

## Solid waste management in Sikkim.

### 1. ULB wise information on Solid waste Management- collection, segregation, processing and Disposal facilities (form IV- SWM Rules) for the financial year 2019-20.

	Name of ULB	Solid waste generated (TPD)	Solid waste collected (TPD)	Solid waste treated (TPD)	Solid waste landfilled/Disposed at dumping site (TPD)
1.	Gangtok Municipal corporation (GMC)	50.00	50.00	11.00	39.00
2.	Gyalshing Municipal Council (GyMC)	3.5	3.5	NIL	3.5
3.	Mangan Nagar Panchayat (MNP)	0.60	0.60	0.06	0.532
4.	Namchi Municipal Council (NMC)	4.60	4.50	NIL	4.5
5.	Rangpo Nagar Panchayat (RNP)	10.00	10.00	NIL	10.00
6.	Singtam Nagar Panchayat (SNP)	2.50	2.50	Nil	2.50
7.	Jorethang Municipal Council (JMC)	3.50	3.50	1.5	2
<b>Total</b>		74.7	74.6	12.56	62.032

### 2. List of Authorize waste processing facilities, processing capacity, technology, product, (Waste processed, products produced/soil Inerts disposal (form III SWM Rules) & validity of authorization.

- At present only one authorized waste processing facilities available in Sikkim i.e Martam landfill site at Martam, East Sikkim.
- Three Solid Waste processing facilities has been set up in the state of Sikkim
  1. MANGAN, NORTH SIKKIM (80kg/day)
  2. MARTAM, EAST SIKKIM (50TPD)

### 3. VEGETABLE MARKET UNDER GANGTOK MUNICIPAL CORPORATION (1 TPD)

#### **3. Compliance status of Authorized waste processing facilities.**

: COMPLIED.

#### **4. Quantities of Solid waste generated, collected processed and disposal in the state.**

Solid waste generation in the State (TPD): **74.7**

ii. Collected (TPD): **74.6.**

iii. Treated/processed (TPD): **12.56**

iv. Landfilled/Dumped (TPD): **62.032**

#### **5. Guidelines and best practices for SWM:**

Best practices highlighted by Urban Development Department in the state waste policy: ref no. 3/UD&HD dated 29/04/2019. Over the past one decade, the State of Sikkim has come up with scalable models of solid waste management which are rooted in zero waste principles. The listed best practices below are noteworthy for its public participation, partnership among general public, government and NGOs, local solutions and local leadership to conserve nature.

(1) Lachen, North Sikkim Lachen is a small village in the India-China border which attracts tourists from across the globe. The village was supported by Ministry of Tourism, Government of India under Endogenous Tourism Project in partnership with UNDP. The village council with the support of local community, district administration and NGOs launched campaigns to reduce waste and which resulted in ban on bottled water. Tourists were advised to use water from dispensers in the hotels instead of bringing in bottled water. Material recovery Facility was established in the village for segregated collection of non bio degradable discards and periodical clean ups were done to keep the premises clean. Lachen also demonstrated waste free festivals as a first initiative towards green protocol.

(2) Yuksam Trails Khangchendzonga Conservation Committee (KCC) initiated a zero waste programme in Khangchendzonga national park in Yuksam. A MRF was set up at the entrance of the National Park for segregated collection and recovery of waste. A check post was maintained to inspect the tourists for the plastic disposable products they are carrying in. An inventory of plastics going into the national park was kept against a cash deposit and which is being reimbursed once the plastics are brought back.

(3) Tsomgo Lake Tsomgo is a sacred lake on the way to NathuLa La from Gangtok. It is a busy tourist hub in the higher altitude. TsomgoPokhiriSamrakshanSamithi was formed by the local community to conserve the lake. Forest Environment and Wildlife Manage Department of Sikkim and WWF-India also joined the initiative for conservation of this high altitude lake. Water dispensers were installed along the shops to reduce the use of bottled water. Market was shifted from the banks of the Lake to prevent waste going into the lake. Periodical participatory clean ups and campaigns are still on to keep the lake town clean.

(4) Zero Waste Monastery Pemayangtse Monastery located in West Sikkim has become the first zero waste monastery in Sikkim. Earlier the offerings brought by the local people

were all packed food items. These offerings received by the monastery would generate a lot of plastic waste, in order to reduce the amount of waste generated, the members of the monastery decided to encourage the visitors to bring offerings that wouldn't have plastic wrappers. The monastery also has water dispensers for the public. The monastery even received an award in the category of "Zero waste Religious Institutions" 5

(5) MelliDara Gram Panchayat. Segregated waste collection and conversion of bio-degradable waste into compost by Melli Dara GPU was a bold step towards zero waste. The GPU went ahead and started selling the processed compost under their brand. The GPU bagged recognition for their efforts towards Zero Waste.

(6) Gurudongmar Lake WWF-India with the support of Lachen Tourism Development Council initiated a process to ban bottled water in a sacred – high altitude – glacier wetland in North Sikkim. It involved awareness campaigns and clean up drives.

(7) Gerethang Village Gerethang Village is probably the first village in India to ban single use plastic cups, plates, Styrofoam plates and carry bags. The ban also followed promotion of eco-friendly products in the region. This has inspired many Indian cities including the capital city of Kerala, Thiruvananthapuram to go ahead with banning single use plastic products.

(8) Green Protocol the programmes organized by RMDD and UDHD have started following green protocol by eliminating single use plastics and including recycled products. PVC flex banners, plastic file folders etc were eliminated and notepads made of single side used paper were introduced in large quantities.

## **6. Annual Report:**

a. Annual Report on Solid Waste Management Rules, 2016 submitted to SPCB-Sikkim by UD&HD from the 07 Urban Local Bodies is compiled and forwarded to Central Pollution Control Board, New Delhi by SPCB-Sikkim.

b. The report is uploaded on CPCB web portal E Sanyojan annually.

c. Annual Report for the year 2019-20 has been uploaded on CPCB web portal E-Sanyojan.

## **7. NGT Report:**

a. As per the Hon'ble National Green Tribunal judgment pertaining to the O.A. no. 606/2018, a State Level Committee with Justice A.P. Subba, former Judge, and High Court of Sikkim as its Chairperson has been formed. The duties of the SLC is to monitor and oversee the implementation of Waste Management Rules as per the the direction/order passed by the Hon'ble NGT.

b. The first meeting of SLC was held on 13.02.2019 and thereafter the SLC has been meeting at regular intervals to ensure implementation of the Waste management rules.

c. Team comprising of SPCB and Gangtok Municipal Corporation Officials headed by SLC Chairman carried out inspection on wire netting of various jhoras in and around Gangtok on 11<sup>th</sup> September, 2019.

d. Meeting of SLC Chairman with District Collector, East and South was held on 19.09.2019 23.09.2019, respectively to discuss implementation on Solid Waste Management Rules, 2016.

**8. Orders and Notification:**

**9. Awareness material (Brochures, Magazines, short films)**

- a. SPCB has conducted sensitisation programme on Solid Waste Management Rules, 2016 for the Block Development Officers and ADCs of all the four districts.
- b. Resource person from SPCB in co ordination with RMDD has conducted orientation and training programme on Solid Waste Management rules, 2016 for Gram Panchayats of all the four districts.
- c. SPCB has been 2 Lakhs annually to Zilla Upadhakshya of all the four districts for conducting awareness programme on waste management in their respective jurisdiction.
- d. Cleanliness drives are regularly carried out by various Departments and Institutions in the State.
- e. SPCB has distributed dustbins to educational institutions Religious places, Tourist spots and other organisation for waste collection at public places.
- f. Short flims with regards to SWM to be uploaded.