |
| | Washing | Washing | Bathing | Bathing | Washing |
| | Fishing | Fishing | Washing | Washing | Fishing |
| | | | Sand recovery | Boating | Stone quarry |
| Colour | Light Brown | Light Brown | Light Brown | Light Brown | Brown |
| Odour | Odour free | Odour free | Odour free | Odour free | Odour free |
| Velocity of flow (m/sec) | 0.56 | 0.48 | 0.46 | 0.38 | 0.42 |
| Water Temperature (°C) | 24 | 25.0 | 24 | 25.00 | 24.0 |
| Dissolved Oxygen (mg/l) | 7.2 | 6.8 | 6.6 | 6.3 | 6.8 |
| pH | 8.3 | 7.8 | 8.1 | 8.4 | 7.8 |
| Conductivity (µS/cm) | 164 | 245 | 256 | 129 | 168 |
| Biochemical Oxygen Demand (mg/l) | 1.8 | 2.1 | 2.2 | 2.3 | 1.8 |
| Nitrate - Nitrogen (mg/l) | 1 | 0.9 | 1.2 | 0.7 | 1.3 |
| Turbidity (NTU) | 3.94 | 5.4 | 3.84 | 4.4 | 5.6 |
| Phenolphthalien Alkalinity (mg/l) | 2 | 0 | 0 | 0 | 0 |
| Total Alkalinity (mg/l) | 132 | 136 | 148 | 142 | 78 |
| Chloride (mg/l) | 4.4 | 4.8 | 5.2 | 6 | 3.2 |
| Chemical Oxygen Demand (mg/l) | 22 | 24 | 25 | 20 | 22 |
| Ammonia- Nitrogen (mg/l) | 0.3 | 0.28 | 0.3 | 0.42 | 0.24 |
| Total Hardness (mg/l) | 80 | 92 | 172 | 84 | 56 |
| Calcium Hardness (mg/l) | 48 | 52 | 56 | 48 | 24 |
| Magnesium Hardness (mg/l) | 7.81 | 9.76 | 28.3 | 8.78 | 7.8 |
| Sulphate (mg/l) | 17 | 16 | 18 | 16 | 18 |
| Total Dissolved Solids (mg/l) | 82 | 122 | 128 | 64 | 84 |
| Total Suspended Solids (mg/l) | 0.12 | 0.16 | 0.14 | 0.14 | 0.12 |
| Phosphate (mg/l) | 0.06 | 0.08 | 0.08 | 0.05 | 0.08 |
| Boron (mg/l) | 0.06 | 0.05 | 0.03 | 0.04 | 0.05 |
| Potassium (mg/l) | 4.2 | 5.2 | 3.8 | 3.6 | 3 |
| Fluoride (mg/l) | 0.3 | 0.2 | 0.14 | 0.12 | 0.11 |



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