



SPCB SIKKIM NEWSLETTER



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STATE WATER & AIR LABORATORY UNDER STATE POLLUTION CONTROL BOARD- SIKKIM, FOREST AND ENVIRONMENT DEPARTMENT TO BE NABL ACCREDITED.



The State Government has notified the laboratory under SPCB-Sikkim as the State Water and Air Laboratory under section 52 of the Water (Prevention and Control of Pollution) Act, 1974 and section 28 of the Air (Prevention and Control of Pollution) Act, 1981 vide Extraordinary Gazette Notification No. 127 dated 9th September, 1996. The said laboratory is located in the ground floor of Block C, Forest Secretariat, Deorali, Gangtok.

The air and water samples collected under National Ambient Air Monitoring programme and National Water Monitoring Programme are analyzed in the State Water and Air Laboratory, SPCB-Sikkim.

The Hon'ble National Green Tribunal (NGT) has mandated that all laboratories conducting environmental testing and analysis to obtain NABL (National Accreditation Board for Testing and Calibration Laboratories) accreditation to ensure standardization, credibility, and reliability of environmental data. It aims to eliminate substandard laboratories providing incorrect or misleading reports from operation.

NABL (National Accreditation Board for Testing and Calibration Laboratories) provides accreditation to Conformity Assessment Bodies (Laboratories) in India.

The State Air and Water Laboratory under SPCB-Sikkim is under the final stage of getting NABL Accreditation in accordance with ISO/IEC 17025:2017 for testing laboratories. The accreditation is for three key disciplines **Surface water, Waste water and Atmospheric Pollution (Ambient air)** comprising of 20 environmental parameters that are very important for environmental monitoring.

As per ISO/IEC 17025:2017 guidelines, the above said laboratory is conducting (Internal/External) training for all the laboratory staff to enhance the credibility of the analyst.

State Air and Water Laboratory, SPCB-Sikkim is participating in Proficiency Testing (PT), Inter Laboratory Comparison Test as per the laid PT calendar of the laboratory to ensure reliability of environmental data produced in the laboratory.

All the Standard operation Procedure used in the Laboratory are EPA/IS certified Method and this procedure are constantly updated as per the latest publication.

After undergoing several trainings, internal auditing and upgrading the said laboratory, the online application for NABL Accreditation was submitted online in the prescribed website during June 2024 by SPCB-Sikkim.

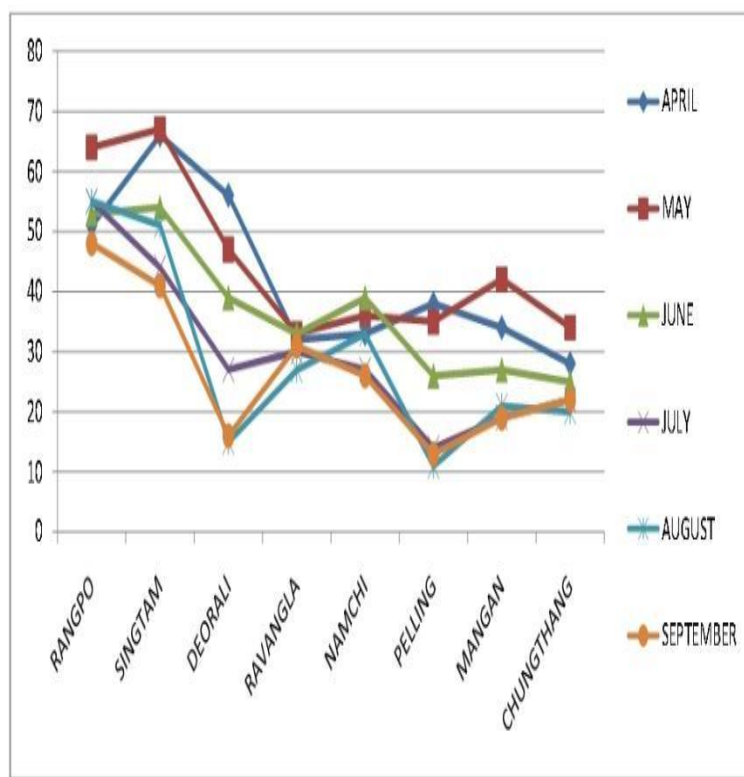
Subsequently, Pre-assessment of State Air and Water Laboratory, SPCB-Sikkim for NABL Accreditation was carried out by NABL official on 03.09.2024.

During the pre-assessment, a total of six non-conformities were reported by the NABL which were successfully complied by the State Air and Water Laboratory, SPCB-Sikkim within fifteen days of pre-assessment.

The final Assessment has been scheduled on 5th and 6th of December 2024 after which SPCB-Sikkim will be considered as NABL certified laboratory and accreditation will be renewed after every 2 years.

AIR QUALITY DATA SEPTEMBER - 2024

Sl. No.	Name of Station	April-24	May-24	June-24	July-24	August-24	September-24
1.	Rangpo	51	64	53	55	55	48
2.	Singtam	66	67	54	44	51	41
3.	Deorali	56	47	39	27	15	16
4.	Ravangla	32	33	33	30	27	31
5.	Namchi	33	36	39	27	33	26
6.	Pelling	38	35	26	14	11	13
7.	Mangan	34	42	27	19	21	19
8.	Chungthang	28	34	25	22	20	22



AQI Category Associated Health Impact

Good (0 to 50)	Minimal impact
Satisfactory (51 to 100)	May cause minor breathing discomfort to sensitive people
Moderately Polluted (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
Poor (201 to 300)	May cause breathing discomfort to people on prolonged exposure and discomfort to people with heart disease
Very Poor (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
Severe (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

SPCB-Sikkim primarily conducts environmental monitoring of air quality under National Ambient Air Monitoring Programme (NAMP) at designated air stations established in different locations of the State under the aegis of Central Pollution Control Board, Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, New Delhi.

Air Quality Index (AQI) shown in Figure 1 is as per the CPCB guidelines taking into account four criteria pollutants in the State viz. PM₁₀, NO₂, SO₂ and PM_{2.5}. As per the findings, the air quality at all location ranged between “good” and “satisfactory” level during April 2024 to September 2024. The station wise AQI ranges for the month of September 2024 are as follows viz. a. Gangtok (AQI: 16-42) b. Rangpo (AQI: 48-57) c. Singtam (AQI: 41-53) d. Namchi (AQI: 25-33) e. Pelling (AQI: 12-20) f. Mangan (AQI: 19-32) g. Chungthang (AQI : 22-28) and h. Ravangla (AQI: 29-31).

The overall status of air quality during the monitoring period of April 2024 to September 2024 has been shown in Figure 2 and Table 2 which demonstrates that most of the time the air quality was found to be “good” and remaining one third of the time it was “satisfactory”. In no occasion, it breached the satisfactory level and not a single case of “Moderate” level was recorded.

Station	Sampling Date	SO2	NO2	PM10	PM2.5	AQI
RANGPO	02.09.2024	4.09	15.47	56.55	15.09	57
	05.09.2024	5.59	13.63	51.65	20.33	52
	10.09.2024	5.41	18.7	57.06	19.91	57
	12.09.2024	6.54	16.63	55.35	20.54	55
	17.09.2024	6.23	13.88	50.58	22.34	51
	19.09.2024	4.64	16.62	55.32	17.83	55
	24.09.2024	4.64	11.52	51.92	17.51	52
	26.09.2024	2.82	9.04	48.25	12.12	48
MONTHLYAVERAGE		5.00	14.44	53.34	18.21	

Station	Sampling Date	SO2	NO2	PM10	PM2.5	AQI
SINGTAM	02.09.2024	4.33	12.54	51.15	17.02	51
	05.09.2024	4.5	13.31	50.07	16.79	50
	10.09.2024	3.91	13.81	53.2	18.48	53
	12.09.2024	4.14	12.86	50.04	15.48	50
	17.09.2024	4.25	13.07	49.73	17.24	50
	19.09.2024	4.2	12.46	48.79	16.83	49
	24.09.2024	4.06	10.72	44.36	14.34	44
	26.09.2024	3.39	9.66	41.41	12	41
MONTHLYAVERAGE		4.10	12.30	48.59	16.00	

Station	Sampling Date	SO2	NO2	PM10	PM2.5	AQI
GANGTOK	02.09.2024	5.71	7.48	28.88	12.72	29
	05.09.2024	4.66	6.82	40.96	19.99	41
	10.09.2024	3.47	11.34	41.59	20.83	42
	12.09.2024	4.15	9.88	33.9	14.14	34
	17.09.2024	5.39	6.46	23.76	11.69	24
	19.09.2024	3.9	7.21	29.13	14.82	29
	24.09.2024	5.85	8.69	23.04	10.93	23
	26.09.2024	5.32	8.43	16.43	7.75	16
MONTHLYAVERAGE		4.81	8.29	29.71	14.11	

Station	Sampling Date	SO2	NO2	PM10	PM2.5	AQI
RAVANGLA	02.09.2024	6.79	6.19	29.43	13.36	29
	05.09.2024	4.95	6.67	30.06	14.28	30
	10.09.2024	5.43	6.21	32.81	14.58	33
	12.09.2024	6.02	6.02	30.11	13.96	30
	17.09.2024	5.15	6.5	29.85	12.91	30
	19.09.2024	5.64	5.12	30.88	13.37	31
	24.09.2024	6.63	6.05	30.88	13.75	31
	26.09.2024	5.59	5.59	31.27	14.18	31
MONTHLYAVERAGE		5.78	6.04	30.66	13.80	

Station	Sampling Date	SO2	NO2	PM10	PM2.5	AQI
NAMCHI	02.09.2024	3.31	7.32	30.03	13.71	30
	05.09.2024	4.15	6.07	31.56	16.25	32
	10.09.2024	4.7	7.31	32.12	16.1	32
	12.09.2024	4.8	6.89	32.71	16.65	33
	17.09.2024	4.16	6.85	31.3	14.5	31
	19.09.2024	4.6	7.22	33.4	15.72	33
	24.09.2024	4.92	6.75	24.84	11.61	25
	26.09.2024	4.8	7.06	25.62	12.86	26
MONTHLYAVERAGE		4.43	6.93	30.2	14.68	

Station	Sampling Date	SO2	NO2	PM10	PM2.5	AQI
PELLING	02.09.2024	2.58	5.71	11.97	5.84	12
	05.09.2024	3.69	5.1	16.7	6.36	17
	10.09.2024	2.76	4.54	15.03	3.78	15
	12.09.2024	3.23	4.79	13.67	5	14
	17.09.2024	3.69	6.19	19.5	8.01	20
	19.09.2024	3.33	5.41	19.97	2.8	20
	24.09.2024	4.04	7.11	16.07	5.41	16
	26.09.2024	3.79	5.71	12.67	6.5	13
MONTHLYAVERAGE		3.42	5.57	15.7	5.46	

Station	Sampling Date	SO2	NO2	PM10	PM2.5	AQI
MANGAN	02.09.2024	3.28	5.78	32.09	14.52	32
	05.09.2024	3.04	5.38	27.69	8.32	28
	10.09.2024	2.74	5.64	22.89	8.82	23
	12.09.2024	2.76	5.54	19.98	12.01	20
	17.09.2024	3.03	5.51	22.27	8.75	22
	19.09.2024	3.28	5.98	24.88	8.32	25
	24.09.2024	2.5	5.22	19.01	6.17	19
	26.09.2024	2.5	5.07	19.41	8.54	19
MONTHLYAVERAGE		2.89	5.51	23.53	9.43	

Station	Sampling Date	SO2	NO2	PM10	PM2.5	AQI
CHUNGTHANG	02.09.2024	4	5.51	27.44	4.72	27
	05.09.2024	3.88	5.89	28.13	4.74	28
	10.09.2024	3.96	6.05	27.06	5.57	27
	12.09.2024	5.14	6.29	26.42	5.23	26
	17.09.2024	4.74	5.68	26.23	5.44	26
	19.09.2024	4.73	5.5	21.61	5.62	22
	24.09.2024	5.15	5.27	22.27	4.65	22
	26.09.2024	4.02	5.56	22.22	4.86	22
MONTHLYAVERAGE		4.45	5.72	25.17	5.1	

CELEBRATION OF PARYAVARAN MAHOTSAV AT HZIP, BULBULEY, GANGTOK ON 01.07.2024



**LECTURE ON BIO-MEDICAL WASTE
MANAGAEMENT RULES 2016 BY DR. J.C.
BABU, SCIENTIST E, CPCB ON 27.05.2024**



Dr. J.C. Babu, Scientist E from CPCB visited the office of SPCB-Sikkim and delivered a lecture on Bio-Medical Waste Management Rules, 2016 with special focus on compliances to be made by Health Care Facilities and timely submission of Annual Report by them. The representatives from Health and Family Welfare Department also attended the said lecture.

COORDINATION MEETING WITH GANGTOK MUNICIPAL CORPORATION ON 28.05.2024 REGARDING WASTE MANAGEMENT



PRESENTATION BY THIRD PARTY NABL ACCREDITED LABS FOR EMPANELMENT WITH SPCB-SIKKIM ON 11.06.2024



CELEBRATION OF EK PED MAA KEH NAAM DURING 2024



SPCB-Sikkim also participated in plantation program under EK PED MAA KEH NAAM, a novel initiative of Hon'ble Prime Minister of India during 2024.

INTERACTIVE MEETING OF INDUSTRIAL UNITS WITH FOREST AND ENVIRONMENT DEPARTMENT REGARDING ENVIRONMENTAL CONSERVATION AND SUSTAINABILITY



Gangtok:- An interactive meeting of industrial units with Forest & Environment Department was organised on 21.05.2024 at Sidkeong Tulku Hall, Block C, Forest & Environment Department on environmental issues and status of compliance of environmental norms by industries in Sikkim. The meeting was chaired by Dr. Pradeep Kumar PCCf cum Secretary, Forest & Environment Department. The meeting deliberated on current status of environmental compliance by the industries and various legal stipulations to be complied with.

19TH SPCB- SIKKIM BOARD MEETING ON 30.07.2024



Inauguration of LED Display Board & release of SPCB Newsletters and Report on SUP Survey



On the auspicious occasion of World Environment Day 2024 the new LED Display Board sponsored by State Pollution Control Board-Sikkim under the aegis of Central Pollution Control Board, MoEF&CC was inaugurated by Dr. Pradeep Kumar, IFS, PCCF-cum-Secretary, Forest and Environment Department in presence of Dr. Senthil Kumar, IFS, APCCF, Dr. Gopal Pradhan, Member Secretary, SPCB-Sikkim and other senior officers and staff of the Forest and Environment Department. The LED board will be utilized for display and dissemination of environmental information for public awareness.

A published report of Single Use Plastic Survey was also released on the occasion along with SPCB Newsletters.

The 19th Board meeting was convened on 30.07.2024 in the conference hall of Parivesh Bhawan, SPCB-Sikkim. The meeting confirmed the minutes of 18th Board meeting. was presided over by Ms. Tshering Palden Bhutia, Hon'ble Deputy Mayor, Gangtok Municipal Corporation. The overview of SPCB-Sikkim since its primordial form in State Land Use Board was described in short by Dr. Pradhan, Member Secretary. The present achievements of the Board were also presented. The following agendas were approved during the meeting:

Establishment of new five stations under NWMP.

Empanelment charge of Rs. 50,000/- for NABL accredited Labs for carrying out third party monitoring.

Proposed amendment in the recruitment rules of Chairman



INAGURATION OF MOBILE LABORATORY VAN OF SPCB-SIKKIM BY HON'BLE GOVERNOR OF SIKKIM AND HON'BLE CHIEF MINISTER OF SIKKIM ON THE OCCASION OF WORLD ENVIRONMENT DAY 05.06.2024 AT RAJ BHAVAN, GANGTOK.

RIVER WATER QUALITY DATA FOR THE MONTH OF SEPTEMBER 2024

Station	Type	Sampling date	pH	Cond. µmhos/ Cm	NO ₃ -N Mg/l	D.O Mg/l	B.O.D Mg/L	T. Coliform MPN/100ml	Faecal Coliform	TDS Mg/L	TSS Mg/L
1801	River	11-09-2024	7.3	112	2.1	8.3	2.1	43	21	21	17
1802	River	11-09-2024	7.2	124	2.3	8.4	2.2	48	23	22	15
1803	River	04-09-2024	7.2	121	2.1	8.6	2.0	42	22	24	14
1804	River	04-09-2024	7.1	148	2.2	7.1	2.4	86	59	32	23
1805	River	04-09-2024	7.2	133	2.0	8.4	2.2	78	56	27	19
1806	River	04-09-2024	7.3	139	1.8	8.2	2.3	69	52	24	19
1807	River	04-09-2024	7.2	148	2.2	8.4	2.2	72	48	22	18
1808	River	09-09-2024	7.1	142	2.3	8.0	2.3	78	42	25	21
1809	River	09-09-2024	7.1	129	2.1	8.9	2.1	82	56	32	23
2034	River	13-09-2024	7.2	148	2.0	8.2	2.2	79	42	31	26
2035	River	13-09-2024	7.0	144	2.2	8.4	2.1	69	32	29	24
2036	River	13-09-2024	7.2	153	2.1	8.3	2.2	79	39	26	22
2037	River	13-09-2024	7.1	164	2.1	7.9	2.3	82	42	24	21
2038	River	09-09-2024	7.2	158	2.3	7.9	2.1	78	44	26	24
5281	River	07-09-2024	7.1	153	2.2	7.8	2.2	81	39	25	23
5282	River	07-09-2024	7.2	149	2.0	8.4	2.2	84	52	28	25
5283	River	07-09-2024	7.0	152	2.1	8.2	2.0	68	38	23	17
5284	River	07-09-2024	7.1	148	2.3	8.0	2.0	75	42	27	24
5285	River	07-09-2024	7.2	152	2.1	8.3	2.3	71	49	23	21
5286	River	07-09-2024	7.2	149	2.3	8.1	2.1	78	52	24	19
5287	River	07-09-2024	7.2	147	2.0	8.3	2.2	64	42	27	24
5288	River	07-09-2024	7.1	142	2.3	8.0	2.3	82	47	28	25
5289	River	07-09-2024	7.2	141	2.1	8.2	2.1	84	49	29	23
5290	Lake	16-09-2024	7.1	149	2.3	8.1	2.0	68	39	31	27
5291	Lake	16-09-2024	7.2	153	2.0	8.2	2.1	73	42	29	22
5553	River	13-09-2024	7.3	146	2.2	7.8	2.2	69	48	27	23
5554	River	13-09-2024	7.2	151	2.3	8.1	2.3	81	49	27	24
5555	River	13-09-2024	7.1	147	2.3	8.2	2.2	72	45	28	22
5556	River	09-09-2024	7.2	159	2.2	8.1	2.4	74	52	25	24
5557	River	09-09-2024	7.0	157	2.1	8.2	2.2	77	47	31	23

ENVIRONMENTAL MONITORING UNDER NATIONAL WATER QUALITY MONITORING PROGRAMME (NWMP) FOR THE PERIOD APRIL 2024- SEPTEMBER 2024.

The State Pollution Control Board-Sikkim has been executing the National Water Quality Monitoring Programme (MINARS have been merged under NWMP) in the state of Sikkim with multiple objective like assessment of the extent of pollution control needed, evaluate effectiveness of pollution control measures that are already in existence, evaluate water quality trend for a period of time, to understand environment fate of different pollutants. The SPCB-Sikkim has at present 30 monitoring stations in Teesta basin (Ranikhola, Rongnichu/Rolepchu, Teesta, Rangit, Maneykhola) in different location starting from Chungthang in north Sikkim to Treveni (after confluence of Teesta and Rangit river) in South Sikkim including Higher Altitude lakes like Tsomgo and Menmoitso. The locations attract significant number of tourists, devotees and there are presence of high military movement which have a tendency to alter the nature of the water bodies. Out of 30NWMP stations 05nos. are newly sanctioned river water monitoring stations by CPCB. The monitoring is carried out on monthly basis and the data obtained is subsequently uploaded in Environmental Water Quality Data Entry System (EWQDES) in CPCB page and SPCB website.

CLEANLINESS DRIVE AT PARIVESH BHAWAN,
BLOCK C , FOREST SECRETARIAT ON 21.09.2024



Disclaimer

Efforts have been made to make the data and information provided in this newsletter as accurate as possible. The

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