

## Enforcing SUP Ban *From Awareness to Action*



July 11, 2022: The State Pollution Control Board - Sikkim convened a meeting of district authorities, State government department and local body officials from all over the State regarding implementation of the Plastic Waste Management (Amendment) Rules, 2021 by which manufacture, import, stocking, distribution, sale and use of certain items of single use plastics (SUPs) have been prohibited with effect from 1st July 2022. The meeting was

attended by District Collectors, Superintendents of Police, Commissioner and Municipal Executive Officers of Urban Local Bodies and Block Development Officers. Officials of Forest & Environment, Urban Development and Rural Development Departments were also present. A power point presentation on listed banned SUP items was shown to sensitize the house and then inputs were requested for



enforcement strategy. All the agencies extended their support for ban and suggested to gear up the awareness activities being conducted.

### Highlights



Awareness campaign for the traders and bazaar community of Gangtok market on the impending ban on Single Use Plastics



Training on ETP operation and Online Continuous Effluent Monitoring System



Public hearing held at Mangan for the upcoming project- Construction of Solid Waste Treatment facility



Status of Ambient Air Quality (April 2022 – September 2022) and River Water Quality (September 2022) across the State



## SPCB Sikkim holds meeting with UDD and ULBs in regard to SUP ban



**June 6, 2022:** The State Pollution Control Board – Sikkim conducted a coordination meeting with Urban Development Department and Urban Local Bodies at its Conference Hall, Forest Secretariat, Deorali on 6th June 2022 focusing on the Single Use Plastics (SUPs) being prohibited from 1st July 2022.

The meeting which was presided over by the Chairman SPCB-Sikkim Dr. Thomas Chandy saw the participation of Shri M.T. Sherpa, Secretary, Urban Development Department, Shri H.K. Chettri, Commissioner, Gangtok Municipal Corporation, Municipal Executive Officers of other Urban Local Bodies and SPCB officials.

The Member Secretary, SPCB-Sikkim, Dr. Gopal Pradhan while reminding all that certain items of SUPs are being prohibited for manufacture, stocking and use with effect from 1st July 2022 under the Central Plastic Waste Management Amendment Rules, 2021 stated that awareness campaigns have been going on for the past few months through the SPCB, ULBs, UDD and RDD's Swachh Bharat Mission. It was decided that for the next two weeks more awareness would be generated through direct meetings, public announcements, posters and banners to ensure that the business community and the public at large become aware of the cut-off date. Surprise checks would also be undertaken to enforce the ban thereafter.

The meeting also discussed actions to be taken in respect of extended producer responsibility enforcement so that the relevant rules can be implemented effectively. Producers, importers and brand owners are required to set up a collection mechanism of wastes arising

from their packaging in coordination with the ULBs. It is informed that as per the Plastic Waste Management Rules 2021, ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene [Thermocol] for decoration; plastic plates, plastic cups, plastic glasses, plastic cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films around sweet boxes, invitation cards, and cigarette packets, plastic or PVC banners less than 100 micron, plastic stirrers are all prohibited items and cannot be distributed, sold, stocked or used.

As a follow up of the meeting, SPCB-Sikkim vide its office order dated 05.07.2022 set up a control room to monitor the enforcement of SUP during the month of July 2022.



**Pictures:** Joint inspection being conducted by Urban Development Department, State Pollution Control Board – Sikkim and Police Department for SUP monitoring, seizure and imposing penalty for non-compliance including awareness.



**Citizens/public may lodge complaint against the use of single-use plastics (SUP) through this app.**

इस मोबाइल ऐप के द्वारा नागरिक एकल उपयोग वाले प्लास्टिक के विरुद्ध अपनी शिकायत दर्ज कर सकते हैं।

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## Awareness campaign for Gangtok business community

**July 16, 2022:** Gangtok Municipal Corporation together with the State Pollution Control Board – Sikkim and the Urban Development Department conducted an awareness campaign for the traders and bazaar community of Gangtok market on the impending ban on Single Use Plastics in a day-long programme organized at Thakurbari, Gangtok on 16th of June 2022. A cross section of the business community consisting of general merchants, fast food shop owners, restaurant owners, taxi drivers' association and hotel owners' association were present in the campaign meeting.



## Review Meeting with RDD, UDD and Municipal Bodies

**September 5, 2022:** A review meeting was conducted on 05/09/2022 chaired by Chairman, SPCB-Sikkim wherein status of solid waste processing facility and Material Recovery Facilities/ Resource Recovery Centres were discussed. The various successful models of safe waste disposal and converting waste to wealth as required for circular economy were also discussed. It was suggested that EPR mandate of PIBOs and Corporate Social Responsibility could be roped into for making provisions for solid waste management.

It was also suggested to regularly carry out the awareness activities from legislators to grass root people and students for making solid waste management effective. The Board also requested UDD officials and Municipal Bodies to implement the SUP ban effectively and to carry out inspections and reporting through registered app as directed by CPCB. Stringent actions may be taken including penalty imposition against defaulters of SUP ban.



Interactive meeting with Hon'ble Union Minister of State for MoEF&CC at Tashiling Secretariat, Gangtok on 21.06.2022



Panel discussion in Radio Misti 95.0 FM on 27.07.2022 w.r.t. SUP ban



Dr. Gopal Pradhan, MS SPCB-Sikkim as one of the key speakers in VC on PWM and SUP on 12.04.2022 organized by We Care Foundation



**Pictures:** National Conference of Ministers of Environment, Forest and Climate Change at Kevadia, Gujarat during September 23-24, 2022 to create further synergy amongst the Central and State Governments in formulating better policies. Representing Sikkim State, this two-day conference was participated by Hon'ble Minister Forest Shri Karma Loday Bhutia, Chairman (SPCB Sikkim) Dr. Thomas Chandy IFS (Retd), ACS-cum-PCCF Shri M L Srivastava IFS along with other senior officers of Forest and Environment Department, Government of Sikkim





## Training for EHS personnel held

**May 12, 2022:** The State Pollution Control Board - Sikkim organized a training programme for Environment, Health and Safety officials of industrial units located in the State on 12th May 2022 at Sidkeong Tulku Conference Hall of Forest Secretariat. The programme started with a welcome address by Dr. Gopal Pradhan, Member Secretary, SPCB-Sikkim. He dwelt on the important role of the EHS officials in ensuring proper functioning of the effluent treatment plants and other aspects of waste management of industries. Shri. Ranjan Rai, Executive Environmental Engineer steered the technical session. He discussed the environmental laws in detail and its implementation in specific categories of industries. He

highlighted the tasks to be undertaken under the supervision of EHS officials for ensuring compliance with standards prescribed under the environmental laws. Shri Shamir Gurung of SPCB-Sikkim explained the Hazardous Waste Management Rules 2016, especially the safety aspects of hazardous waste handling and storage of such wastes. Shri Pravash Chettri of technical wing of SPCB-Sikkim discussed the Extended Producer Responsibility of industries which manufacture PET bottles, plastic containers and sheets for medicine. He explained the provision of the new Rules in this regard. Chairman SPCB-Sikkim, Dr. Thomas Chandy, while summarizing the training sessions, emphasized the important role of EHS officials in fulfilling various compliances of laws and cautioned everyone against any casual approach in this regard.

## Training on Online Continuous Effluent Monitoring System held



**June 1, 2022:** SPCB-Sikkim organized a training session on Online Effluent Monitoring System for industry at Sidkeong Tulku Conference Hall of Forest Secretariat in Gangtok on 1st June 2022. The Resource Person for the technical sessions Dr. S. Suresh Kumar, Chief Technical Director at Knowledge Lens Innovative Lab, Chennai explained the technical aspects of operating Effluent Treatment Plants so that the treatment achieved is optimal. This included basics of flow meter installation, calibration, placement of monitoring cameras, checking of the efficacy of analysers. He also explained the standards and guidelines notified by CPCB which included protocol for frequency of calibration, validation of sensors and probes, cleaning of analyser and other aspects. He also explained how water balance of ETPs is important for audit by Pollution Control Boards. Online monitoring systems for air pollution monitoring of stacks in industries was also discussed.

The training program was presided over by Dr. Thomas Chandy, Chairman SPCB-Sikkim, who dwelt on the importance of timely calibration of monitoring systems to generate accurate and reliable data. Welcoming the participants, Dr. Gopal Pradhan Member Secretary, SPCB-Sikkim, mentioned the importance of the training to comply with the stipulations of Hon'ble National Green Tribunal and Central Pollution Control Board. Shri Ranjan Rai, Executive Environmental Engineer mentioned the

importance of the training to all government departments that produce waste water and air pollution. Shri Binday Kumar Chettri, Chief Scientific Officer conveyed vote of thanks.

The training program saw the participation of Environmental officials of Industries, Hydroelectric Projects, Government Departments, PHE department, Animal Husbandry, Sikkim Milk Union and Health Departments which are required to install Continuous Online Pollution measuring systems in their waste water outlets.

## On-site Training on ETP operation held



**June 3, 2022:** The State Pollution Control Board - Sikkim conducted an on-site training on Effluent Treatment Plant (ETP) operation for State Government department functionaries at Torrent Pharmaceuticals, Namli, Gangtok district on 3rd June 2022. Those who attended the training included officials from Health, PHED, Animal Husbandry, Sikkim Fruit Preservation Factory and Sikkim Milk Union.

Shri Ranjan Rai, Executive Environmental Engineer, SPCB-Sikkim, explained the functions of various components of the ETP system to the participants and the points to be monitored and checked in order to ensure that the system functions

**On-site Training on ETP operation held.....**

efficiently and removes pollutants from waste water. Dr. Suresh Kumar, an expert in the field, also explained the technical aspects of operating the system including the calculations and parameters for determining the standards of treated waste water. Participants were explained the functions of equalization tanks, clarifier and flocculation chambers, activated carbon and dosing tanks.

Government departments are required by law to set up and efficiently operate effluent treatment plants in hospitals and healthcare facilities, slaughter houses and abattoirs, sewage treatment plants and government factories. SPCB proposes to hold ETP installation and operation training in future for entrepreneurs, hotel owners, garage and car spa owners.

## Coordination meeting with Department of Animal Husbandry and Veterinary Science for compliance of Bio-Medical Waste Management Rules, 2016



**August 24, 2022:** In the coordination meeting with AH&VS Department held on 24<sup>th</sup> August 2022 and chaired by the Chairman, SPCB-Sikkim at SPCB Conference Hall, various issues of compliances were discussed for taking up action for abatement of pollution. The main issue discussed was construction status of modern abattoir at Mazitar, Rangpo for safe disposal of animal waste like blood, skin, hide, bone and other waste. It was suggested to complete the work as soon as possible and to technically review the efficiency of ETP being installed. It was also suggested to establish the rendering plant for making blood meal, bone meal etc. of animal waste from slaughterhouse. Installation of DG set for continuous functioning of ETP and deputing of dedicated technical manpower to run the ETP were also suggested. Awareness regarding proper disposal of carcass, road kills, dead stray animals was required to be provided to Municipal Bodies as well. It was also suggested to increase the existing capacity of ETP in Sikkim Milk Processing unit at 5<sup>th</sup> Mile Tadong by opting for vertical expansion of ETP to deal with issue of available free space. Registration of Sikkim Milk in the Extended Producer Responsibility central portal was also discussed. It was also suggested to apply for consent to operate from SPCB through OCMMS portal and also to carry out third party monitoring of treated effluent from ETP. The Secretary, AH&VS Department agreed to initiate action as per the suggestion and comply with directions of Hon'ble NGT and CPCB. He also requested the Board to provide training to field officials on BMW Rules, 2016 and on construction of deep burial pits and also to provide relevant training materials for reference.

**IMPORTANT WEB UPDATES**

**Segregate waste in correct coloured liners (non-chlorinated)**

कचरे को उचित रंग के थैले में ही डालें

**Guidelines for Handling, Treatment, and Disposal of Waste Generated during Treatment/Diagnosis/Quarantine of COVID-19 Patients – Revision 5**

Published on 26th April 2022

Source: CPCB

Check out more at:

<http://spcb.sikkim.gov.in/Publications.html>

**SNIPPETS****Annual Board Meetings of SPCB Sikkim held**

- 16<sup>th</sup> Board Meeting conducted on 29/04/2022
- 17<sup>th</sup> Board Meeting conducted on 14/09/2022



Hon'ble Zilla Upadhakshays (4 nos) were bid farewell on 14.09.2022



Chief Secretary of Sikkim Shri V B Pathak attending 14th CMC virtual meeting with Ministry of Jal Shakti on 20.09.2022 regarding NGT matter O.A. No. 673 of 2018

**SPCB-Sikkim attends VC meet on Antimicrobial Resistance**

**Antimicrobial Resistance:** SPCB-Sikkim, a member of technical committee participated in a VC meeting on Antimicrobial Resistance conducted by Health and Family Welfare Department on 14.09.2022. As per the discussions held the Board provided all the relevant information to the Health Department for formulation of State Action Plan for Containment of Antimicrobial Resistance (SAPCAR).



## Trainings held for effective implementation of Bio-Medical Waste Management at hospitals



**September 2022:** SPCB Sikkim conducted a series of trainings on bio-medical waste management for medical professionals like doctors, nurses, waste handlers of government hospitals at New STNM, Gyalshing and Namchi in association with health department.

## World Ozone Day observed



**September 16, 2022:** SPCB Sikkim observed World Ozone Day with the UNEP theme "Montreal Protocol@35: global cooperation protecting life on earth" at several places viz Burtuk School, Rongneck School, and industrial units of IPCA and GATI with awareness campaigns and competitions for students.

## SNIPPETS



Visit to National EXPO at Chennai on SUP alternative

Awareness on plastic pollution and distribution of waste segregation bins at Tumin Namrang on September 21, 2022



Visit at Martam waste treatment facility on July 27, 2022 for joint verification of provisions to prevent methane gas leakage



Visit to BMW treatment plant at Hyderabad by Chairman, SPCB-Sikkim

## Meeting held with HEPs for stipulating minimum e-flow



**September 15, 2022:** The meeting chaired by Chairman, SPCB-Sikkim mainly discussed the issue of installation of e-flow meter in the dam/barrage site for release of 15-20% of ecological flow in lean period as per the direction of Hon'ble NGT. The other issues discussed were Third Party Monitoring Report, verification of report, HW Authorization, connectivity with SPCB portal, Multidisciplinary committee constitution and monitoring by them, issue of sub-contractors and intimation to River Rejuvenation Committee (RRC). The meeting after much deliberation decided on calculating HEP specific e-flow after studying all the supporting documents like rainfall data etc. for identifying the lean period and specific e-flow to be released.

## Public hearing held at Mangan for the upcoming project- Construction of Solid Waste Treatment facility



**August 4, 2022:** SPCB Sikkim conducted public hearing in the interest of the public in regard to the project - Construction of Solid Waste Treatment facility for Mangan at Ringdang, Mangan District proposed to be constructed by the Urban Development Department, Government of Sikkim. The project is spread in an area of 1.2 hectare at location 1.6 km south east of nearest town Mangan and will have capacity of 16 TPD with project cost estimated to Rs 15.99 crores. The project falls under category B seeking environmental clearance from the State Environment Impact Assessment Authority (SEIAA) Sikkim. The salient features of the project and EIA study report may be accessed from SPCB Sikkim Website. Link is provided as under:

<http://spcb.sikkim.gov.in/Public-Hearings.html>



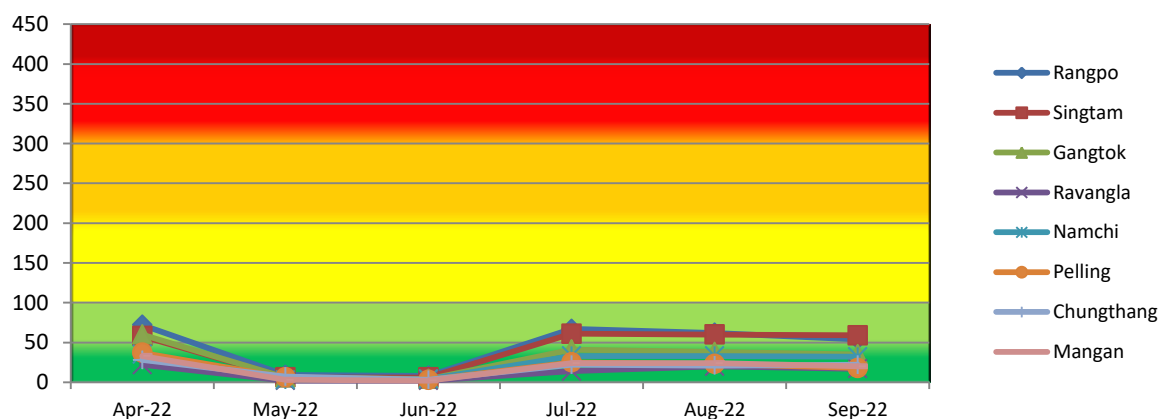
SPCB Sikkim member's visit to Indore to see bioremediation of legacy waste sites and celebration of a day for Earth 2022 by planting saplings there

## Monthly AQI of Sikkim Recorded from Eight Air Quality Monitoring Stations of Sikkim: April 2022 – September 2022

State Pollution Control Board Sikkim has been conducting ambient air quality monitoring under the National Air Monitoring Programme in eight stations in the state. As per the comparative analysis of the data generated for the average air quality index from April 2022 to September 2022, Sikkim State is well within the permissible limits and have been mostly under 'Good' category of AQI health index.

SN	Name of Station	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sept-22
1	Rangpo, Pakyong District	72	9	8	67	62	54
2	Singtam, Gangtok District	58	6	6	61	60	59
3	Deorali, Gangtok District	60	6	4	41	38	35
4	Ravangla, Namchi District	22	2	2	14	20	17
5	Namchi, Namchi District	35	3	4	33	33	32
6	Pelling, Gyalshing District	37	6	3	25	23	18
7	Mangan, Mangan District	33	3	2	24	24	20
8	Chungthang, Mangan District	28	7	3	22	21	22

Monthly AQI (April 2022 - September 2022) - Sikkim



### AQI Category Associated Health Impact

<b>Good</b> (0 to 50)	Minimal impact
<b>Satisfactory</b> (51 to 100)	May cause minor breathing discomfort to sensitive people
<b>Moderately Polluted</b> (101 to 200)	May cause breathing discomfort to the people with lung disease such as asthma and discomfort to people with heart disease, children and older adults
<b>Poor</b> (201 to 300)	May cause breathing discomfort to people on prolonged exposure and discomfort to people with heart disease
<b>Very Poor</b> (301 to 400)	May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases
<b>Severe</b> (401 to 500)	May cause respiratory effects even on healthy people and serious health impacts on people with lung/heart diseases. The health impacts may be experienced even during light physical activity

## River Water Quality Data for the Month of September 2022

Station Code	Type	Sampling Date	pH	Cond. µmhos / Cm	NO <sub>3</sub> -N mg/l	D.O mg/l	B.O.D mg/l	T. Coliform MPN/10 Oml	Faecal Coliform 100/ml
1801	R	02-Sep	7.0	158	2.5	8.3	2.1	133	66
1802	R	02-Sep	7.0	159	2.1	8.8	2.4	155	76
1803	R	06-Sep	6.8	127	2.5	8.5	2.5	155	97
1804	R	06-Sep	7.0	140	2.2	8.6	2.7	155	87
1805	R	12-Sep	6.7	180	2.2	8.7	2.6	181	100
1806	R	12-Sep	6.5	185	2.6	8.8	2.4	187	97
1807	R	13-Sep	7.0	171	2.5	8.6	2.3	179	118
1808	R	13-Sep	6.9	144	2.5	8.9	2.1	155	105
1809	R	16-Sep	7.1	134	2.4	8.6	2.4	165	107
2034	R	16-Sep	7.0	178	2.2	8.6	2.1	134	70
2035	R	19-Sep	7.0	188	2.8	8.7	2.1	156	87
2036	R	19-Sep	6.8	176	2.1	9.1	2.1	137	82
2037	R	19-Sep	6.9	179	2.6	8.5	2.6	161	99
2038	R	20-Sep	7.0	180	2.5	8.7	2.6	169	100
5281	R	20-Sep	6.6	166	2.3	8.7	2.1	113	62
5282	R	20-Sep	7.1	164	2.1	8.8	2.1	147	100
5283	R	21-Sep	6.8	139	2.4	8.9	2.1	189	103
5284	R	21-Sep	6.5	98	2.6	8.9	2.3	115	85
5285	R	23-Sep	6.5	32.7	2.0	10.0	1.7	135	70
5286	R	23-Sep	6.0	34.0	2.5	7.1	1.5	250	105
5287	R	23-Sep	6.5	34.9	2.1	10.4	1.5	160	95
5288	R	23-Sep	6.5	36.9	2.3	7.7	2.6	160	100
5289	R	23-Sep	6.6	40.0	2.1	8.3	2.7	145	85
5290	L	28-Sep	6.8	105	2.3	8.5	2.4	167	77
5291	L	28-Sep	7.0	90	2.0	8.9	1.9	65	45

## The Details of the monitoring stations are as under

SN	Station code	Name of Station	Latitude °N	Longitude °E
1.	(1801)	Chungthang	27.60	88.64
2.	(1802)	Dikchu	27.40	88.52
3.	(1803)	Burtuk	27.35	88.61
4.	(1804)	Adampool	27.30	88.58
5.	(1805)	Ranipool	27.29	88.59
6.	(1806)	Singtam - Ranichu	27.22	88.49
7.	(1807)	Singtam - Teesta	27.11	88.45
8.	(1808)	Rangpo	27.17	88.52
9.	(1809)	Melli	27.08	88.45
10.	(2034)	Rangeet river at NHPC dam Site	27.29	88.29
11.	(2035)	Rangeet river at Legship	27.27	88.27
12.	(2036)	Rangeet river at Reshi	27.22	88.30
13.	(2037)	Rangeet river at Jorethang	27.13	88.27
14.	(2038)	Rangeet river at Triveni	27.08	88.41
15.	(5281)	Upstream of Dam site (Gati Infrastructure Private Ltd.) Rangpo river	27°14'18.66 "N	88°42'35.74" E
16.	(5282)	Downstream of Dam site(Gati Infrastructure Private Ltd.)Rangpo River.	27°14'2.74"N	88°42'31.26 "E
17.	(5283)	Upstream of Dam site (Gati Infrastructure Private Ltd.)	27°12'15.47"N	88°42'46.45 "E
18.	(5284)	Downstream of Dam site (Gati Infrastructure Private Ltd.)	27°12'23.87"N	88°41'6.20" E
19.	(5285)	Power house Downstream of (Gati Infrastructure Private Ltd.)	27°12'32.50"N	88°39'55.91 "E
20.	(5286)	Upstream of Rorathang Bazar (above Swiss Garnier)	27°11'50.38"N	88°37'58.24"E
21.	(5287)	Downstream of Rorathang Bridge	27°11'43.99"N	88°36'28.51"E
22.	(5288)	Downstream of Pharma Plant Kumrek	27°10'54.02"N	88°32'25.89" E
23.	(5289)	Downstream of Madhya Bharat Power house	27°10'42.31"N	88°32'0.33" E
24.	(5290)	Menmoitso Lake	27°19'44.15"N	88°50'57.21" E
25.	(5291)	Changu lake	27°22'35.90"N	88°45'56.37" E

**Disclaimer**

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