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UTTARAKHAND

UEPPCB

Uttarakhand Environment Protection & Pollution Control Board

29/20 Nemi Road, Dalanwala, Dehradun

पर्यावरण संरक्षण में आप भी सहयोग कर सकते हैं।

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1.0 INTRODUCTION

Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) is a statutory organization constituted under the section 4 of the Water (Prevention and Control of Pollution) Act, 1974. The **UEPPCB** came into existence on 1st May 2002 and is functioning through its Head Office at Dehradun along with its four Regional Offices, located at Dehradun. Roorkee, Kashipur and Haldwani. The Board is entrusted with the powers and functions under the Water (Prevention and Control of Pollution) Act 1974. Air (Prevention and Control Of Pollution) Act, 1981; Environment Protection Act 1986and the Public Liability Insurance Act, 1991 . The primary objective of all these Acts are to maintaining, restoring and conserving the wholesomeness of quality of environment and prevention of hazards to human beings, terrestrial and aquatic flora and fauna. The involvement of the State Board begins right from planning comprehensiveprogrammes for the prevention, control or abatement of pollution, advising State Govt. relating to environmental aspects, collecting and disseminating of informations related to Environment protection and enforcing various provisions of the acts.

The major components of the environmental legislation presently existing in the country are:

- The Water (Prevention & Control of Pollution) Act, 1974,
- The Air (Prevention & Control of Pollution) Act, 1981,
- The Environment (Protection) Act, 1986,
- Hazardous and other Wastes (Management, Handling& Transboundry movement) Rules,

2016 Bio-Medical Wastes Management Rules, 2016;

- Municipal Solid Wastes Management Rules, 2016;
- Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989;
- Plastics Wastes Management Rules, 2016;
- The Noise Pollution (Regulation & Control) Rules, 2000;
- The Batteries (Management & Handling) Rules, 2001;
- Public Liability Insurance Act, 1991.
- E-Waste (Management) Rules, 2016;

1.1 Functions of Uttarakhand Environment Protection & Pollution Control Board

The functions of State board under Air (Prevention & Control of Pollution) Act, 1981

Under the Water (Prevention and Control of Pollution) Act, 1974, the functions of the State Board shall be:

1) To plan a comprehensive programme for the prevention, control or abatement of air pollution and to secure the execution thereof;
2) To advise the State Government on any matter concerning the prevention, control or abatement of air pollution;
3) To collect and disseminate information relating to air pollution;
4) To collaborate with the Central Board in organizing the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of air pollution and to organize mass education programme relating there to;

5) To inspect, at all reasonable times, any control equipment, industrial plant or manufacturing process and to give, by order, such directions to such persons as it may consider necessary to take steps for the prevention, control or abatement of air pollution;

6) To inspect air pollution control areas at such intervals as it may think necessary, assess the quality of air therein and take steps for the prevention, control or abatement of air pollution in such areas;

7) To lay down, in consultation with the Central Board and having regard to the standards for the quality of air laid down by the Central Board, standards for emission of air pollutants into the atmosphere from industrial plants and automobiles or for the discharge of any air pollution into the atmosphere from any other source whatsoever not being a ship or an aircraft:

8) Provied that different standards for emission may be laid down under this clause for different industrial plants having regard to the quantity and composition of emission of air pollutants into the atmosphere from such industrial plants;

9) To advise the State Government with respect to the suitability of any premises or location for carrying on any industry which is likely to cause air pollution;

10) To perform wsuch other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government;

11) To do such other things and to perform such other acts as I may think necessary for the proper discharge of its functions and generally for the purpose of carrying into effect the purposes of this Act.

12) State Board may establish or recognize a laboratory or laboratories to enable the State Board to perform its functions under this section efficiently.

The functions of State board under Water (Prevention & Control of Pollution) Act, 1974

The functions of a State Board under the Water (Prevention & Control of Pollution) Act, 1974 are –

1. to plan a comprehensive programme for the prevention, control or abatement of pollution of streams and wells in the State and to secure the execution thereof;
2. to advise the State Government on any matter concerning the prevention, control or abatement of water pollution;
3. to collect and disseminate information relating to water pollution and the prevention, control or abatement thereof;
4. to encourage, conduct and participate investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution;
5. to collaborate with the Central Board in organizing the training of persons engaged or to be engaged in progammes relating to prevetion, control or abatement of water pollution and to organise mass education programme relating thereto;
6. to inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review plans, specifications or other data relating to plants set up for the treatment of water, works for the purification thereof and the system for the disposal of sewage or trade effluents or in connection with the grant of any consent as required by this Act;
7. to lay down, modify or annual effluent standards for the sewage and trade effluents and for the quality of receiving waters (not being water in an inter-State stream) resulting from the discharge of effluents and to classify waters of the State;

8. to evolve economical and reliable methods of treatment of sewage and trade effluents, having regard to the peculiar conditions of the soils, climate ad water resources of different regions and more especially the prevailing flow characterstics of water in streams and wells which render it impossible to attain even the minimum degree of dilution;
9. to evolve methods of utilization of sewage and suitable trade effluents in agriculture;
10. to evolve efficient methods of disposal of sewage and trade effluents on land, as are necessary on account of the predominant conditions of scant stream flows that do not provide for major part of the year the minimum degree of dilution;
11. to lay down standards of treatment of sewage and trade effluents to be discharged into any particular stream taking into account the minimum fair weather dilution available in that stream and the tolerance limits of pollution permissible in the water of the stream, after the discharge of such effluents;
12. to make, vary or revoke any order-
13. for the prevention, control or abatement of discharges of waste into streams or wells;
14. requiring any person concerned to construct new systems for the disposal of sewage and trade effluents or to modify, alter or extend any such existing system or to adopt such remedial measures as are necessary to prevent, control or abate water pollution;
15. to lay down effluent standards to be compiled with by persons while causing discharge of sewage or sullage or both and to lay down, modify or annual effluent standards for the sewage and trade effluents;
16. to advise the State Government with respect to the location of any industry the carrying on of which is likely to pollute a stream or well;
17. to perform such other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government.
18. The Board may establish or recognize a laboratory or laboratories to enable the Board tp perform its functions under this section efficiently, including the analysis of samples of water from any stream or well or of samples of any sewage or trade effluents.

2.0 Constitution of the Board

The UEPPCB is comparising of followings members from different fields are

1.	Additional Chief Secretary	Chairman
2.	Principal Chief Conservator of Forest, Uttarakhand	Member
3.	Additional Secretary, Urban Development , Govt. of Uttarakhand	Member
4.	Additional Secretary, Industrial Development, Govt. of Uttarakhand	Member
5.	Chief Engineer, Jal Nigam, Uttarakhand	Member
6.	Commissinoner, Nagar Nigam, Dehradun, Uttarakhand	Member
7.	Commissinoneri,Nagar Nigam, Haridwar, Uttarakhand	Member
8.	Commissinoner, Nagar Palika, Kashipur, Uttarakhand	Member
9.	Vice Chairman, Mussorie Dehradun Development Authority Dehradun, Uttarakhand	Member
10.	Vice Chairman, Haridwar Development Authority, Haridwar	Member
11.	Member of Uttarakhand Chamber of Commerce	Member
12.	Vinod Singhal, IFS/ S.P. Subudhi ,IFS	Member Secretary

3.0 Monitoring Network for Air & Water Quality

3.1 Water Quality Monitoring Programme.

Water Quality refers to the chemical, physical and biological characterstics of water, it is a measure of the condition of water relative to the requirement of one or more biotic species and or to any human need or purpose. Water is one of the most important basic natural resources. The total amount of water available in the world, is constant and it is generally said to be adequate to meet all demands of mankind, its quality and distribution over diffferent region of worlds is uneven and cause problem to scarcity and suitability.

In order to defeat the water pollution problems the planning of pollution control programme is indispensible to understand the nature and extend of pollution, this understanding can be obtained through regular monitoring programme.The State Board in collaboration with Central Pollution Control Board (CPCB) is carrying out the water quality monitoring at 59 locations in the State.

Characteristics of water quality of river in Uttarakhand

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/10 0 ml
April-17	River Bhagirathi B/C Alaknanda Devprayag	18	7.72	9.4	<1	0
	River Alaknanda B/C Bhagirathi Devprayag	18	7.82	9.4	<1	0
	River Alaknanda A/C Bhagirathi Devprayag	18	7.64	9.2	<1	0
	River Alaknanda B/C Mandakini Rudraprayag	17	7.74	9.2	<1	0
	River Mandakini B/C Alaknanda Rudraprayag	17	7.74	9.2	<1	0
	River Alaknanda A/C Mandakini Rudraprayag	17	7.82	9.2	<1	0
	River Ganga U/S Lakshmanjhula	19	7.61	9.8	<1	26
	Upper Ganga Canal D/S Harki Pauri Haridwar	22	7.51	9.6	<1	90
	Upper Ganga Canal D/S Roorkee Haridwar	19	7.58	9.6	1	110
	River Ganga D/S Raiwala, Dehradun	20	7.56	9.2	1	170
	River Suswa D/S Mathurawala, Dehradun	20	7.89	2.6	34	>1600
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	21	7.42	9.4	<1	60
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	20	7.81	9.6	<1	60
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	19	7.64	8.8	1	80
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	19	7.8	9.2	1.2	220
	Lal Ta Rao Bridge, Haridwar	19	7.52	9.2	<1	70
	River Yamuna U/S Lakwar Dam Dehradun	18	7.98	9	<1	Nil

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/100 ml
	River Yamuna U/S Dakpather Dehradun	19	7.78	8.8	1	60
May-17	River Ganga U/S Lakshmanjhula	19	7.02	10.3	<1	70
	Upper Ganga Canal D/S Harki Pauri Haridwar	-	6.98	9.8	<1	80
	Upper Ganga Canal D/S Roorkee Haridwar	-	7.48	8.9	<1	120
	River Ganga D/S Raiwala, Dehradun	21	7.21	7.1	1	180
	River Suswa D/S Mathurawala, Dehradun	22	6.88	1.8	37	>1600
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	-	6.98	9.8	<1	80
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	-	7.81	10.2	<1	80
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	-	7.52	9.2	>1	120
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	-	6.85	6.4	1.6	480
	Lal Ta Rao Bridge, Haridwar	-	7.12	10.2	<1	80
Jun-17	River Ganga U/S Lakshmanjhula	18	7.18	10.3	<1	80
	Upper Ganga Canal D/S Harki Pauri Haridwar	-	7.12	9.6	<1	170
	Upper Ganga Canal D/S Roorkee Haridwar	-	7.42	9.4	1	120
	River Ganga D/S Raiwala, Dehradun	24	6.98	8.6	1	210
	River Suswa D/S Mathurawala, Dehradun	26	6.86	2.9	33	>1600
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	-	7.24	10.2	<1	110
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	-	7.26	9.6	<1	150
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	-	7.41	9.3	>1	210
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	-	7.21	9.4	1.2	360
	Lal Ta Rao Bridge, Haridwar	-	7.18	9.4	<1	180
Jul-17	River Bhagirathi B/C Alaknanda Devprayag	19	7.78	9.2	<1	0
	River Alaknanda B/C Bhagirathi Devprayag	19	7.83	9	<1	0
	River Alaknanda A/C Bhagirathi Devprayag	18	7.88	9.4	<1	0
	River Alaknanda B/C Mandakini Rudraprayag	18	7.71	8.6	<1	0
	River Mandakini B/C Alaknanda Rudraprayag	18	7.74	9.2	<1	0
	River Alaknanda A/C Mandakini Rudraprayag	18	7.64	8.8	<1	0
	River Ganga U/S Lakshmanjhula	19	7.45	9.6	<1	60

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/100 ml
	Upper Ganga Canal D/S Harki Pauri Haridwar	19	7.42	9.4	<1	90
	Upper Ganga Canal D/S Roorkee Haridwar	20	7.71	9.2	1	110
	River Ganga D/S Raiwala, Dehradun	20	7.58	8.4	1.2	130
	River Suswa D/S Mathurawala, Dehradun	20	7.66	3.2	32	>1600
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	19	7.58	9.4	<1	80
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	-	7.48	9.4	<1	80
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	20	7.62	9	1	130
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	20	7.67	9.2	1	280
	Lalita Rao Bridge, Haridwar	20	7.52	9	<1	90
	River Yamuna U/S Lakwar Dam Dehradun	19	7.68	9	<1	0
	River Yamuna U/S Dakpather Dehradun	20	7.62	8.6	1	90
Aug-17	River Ganga U/S Lakshmanjhula	24	7.56	9.8	<1	70
	Upper Ganga Canal D/S Harki Pauri Haridwar	-				
	Upper Ganga Canal D/S Roorkee Haridwar	25	8.21	8.8	1	90
	River Ganga D/S Raiwala, Dehradun	25	7.62	8.6	1	110
	River Suswa D/S Mathurawala, Dehradun	25	7.86	2.5	36	>1600
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	24	8.22	9.4	<1	60
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	25	7.84	9	<1	70
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	24	7.87	8.6	1	110
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	24	7.76	8.2	1	220
	Lalita Rao Bridge, Haridwar	24	8.12	8.6	<1	80
Sep-17	River Ganga U/S Lakshmanjhula	24	7.48	9.6	<1	50
	Upper Ganga Canal D/S Harki Pauri Haridwar	24	7.59	8.6	<1	80
	Upper Ganga Canal D/S Roorkee Haridwar	24	7.75	8.4	1	110
	River Ganga D/S Raiwala, Dehradun	24	7.58	8.8	1	90
	River Suswa D/S Mathurawala, Dehradun	25	7.91	2.4	32	>1600
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	24	7.64	8.6	<1	70
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	23	7.62	8.8	<1	80
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	24	7.74	8.2	1	90

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/10 0 ml
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	24	7.46	8	1	170
	Lalita Rao Bridge, Haridwar	24	7.64	8.8	<1	90
Oct-17	River Bhagirathi B/C Alaknanda Devprayag	17	7.74	9.4	<1	Nil
	River Alaknanda B/C Bhagirathi Devprayag	17	7.75	9.4	<1	Nil
	River Alaknanda A/C Bhagirathi Devprayag	17	7.62	9.2	<1	Nil
	River Alaknanda B/C Mandakini Rudraprayag	16	7.72	9.4	<1	Nil
	River Mandakini B/C Alaknanda Rudraprayag	17	7.68	9.2	<1	Nil
	River Alaknanda A/C Mandakini Rudraprayag	17	7.72	9.4	<1	Nil
	River Ganga U/S Lakshmanjhula	18	7.84	9.8	<1	30
	River Ganga D/S Raiwala, Dehradun	19	7.56	9	1	220
	River Suswa D/S Mathurawala, Dehradun	20	7.84	2.2	32	>1600
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	18	7.68	9.2	1	50
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	18	7.54	8.8	1	140
	River Yamuna U/S Lakwar Dam Dehradun	17	7.82	9.2	<1	Nil
	River Yamuna U/S Dakpather Dehradun	18	7.72	9	1	50
Nov-17	River Ganga U/S Lakshmanjhula	16	7.64	9.8	<1	50
	Upper Ganga Canal D/S Harki Pauri Haridwar	16	7.49	8.8	<1	80
	Upper Ganga Canal D/S Roorkee Haridwar	16	7.65	8.4	1	120
	River Ganga D/S Raiwala, Dehradun	16	7.66	9	<1	220
	River Suswa D/S Mathurawala, Dehradun	17	7.21	2.4	34	>1600
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	16	7.62	8.8	<1	70
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	16	7.32	9.2	<1	80
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	16	7.52	9.4	1	60
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	16	7.42	8.9	<1	140
	Lalita Rao Bridge, Haridwar	16	7.52	8.9	<1	80
	River Ganga D/s Rishikesh	15	7.45	8.6	<1	70
Dec-17	River Ganga U/S Lakshmanjhula	16	7.64	9.8	<1	50

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/10 0 ml
	Upper Ganga Canal D/S Harki Pauri Haridwar					
	Upper Ganga Canal D/S Roorkee Haridwar	16	7.65	8.4	1	120
	River Ganga D/S Raiwala, Dehradun	16	7.66	9	<1	220
	River Suswa D/S Mathurawala, Dehradun	17	7.21	2.4	34	>1600
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	16	7.62	8.8	<1	70
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	16	7.32	9.2	<1	80
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	16	7.52	9.4	1	60
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	16	7.42	8.9	<1	140
	Lalita Rao Bridge, Haridwar	16	7.52	8.9	<1	80
Jan-18	River Bhagirathi at Gangotri					
	River Bhagirathi B/C Alaknanda Devprayag	16	7.68	9.6	<1	4
	River Alaknanda B/C Bhagirathi Devprayag	16	7.53	9.4	<1	4
	River Alaknanda A/C Bhagirathi Devprayag	16	7.58	9.4	<1	4
	River Alaknanda B/C Mandakini Rudraprayag	15	7.46	9.4	<1	4
	River Mandakini B/C Alaknanda Rudraprayag	15	7.52	9.6	<1	4
	River Alaknanda A/C Mandakini Rudraprayag	15	7.61	9.2	<1	4
	River Ganga U/S Lakshmanjhula	16	7.38	9.8	<1	4
	Upper Ganga Canal D/S Harki Pauri Haridwar	16	7.89	9.4	<1	4
	Upper Ganga Canal D/S Roorkee Haridwar	16	7.93	9.4	<1	4
	River Ganga D/S Raiwala, Dehradun	16	7.52	9.0	<1	6
	River Suswa D/S Mathurawala, Dehradun	16	7.84	2.8	32	156
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	16	7.95	9.8	<1	4
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	16	7.98	9.8	<1	4
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	16	7.92	9.8	<1	4
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	16	7.76	9.2	1	6
	Lalita Rao Bridge, Haridwar	16	7.91	9	<1	4
	River Yamuna U/S Lakwar Dam Dehradun	16	7.64	9	<1	4
	River Yamuna U/S Dakpather Dehradun	16	7.12	8.8	1	4

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/10 0 ml
Feb-18	River Ganga U/S Lakshmanjhula	16	7.82	10.2	<1	4
	Upper Ganga Canal D/S Harki Pauri Haridwar	16	7.89	9	<1	4
	Upper Ganga Canal D/S Roorkee Haridwar	16	7.87	9.2	1	6
	River Ganga D/S Raiwala, Dehradun	16	7.84	8.8	1	6
	River Suswa D/S Mathurawala, Dehradun	16	7.91	2.2	36	172
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	16	8.15	9.6	<1	4
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	16	7.72	9.2	<1	4
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	16	8.2	9.6	1	6
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	16	7.74	9.0	1	6
	Lalita Rao Bridge, Haridwar	16	7.93	9.2	<1	4
Mar-18	River Ganga U/S Lakshmanjhula	18	7.32	10.4	<1	4
	Upper Ganga Canal D/S Harki Pauri Haridwar	18	7.8	9.8	<1	6
	Upper Ganga Canal D/S Roorkee Haridwar	18	7.69	9.4	1	6
	River Ganga D/S Raiwala, Dehradun	18	7.54	9.4	1	4
	River Suswa D/S Mathurawala, Dehradun	19	7.88	2.4	34	134
	Upper River Ganga Canal at Har-ki-Pauri, Haridwar (Damkoti)	18	7.93	10	<1	4
	Upper Ganga Canal at Har ki Pauri, Haridwar (Rishikul Bridge)	18	7.57	9.6	<1	4
	Ganga U/S Abindugh at Dudhiyabad, Haridwar	18	7.91	9.4	1	4
	(Ganga at Haridwar U/s, Hairdwar)					
	Upper Ganga Canal D/S Balkumari Mandir, Ajeetpur, Haridwar	18	7.69	9.2	1.2	6
	Lalita Rao Bridge, Haridwar	18	7.77	10.2	<1	6

Characteristics of water quality of rivers in Kumaon Region

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/100 ml
Apr-17	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	No discharge				
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	No discharge				
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	No discharge				
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	No discharge				
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	No discharge				
	River Pilkhar after Bilaspur, Udham Singh Nagar	32	8.1	5	3.8	24
	River Nandour U/S Sitarganj, Udham Singh Nagar	No discharge				
	River Nandour D/S Sitarganj, Udham Singh Nagar	No discharge				
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	30	7.6	4.4	10	40
	River Gola, Haldwani	No discharge				
	Nainital Lake, Haldwani	No discharge				
	Bheemtal Lake, Haldwani	No discharge				
	Kalyani River U/S Pantnagar Industrial Area	No discharge				
	Kalyani River D/S Pantnagar Industrial Area	30	7.7	3.2	12.6	44
May-17	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	No discharge				
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	No discharge				
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	No discharge				
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	No discharge				
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	No discharge				
	River Nandour U/S Sitarganj, Udham Singh Nagar	No discharge				
	River Nandour D/S Sitarganj, Udham Singh Nagar	No discharge				
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	28	7.7	4.8	6.6	46
	River Pilkhar after Bilaspur, Udham Singh Nagar	28	8.2	5.2	3.6	30
	River Gola, Haldwani	23	8.1	136	7.8	1.4
	Nainital Lake, Haldwani	19	7.4	196	7.2	1.6
	Bheemtal Lake, Haldwani	18	7.6	120	7.2	1.6
	Kalyani River U/S Pantnagar Industrial Area	No discharge				
	Kalyani River D/S Pantnagar Industrial Area	28	7.6	4.6	7.2	42
June-17	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	26	7.2	6.2	6	32

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/10 0 ml
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	No discharge				
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	28	7.3	0	16	42
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	No discharge				
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	27	6.8	0	52	148
	River Pilkhar after Bilaspur, Udham Singh Nagar	28	8.1	5	3.8	32
	River Nandour U/S Sitarganj, Udham Singh Nagar	No discharge				
	River Nandour D/S Sitarganj, Udham Singh Nagar	No discharge				
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	28	7.7	4.8	6.6	46
	River Gola, Haldwani	21	7.9	122	7.2	1.6
	Nainital Lake, Haldwani	17	7.7	7	1.8	6
	Bheemtal Lake, Haldwani	19	7.8	112	7.4	1.6
	Kalyani River U/S Pantnagar Industrial Area	No discharge				
	Kalyani River D/S Pantnagar Industrial Area	No discharge				
July-17	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	26	7.4	6	2	9.2
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	25	7.2	5.2	8	20
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	25	7.1	3	18	58
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	26	6.95	6.2	6	26
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	26	6.8	0.8	12	80
	River Pilkhar after Bilaspur, Udham Singh Nagar	27	7.6	6	10	48
	River Nandour U/S Sitarganj, Udham Singh Nagar	25	7.7	7.2	5.6	42
	River Nandour D/S Sitarganj, Udham Singh Nagar	25	7.7	5.8	5.2	48
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	26	7.8	4.8	6	44
	River Gola, Haldwani	17	7.8	118	7.4	1..4
	Nainital Lake, Haldwani	14	7.4	168	6.8	1.6
	Bheemtal Lake, Haldwani	15	7.3	104	8.1	1.4
	Kalyani River U/S Pantnagar Industrial Area	26	8	7.2	1.6	16
	Kalyani River D/S Pantnagar Industrial Area	No discharge				
Aug-17	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	27	7.4	6.4	4	12
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	28	7.5	5.8	10	34

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/10 0 ml
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	25.8	7.4	1.8	20	72
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	26.7	7.2	6.4	4	18
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	27	6.8	0	64	230
	River Pilkhar after Bilaspur, Udham Singh Nagar	27	7.7	6	4	20
	River Nandour U/S Sitarganj, Udham Singh Nagar	27	7.2	7.4	2	22
	River Nandour D/S Sitarganj, Udham Singh Nagar	29.8	7.1	6	4.8	28
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	27	7.7	5.2	10	38
	River Gola, Haldwani	11	7.5	7.2	1.6	6
	Nainital Lake, Haldwani	15	7.8	7.4	1.4	4
	Bheemtal Lake, Haldwani	13	7.6	7.6	1.8	6
	Kalyani River U/S Pantnagar Industrial Area	28.8	7.8	7.4	2.8	12
	Kalyani River D/S Pantnagar Industrial Area	28	7.5	4.8	8	32
Sep-17	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	29	7.5	7.2	2	8.2
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	29	7.4	6.2	8	20
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	28	7.2	4	16	56
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	29	7.3	6.6	4.4	16
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	30	7.1	1.2	34	210
	River Pilkhar after Bilaspur, Udham Singh Nagar	29	7.4	5.6	4	22
	River Nandour U/S Sitarganj, Udham Singh Nagar	27	7.3	7.4	3.2	18
	River Nandour D/S Sitarganj, Udham Singh Nagar	29	7.6	6	5.6	26
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	28	7.5	5.4	6	34
	River Gola, Haldwani	15	7.4	118	7.2	1.6
	Nainital Lake, Haldwani	12	7.9	186	7.8	1.2
	Bheemtal Lake, Haldwani	12	7.5	142	8	1.2
	Kalyani River U/S Pantnagar Industrial Area	28	7.6	7.6	2	8.2
	Kalyani River D/S Pantnagar Industrial Area	29	7.5	6	5.2	24
Oct-17	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	24	7.3	7.2	3.2	8
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	25	7.4	5.2	10	38
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	23	7.15	2	18	60

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/10 0 ml
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	24	7.3	6.8	4	18
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	26	7.25	1.2	16	76
	River Pilkhar after Bilaspur, Udham Singh Nagar	24	7.4	5.4	4.2	18
	River Nandour U/S Sitarganj, Udham Singh Nagar	25	7.4	3.8	4.4	28
	River Nandour D/S Sitarganj, Udham Singh Nagar	No discharge				
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	25	7.4	4.6	16	56
	River Gola, Haldwani	12	7.6	126	7.4	1.2
	Nainital Lake, Haldwani	10	7.5	192	7.6	1.4
	Bheemtal Lake, Haldwani	11	7.7	122	7.8	1.4
	Kalyani River U/S Pantnagar Industrial Area	No discharge				
	Kalyani River D/S Pantnagar Industrial Area	No discharge				
Nov-17	Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	20	7.1	7.6	4	14
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	22	7.3	5.8	8	22
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	20	7.5	2.2	20	78
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	20	7.2	7.6	4.2	14
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	23	7.6	0.2	30	96
	River Pilkhar after Bilaspur, Udham Singh Nagar	20	7.5	7.2	2	8
	River Nandour U/S Sitarganj, Udham Singh Nagar	No discharge				
	River Nandour D/S Sitarganj, Udham Singh Nagar	21	7.6	6	8	30
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	19	7.3	4.2	12	30
	River Gola, Haldwani	11	7.4	130	7.6	1.2
	Nainital Lake, Haldwani	10	7.8	198	7.4	1.6
	Bheemtal Lake, Haldwani	10	7.6	118	7.4	1.4
	Kalyani River U/S Pantnagar Industrial Area	No discharge				
	Kalyani River D/S Pantnagar Industrial Area	20	7.4	7	3.6	14
Dec-17	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	17.7	7.8	7.8	2	6.2
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	17.2	7.8	5.8	12	30
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	18.2	6.7	2.6	12	64
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	17	7.9	7.4	6	16.4

Month	Station	Temp. ° C	pH	DO (mg/l)	BOD (mg/l)	Total Colifor MPN/100 ml
Mar-18	River Pilkhar after Bilaspur, Udham Singh Nagar	22.6	7.7	5.8	4.8	42
	River Nandour U/S Sitarganj, Udham Singh Nagar	No discharge				
	River Nandour D/S Sitarganj, Udham Singh Nagar	23	8.1	7.6	8	46
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	20	8.0	4.4	18	66
	River Gola, Haldwani	14	7.7	124	7.4	1.6
	Nainital Lake, Haldwani	11	7.9	260	7.6	1.6
	Bheemtal Lake, Haldwani	12	7.42	122	7.2	1.4
	Kalyani River U/S Pantnagar Industrial Area	27	7.2	8	2.2	16
	Kalyani River D/S Pantnagar Industrial Area	22	7.4	5.2	6	36
	River Kosi, Bazpur Road, Kashipur, Udham Singh Nagar	28	6.8	6.4	6	18
	River Dhella U/S Moradabad Road ,Kashipur, Udham Singh Nagar	28.2	7.3	5.4	8	26
	River Dhella D/S Aliganj Road, Thakurdwara, Udham Singh Nagar	25.5	7.8	2.4	18	60
	River Bhella U/S Ramnagar Road, Kashipur, Udham Singh Nagar	25	7.2	6.2	4.2	16
	River Bhella D/S Lohiya Bridge, Kashipur, Udham Singh Nagar	26.2	7.5	1.2	38	128
	River Pilkhar after Bilaspur, Udham Singh Nagar	27	7.35	3.6	14	80
	River Nandour U/S Sitarganj, Udham Singh Nagar	No discharge				
	River Nandour D/S Sitarganj, Udham Singh Nagar	26	7.7	7.2	2	20
	River Kichha U/S Nagarblla, Kashipur, Udham Singh Nagar	26	7.42	6.6	6	58
	River Gola, Haldwani	15	7.6	122	7.6	1.2
	Nainital Lake, Haldwani	12	8.15	220	7.2	1.6
	Bheemtal Lake, Haldwani	13	7.48	140	7.4	1.4
	Kalyani River U/S Pantnagar Industrial Area					
	Kalyani River D/S Pantnagar Industrial Area	27	6.98	1.8	20	84

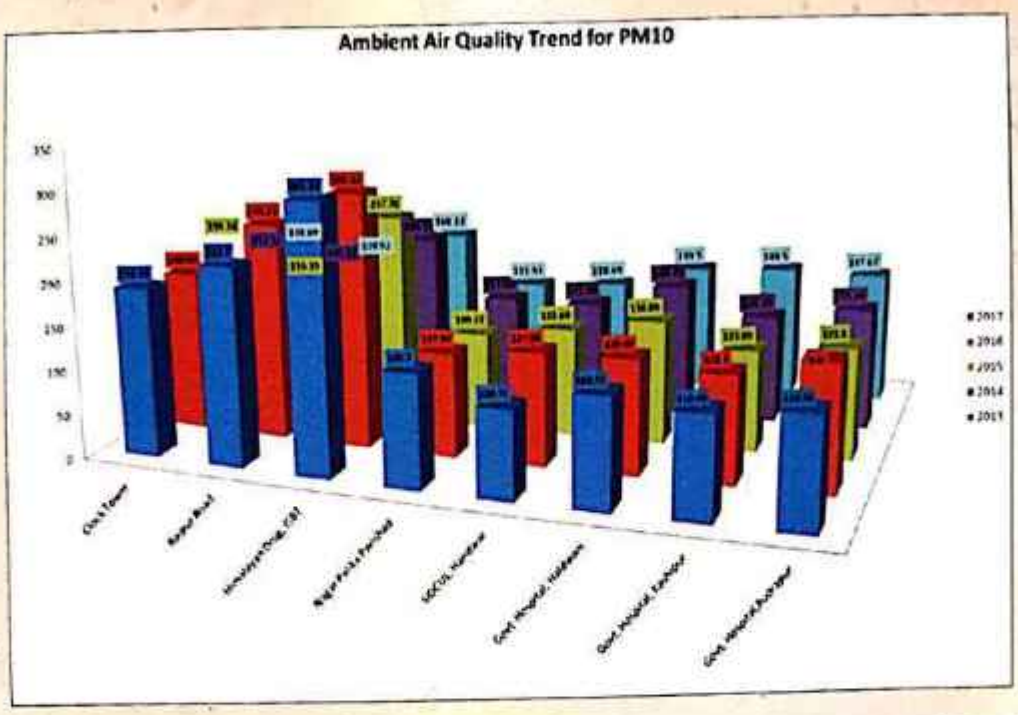
3.2 Air Quality Monitoring Programme

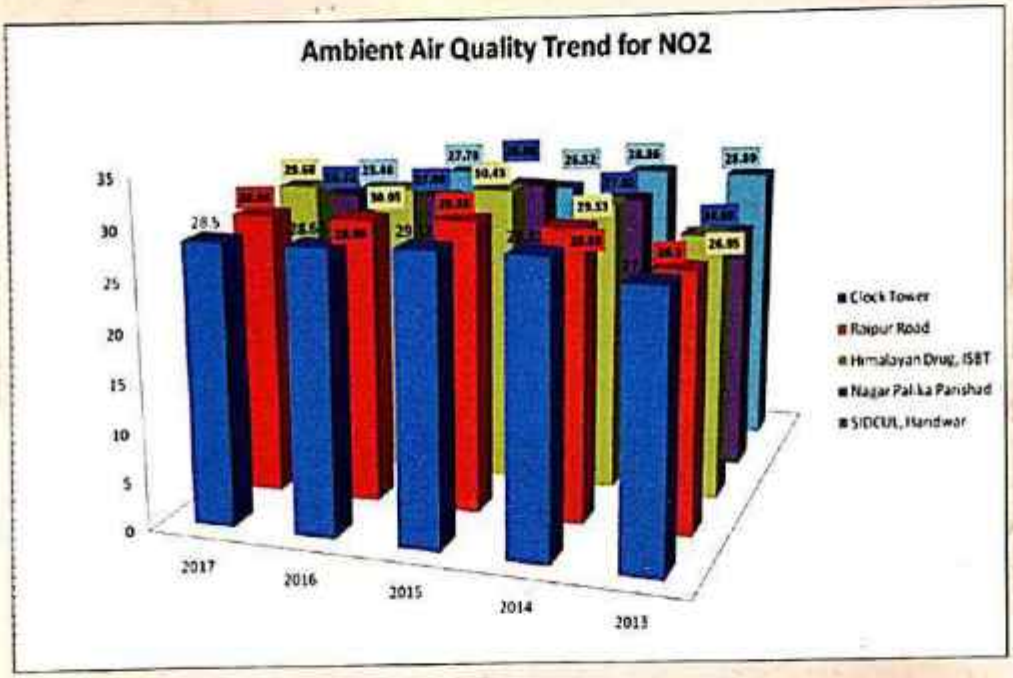
The air pollution may be discribed as deterioration in air quality to such extend that causes deterious effect. The source of air pollution includes vehicles, industries, domestic emissions and natural emission because of the presence of huge amount of air pollution in the ambient air, the health of the peoples is getting adversely affected. It is necessary to assess the anticipated air pollution through regular air quality monitoing programme. The State Board is conducting ambient air quality monitoring at 06 locations of the state in different cities. The status of ambient air quality monitoring is elaborated as following.

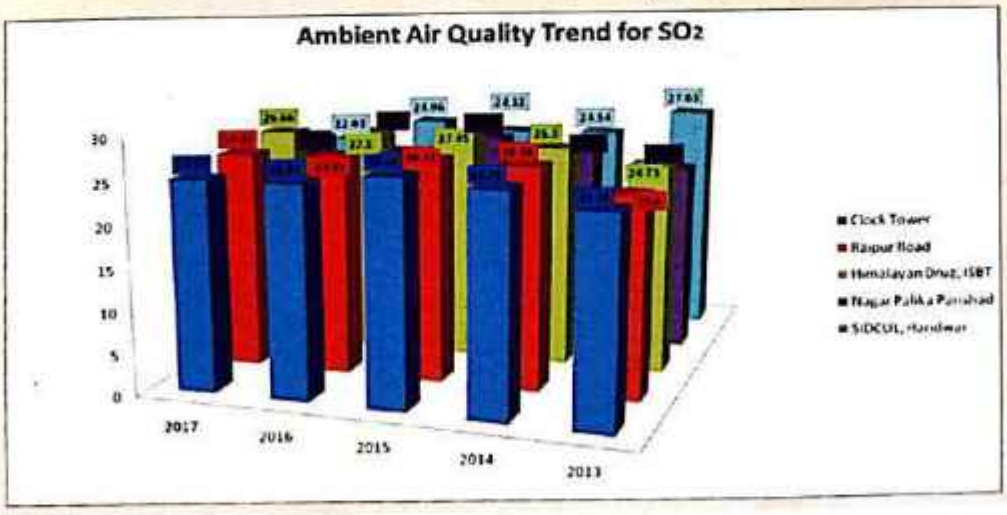
Ambient Air Quality Characterstics

City	Dehradun									Rishikesh			Haridwar			Haldwani		Kashipur	Rudrapur		
Locations	Clock Tower			Raipur Road			Himalayan Drug, ISBT			Nagar Palika Parishad			SIDCUL			Govt. Hospital		Govt. Hospital	Govt. Hospital		
Zone	Commercial			Commercial/Residential			Commercial/Industrial			Commercial			Industrial			Commercial		Sensitive	Sensitive		
Month	P.M.10	SO2	NO2	P.M.10	SO2	NO2	P.M.10	SO2	NO2	P.M.10	SO2	NO2	P.M.10	SO2	NO2	P.M.10	S.P.M.	P.M.10	S.P.M.	P.M.10	S.P.M.
April 17	239.69	26.84	31.11	225.85	28.16	30.67	302.47	27.46	30.67	143.83	23..71	28.2	102.29	21.97	24.7	129.92	219.86	130.35	272.17	143.81	244.26
May 17	230.9	25.24	28.78	297.19	27.47	30.59	321.9	26.92	30.79	157.06	24.65	28	102.98	22.41	25.53	130.68	220.73	124.47	277.61	131.13	237.55
June 17	244.91	25.68	28.68	255.97	26.8	28.43	323.91	27.58	30.22	147.01	23.03	27.49	103.76	22.77	25.98	132.02	226.1	102.76	234.88	116.83	218.42
July 17	170.81	24.85	27.9	156.76	26.08	27.81	187.32	26.63	28.18	139.29	21.98	26.54	85.02	20.76	23.39	118.75	199.29	86.49	176.98	73.21	158.23
Aug 17	120	23.43	28.13	150.93	24.65	28.06	128.9	26.41	28.83	150.53	21.86	26.19	48.7	18.74	23.45	123.43	206.71	71.52	149.43	105.83	196.6
Sept 17	157	24.06	28.02	179.87	24.71	29	330.42	25.58	28.41	142.34	21.46	24.62	71.13	20.87	24.04	69.86	213.83	126.88	141.45	112.18	212.18
Oct 17	178.92	23.11	26.4	332.2	24.68	28.32	333.2	24.84	28.84	112.96	18.32	21.47	117.23	24.95	27.61	139.97	226.37	91.69	188.96	103.03	199.8
Nov 17	194.16	IF	IF	254.25	IF	IF	377.07	IF	IF	112.96	IF	IF				128.56	209.73	128.22	238.03	104.51	200.66
Dec 17	206.31	IF	IF	213.17	IF	IF	375.38	IF	IF	104.22	IF	IF	115.57	IF	IF	131.07	209.95	106.91	193.69	107.76	205.26
Jan 18	198.04	IF	IF	228.18	IF	IF	350.96	IF	IF	102.37	IF	IF	135.15	IF	IF	129.89	206.95	100.45	203.52	108.15	207.3
Feb 18	201.47	IF	IF	192.66	IF	IF	314	IF	IF	119.87	IF	IF	117.4	IF	IF	130.37	213.22	113.54	218.61	107.79	208.81
Mar 18	219.31	IF	IF	188.48	IF	IF	335.45	IF	IF	138.61	IF	IF	114.98	IF	IF	132.27	219.3	100.45	203.52	113.54	218.68
Average	196.79	24.74	28.43	222.96	26.08	28.98	306.75	26.49	29.42	130.92	21.88	26.07	101.29	21.78	24.96	124.73	214.34	106.98	208.24	110.65	208.98

IF Instrument Failure
All values are in (µg/m3)





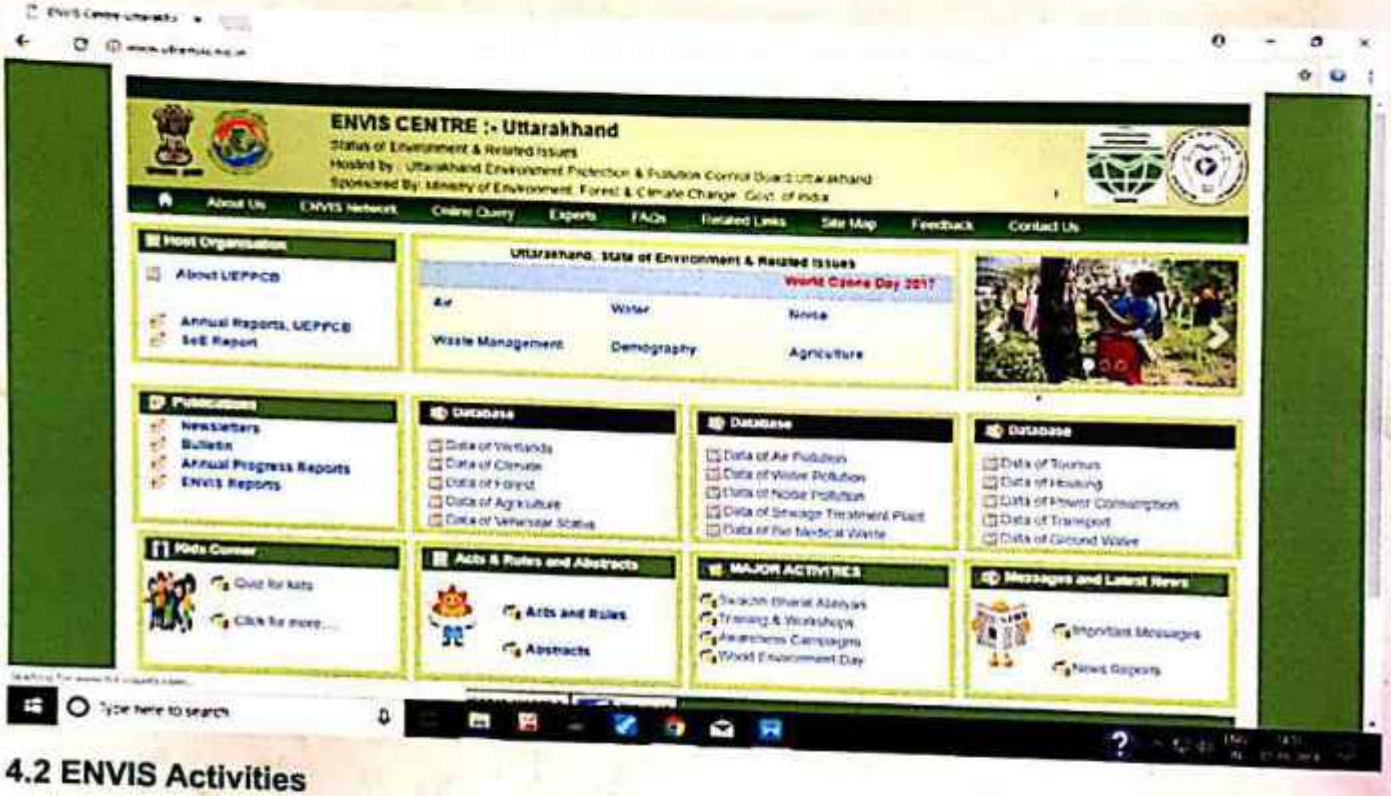


4.0 Environmental Awareness and Public Participation.

4.1 ENVIS (Environment Information System) Centre

ENVIS is a decentralized System with a network of oriented centers for Environmental Information collection, collation, storage, retrieval and dissemination of Environmental Information.

WEBSITE HOMEPAGE



4.2 ENVIS Activities

4.2.1 Swachhta Pakhwada

Various activities were carried on Swachhta Pakhwadas by the ENVIS, Centre Uttarakhand Environment Protection and Pollution Control Board.Drawing, Essay Competition and Craft Exhibition at Rajkiya Poorv Madhyamik Vidhyalaya, Sarkhet.

On 10th June 2017"A Drawing, Essay Competition and Craft Exhibition" was held at Rajkiya Poorv Madyamik Vidhyalaya, Sarkhet. ENVIS Centre in collaboration with Amar Ujala Foundation organized this event. More than 55 students from class 3rd to 12th participated in the event. Various categories were made for the competition and first three winners from each category were awarded with gifts from the ENVIS Centre.

They were also taught how to keep their locality clean and how to dispose waste and meaning of Bio-degradable and non bio-degradable wastes.

Images of 10th June 2017

On 12th June, a wall mural at Raj Plaza near Dilaram Chowk in collaboration with Waste Warriors, Local NGO. ENVIS Staff along-with waste warriors team and five students from Aasra Trust actively participated in the event, and beautified the main boundary wall of Raj Plaza to spread an important message about 'No littering' and promoted a new App on Swachh Bharat Abhiyan in which we can click pictures and upload for the municipality to see and take action.

Images of 12th June 2017

On 13th June, 2017 a waste management setup was installed at Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) by ENVIS along-with Waste Warriors. Education Assistants from Waste Warriors team talked about waste management, waste segregation, and proper waste disposal methods with the staff of the office.

Dr. Ankur Kansal, Environment Engineer, Uttarakhand Environment Protection and Pollution Control Board talked about Waste Management. Four sets of dustbins with three different colors for Recyclable (Green), Non- Recyclable (Red) and Food waste (Blue) were setup in key areas of the office like corridors, canteen, etc. The UEPPCB staff keenly participated in the event.

Images of 13th June 2017

On 14th June, 2017 ENVIS, Uttarakhand Environment Protection and Pollution Control Board and Waste Warriors Society conducted an Awareness Session and Clean-Up Drive in Secretariat Colony, Kedarpuram. The 25 members from the colony participated in the awareness session followed by a Clean-Up Drive along with ENVIS Staff, members of the Waste Warriors staff and 4 volunteers.

Images of 14th June 2017

On 15th June, 2017 the ENVIS, Uttarakhand Environment Protection and Pollution Control Board in collaboration with Waste Warriors society set up a composting enclosure at Bal Vanita Ashram. Education Assistant form Waste Warriors taught the kids how to setup a composting enclosure and told them about benefits of composting. Five sets of dustbins were setup at different locations in the ashram. Along with that, the kids were taught the correct ways of using different colors of dustbins i.e. Red for Non-Recyclable, Green for Recyclable, Blue for Food Waste. The kids showed a keen interest in the event and were happy to learn something new for a better and clean environment.

Images of 15th June 2017

4.2.2 World Ozone Day

ENVIS, Uttarakhand Environment Protection and Pollution Control Board and Ministry of Environment Forests and Climate Change, Regional Office (North-Central Zone) has jointly organized a quiz competition among the different school children of Dehradun on the occasion of World Ozone Day 2017.

The competition was organized on 15th and 16th September 2017 in four different schools. Preferences, was given to organize, the events in Govt. Schools. The event was conducted in two groups, i.e. junior and senior group. The students were given objective type question paper with fifty

Environment related questions. Subsequently, winner students from each group were awarded by mementos and Merit Certificates and Participation Certificates was also given to all the participating students. The students has also helped the ENVIS staff in displaying the banners, sticking posters etc.

Two schools (Govt. Inter College, Khurbura and Phool Chandra Nari Shilp Mandir Inter College, Tagore Villa) are located in centre of the city, while other two (Government Inter College, Maldevta and Government High School, Kotla Santoor) are located at outskirts of city. A distance of more than 80 Kms was covered by the staff for organizing the event in all schools.

The event management detail is as follows:

On 15th September 2017,Environment Quiz was conducted at Govt. Inter College, Khurbura, Dehradun, wherein 40 students from junior and senior classes have participated in the quiz.

During question hour, children were asked questions about recycling of waste by the jury teams, students have replied satisfactorily, the jury had asked for examples, how to reduce waste. ENVIS Staff and School Officials had also discussed about, how the waste can be reduced at source and recycled for other products.

On **16th September 2017Environment Quiz Competition** organised at Government Inter College, Maldevta, Dehradun, the school is located at outskirt of city and bounded by dense forest and hilly stops. The school campus is full of green areas. The ENVIS Staff has shared the options of recycle of the waste collected in the school with school staff. ENVIS Staff has also assured to provide the technical assistance to school staff for adoption of composting facility in the school premises. Total 41 students from junior and senior classes participated in the quiz competition.

On **16th September 2017Environment Quiz Competition** was organised at Phool Chandra Nari Shilp Mandir Inter College, Tagore Villa, Dehradun. Total 40 girl students from junior and senior classes participated in the quiz competition.

On **16th September 2017Environment Quiz Competition** was organised at Government High School, Kotla Santoor, Dehradun. This school is a Junior High School level, so competition was organised for one group only i.e. Junior Group. Total 20 students participated in the quiz. Since, the day was Saturday and the school has fixed the day for cleanliness day. During visit to the school all students were found engaged in cleanliness drive. Principal and all teaching staff were found helping the children in the cleaning activity. Even after so busy schedule of cleanliness activity the children had participated in the quiz competition. The students answered all the questions asked by the jury and also explained how to reduce waste at source. ENVIS Staff and School Officials had also discussed on the issue of waste reduction and recycling.

4.2.3 Swachhta hi Sewa

ENVIS, Uttarakhand Environment Protection and Pollution Control Board and Ministry of Environment Forests and Climate Change, Regional Office (North-Central Zone) jointly organized a cleanliness drive and sanitation pledge at Government Inter College, Khurbura, Dehradun under

SWACHHTA HI SEWA on 27.09.2017 as per direction of Ministry of Environment, Forests and Climate Change, New Delhi. Five Officials from Uttarakhand Environment Protection and Pollution Control Board and four Officials from Ministry of Environment Forests & Climate Change, Regional Office (North Central Zone) were present in the event. School Children and Staff has performed the cleanliness drive in the school premise followed by a sanitation pledge for caring our environment. Sh. S.C. Garkoti, Scientist 'F', Ministry of Environment, Forests and Climate Change, New Delhi has highlighted on the issue of waste management and means of reducing waste. Principal Sh. Satish Chandra Kothiyal has also addressed to the children about Clean Ganga and Swachhta Hi Sewa. Uttarakhand Environment Protection and Pollution Control Board has distributed Cloth Bags (Jhola) to all the School Staff with the request not to use plastic carry bags.

Cleanliness Drive in School Campus

Sanitataion Pledge

Distribution of Cloth Bags

5.0 Environmental Standards including time schedule for their enforcement.

5.1 Hazardous Waste (Management, Handling & Transboundry Movement) Rules 2016

The Ministry of Environment & Forest, Govt. of India has promulgated the Hazardous and other waste (Management and Transboundry Moment) Rules, 2016. According to the rulesthe duties of the various authorisation are as follows :

S.No.	Authority	Corresponding Duties
1	Ministry of Environment and Forests under the Environment(Protection) Act, 1986	i. Identification of hazardous wastes ii. Permission to exporters of hazardous wastes iii. Permission to importers of hazardous wastes iv. Permission for transit of hazardous wastes through India v. Sponsoring of training and Awareness programme on Hazardous Waste Management related activities
2	Central Pollution Control Board constituted under the Water (Prevention and Control of Pollution) Act, 1974	i. Co-ordination of activities of State Pollution control Boards/Committees ii. Conduct training courses for authorities dealing with management of hazardous wastes iii. Recommend standards and specifications for treatment and disposal of wastes and leachates Recommend procedures for characterization of hazardous wastes iv. Sector specific documentation to identify waste for inclusion in Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules, 2008. v. Prepare guidelines to prevent/reduce/minimize the generation and handling of hazardous wastes vi. Registration and renewal of registration of Recylers/ Reprocessors vii. Any other function under Rules delegated by the Ministry of Environment & Forests
3	State Government/UnionTerritory Government/ Administration	i. Identification of site(s) for common Hazardous Waste Treatment Storage and Disposal Facility (TSDF) ii. Assess EIA reports and convey the decision of approval of site or otherwise iii. Acquire the site or inform operator of facility or occupier or association of occupiers to acquire the site iv. Notification of sites v. Publish periodically an inventory of all disposal sites in the State/Union Territory

S.No.	Authority	Corresponding Duties
4	State Pollution Control Boardsor Pollution Control Committees constituted under the Water (Prevention and Control of Pollution) Act, 1974	i. Inventorisation of hazardous wastes ii. Grant and renewal of authorization iii. Monitoring of compliance of various provisions and conditions of authorization including conditions of permission for issued by MoEF exports and imports iv. Examining the applications for imports submitted by the importers and forwarding the same to Ministry of Environment and Forests v. Implementation of programmes to prevent/reduce/minimize the generation of hazardous wastes vi. Action against violations of Hazardous Waste (Management, Handling and Trans boundary Movement)Rules, 2008 vii. Any other function under these Rules assigned by MoEF from time to time.
5	Directorate General of ForeignTrade constituted under the Foreign Trade (Development and Regulation) Act, 1992	i. Grant of licence for import of hazardous wastes ii. Refusal of licence for hazardous wastes prohibited for imports and export
6	Port Authority under Indian Ports Act, 1908 (15 of 1908) and Customs Authority under the Customs Act, 1962 (52 of 1962)	i. Verify the documents ii. Inform the Ministry of Environment and Forests of any illegal traffic iii. Analyse wastes permitted for imports and exports iv. Train officials on the provisions of the (Management, Handling and Trans boundary Movement) Rules, 2008 and in the analysis of hazardous wastes v. Take action against exporter/importer for violations under the Indian Ports Act, 1908/Customs Act, 1962

5.2 Status of Hazardous Waste Management

Hazardous Waste means any waste which by reason of characterstics such as physical, chemical biological, reactive toxic, flammable, explosive or corrosive causes danger or is likely to cause danger to health or environment, wheter alone or in contact with oher waste or substances and shall include:

1. Waste specified under column (3) of Schedule I
2. Waste having equal to or more than the concentration limit specified for the constituents in class 'Á'and class 'B' of Schedule II, and
3. Waste specified in part 'A' of Schedule III in respect of import or export of such hazardous wastes or the wastes not specified in part 'A' but exhibits hazard charecterstics specified in part 'C' of Schedule III. Hazardous Waste Management Rules, are notified to ensure safe handling, generation, processing, treatment, transportation and reuse and recycling.

S.No.	Name of District	Number of HW Generating Industry	Quantity Disposed in Captive SLF (MT	Quantity Disposed through Common SLF at TSDF (MT)	Quantity Disposed by Captive Incinerator (MT)	Quantity Disposed by Captive Incinerator at TSDF (MT)	Quantity Co-processes in cement klin (MT	Quantity sent to Recyclers of Schedule-IV Hazardous Wastes (MT)
1	Udham Singh Nagar	953	0.00	1332.85	122.37	2522.44	759.64	7497.49
2	Hardiwar	2141	102.44	2317.01	40.53	1009.25	162.42	2332.54
3	Nainital	165	0.00	1.72	0.00	0.00	0.00	0.00
4	Almora	49	0.00	0.00	0.00	0.00	0.00	0.00
5	Bageshwar	20	0.00	0.00	0.00	0.00	0.00	0.00
6	Pithoragarh	8	0.00	0.00	0.00	0.00	0.00	0.00
7	Champawat	12	0.00	0.00	0.00	0.00	0.00	0.00
8	Dehradun	150	0.00	207.41	0.00	67.93	0.00	12.39
9	Pauri	82	0.00	1.37	0.00	0.98	0.00	1.42
10	Tehri	44	0.00	0.00	0.00	0.00	0.00	13.43
11	Chamoli	20	0.00	0.00	0.00	0.00	0.00	3.60
12	Rudraprayag	11	0.00	0.00	0.00	0.00	0.00	0.00
13	Uttarkashi	16	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**3671**	**102.44**	**3860.36**	**162.90**	**3600.60**	**922.06**	**9860.87**

The total quantum, of Hazardous Waste generated in the state istpa out of which tons are suitable for Recyclable, tons are suitable for incineration and tons are suitable for secure land disposal.

In order to manage the hazardous waste in the State M/s Bharat Oil & Waste Management Ltd., has developed the Common Hazardous Waste Treatment Store & Disposal Facility at Haridwar district. The landfill site is designed at the capacity of 6.0 lac tons of hazardous waste for 30 years life time period. The incinerator installed is of 12000 ton per annum capacity.

5.3 Municipal Solid Waste Management

Government of India has launched an ambitious Swatch Bharat Mission which undertakes to make India a clean country by 02nd October, 2019 when the country shall be celebrating the 150th birth anniversary of Father of Nation Shr. Mahatma Gandhi. The main objectieve of this mission too is to ensure personal and community hygiene focusing on the scientific management and disposal of municipal solid waste.

The state of Uttarakhand, also referred as "Dev Bhumi" was formed on 9th November, 2000 as the 27th state of the India. It was also the year when Municipal Solid Waste (Management and Handling) Rules, 2000 was implemented. Dedicated solid waste management (SWM) projects were initiated in four towns of Uttarakhand I.e. Dehradun, Haridwar, Haldwani and Nainital in 2005-06 and currently these projects are in various stage of completion. However, the needs of integrated SWM plan for the other ULBs have been long felt in the State of Uttarakhand.

Total Area of the Uttarakhand State 53484 Km^2	
Total Population as per Census 2011	1.086 Crore
Population as per Census 2011	33.0 Lacs
Total Urban Population	Urban 30.3%
	Rural 69.7%
Population Density	189 person/Km^2
Total Forest Area	Approx. 34,651 Km^2 (64%)
Total Revenue Land	Approx. 6.33 Lac Hac. (11.1%)
Total Agriculture Land	Approx. 13.37 Lac Hac. (23.6%)
Urban Development & Infrastructure	Approx. 2.17 Lac he. (3.8%)
Floating Population	200 to 300 Lac/Year (A per MoT, 2010)
Total No. Of ULBs including 18 newly formed	81+3 (Proposed)
Nagar Nigam	06
Nagar Palika Parishad	31+1 (Proposed)
Nagar Panchayat	44+2 (Proposed)
Total No. Of ULBs in Plains Region	40 (47%)
Total No. Of ULBs in Hilly Region	44 (53%)

The Uttarakhand State 93% area is mountains and recorded forest area is covering 65% of the total land. The remaining 35% land fallls under urban land cover in which all infrastructural, urban and industrial development are being planned. Thus to identify a suitable land for Municipal Solid Waste Management in compliance with the said rules is challenging for the Urban Local Bodies of Uttarakhand. The most of the available land portions for establishing Municipal Solid Waste Managemet Facility are along streams banks or river banks or near tributaries where pollution and contamination risk are high.

In Uttarakhand state there are total 81 urban local bodies and five cantonment boards. The 13 nos. district magistrates have been informed about the requirement of the land in their concerned ULBs and have thus been directed to identify and help the ULBs to get one suitable land either of forest or

revenue, if not available with the concerned local body. Direction from principal Secretary, Urban have been issued to all the District Magistrate and many of them have even compiled with the directions. Though many of the ULBs have compiled with the directions but the land indentified by them, is either Forest or Revenue, and thus is pending to get transferred. altogether over 50 ULBs are yet to identify suitable site for MSW processing facility.

Uttarakhand States which is having combined rural and urban population over crores have its municipal solid waste management system in a state. State is generating approximately. 3000 metric tons of muncipal solid waste every day of which only 40-50 % is being managed and remaihing is disposed of through unscientific traditional means. In Uttarakhand municipal waste generation is estimated to accelerate to approx. 9500 tons per day by 2040, resulting in an estimated total of 9.0 Million tons of municipal waste being generated during 2014-41, thus solutions are needed urgently. (Source: Urban Municipal Waste Management Action Plan for State of Uttarkhand.) There are two scientific sanction landfill sites each at Dehradun and Haridwar are operation and are having land disposal facility and composting facilities.

The town wise current and projected waste generation details are as follows:

Name of the ULB	Population 2017 (Survey)	MSW Status (MTPD)*
Nagar Palika Gauchar	9290	10.9
Nagar Palika Nandprayag	1953	2.8
Nagar Palika Karanprayag	9480	10.2
Nagar Palika Parishad Chamoli- Gopeshwar	25733	12.8
Nagar Palika Parishad Joshimath	19367	9.8
Nagar Palika Badrinath	3527	3.0
Nagar Palika Pokhari (new)	6666	3.3
Nagar Palika Gairsain (new)	9185	4.5
Nagar Nigam Dehradun	700563	327.9
Nagar Palika Parishad Vikasnagar	15310	7.7
Nagar Palika Parishad Mussoorie	30797	19.3
Nagar Palika Herbertpur	10610	6.1
Nagar Palika Parishad Rishikesh	86308	41.4
Nagar Palika Doiwala	9227	4.5
Nagar Palika Parishad Shivalik Nagar (New)	18345	8.9
Nagar Nigam Haridwar	269635	236.5
Nagar Nigam Roorkee	131686	79.3
Nagar Palika Parshad Mangalore	56174	27.4
Nagar Palika Jhebrera	11857	5.8
Nagar Palika Laksar	23066	11.2
Nagar Palika Landhora	19472	9.5
Nagar Palika Bhagwanpur (New)	18342	8.9
Nagar Palika Parishad Pauri	28537	21.5
Nagar Palika Parishad Kotdwara	35530	23.8
Nagar Palika Parishad Srinagar	21296	14.8
Nagar Palika Satpulli (New)	4480	2.2
Nagar Palika Parishad Dogadda	2568	1.3
Nagar Palika Swargashram Jauk (New)	4949	3.3
Nagar Palika Parishad Rudraprayag	10450	5.0
Nagar Palika Sri Kedarnath	834	4.9
Nagar Palika Ukhimath (New)	3095	1.5
Nagar Palika Augustmuni (New)	7809	3.8

Name of the ULB	Population 2017 (Survey)	MSW Status (MTPD)*
Nagar Palika Parishad Muni-Ki-Reti	31509	18.7
Nagar Palika Parishad Narendra Nagar	6549	3.3
Nagar Palika Chamba	8237	4.9
Nagar Palika Parishad New Tehri	25453	16.0
Nagar Palika Ghansali (New)	8242	4.0
Nagar Palika Kirti Nagar	1608	2.6
Nagar Palika Dev Prayag	2983	1.5
Nagar Palika Barkot	7123	3.5
Nagar Palika Gangotri	1514	1.6
Nagar Palika Chinyalisaur (New)	9375	4.6
Nagar Palika Parishad Uttarkashi	18529	9.0
Nagar Palika Nauvgaon (New)	4108	2.0
Nagar Palika Purola (New)	5624	2.7
Nagar Palika Dwarahat	2914	2.3
Nagar Palika Parishad Almora	36736	22.3
Nagar Palika Chaukutiya (New)	5084	2.5
Nagar Palika Parishad Bageshwar	9624	5.6
Nagar Palika Kap Koth (New)	5687	2.8
Nagar Palika Parishad Champawat	13799	6.8
Nagar Palika Lohaghat	8402	4.1
Nagar Palika Parishad Tanakpur	18679	9.1
Nagar Palika Banbasa (New)	8469	4.1
Nagar Palika Parishad Nainital	42244	25.9
Nangar Nigam Haldwani	181632	88.5
Nagar Palika Lalkuan	8103	3.9
Nagar Palika Bhimtal	8185	4.9
Nagar Palika Parishad Ramnagar	64353	39.2
Nagar Palika Parishad Bhowali	6686	4.1
Nagar Palika Kaladhungi	8068	4.8
Nagar Palika Didihat	6913	4.3
Nagar Palika Parishad Pithoragarh	71442	34.9
Nagar Palika Parishad Dharchula	7461	4.5
Nagar Palika Beri Naag (New)	8099	4.8
Nagar Palika Gangolihaat (New)	7539	4.6
Nagar Palika Parishad Munisyari (New)	3837	2.8
Nagar Nigam Kiccha	55225	25.9
Nagar Nigam Rudrapur	204552	99.2
Nagar Palika Parishad Kashipur	143900	71.6
Nagar Palika Parishad Jaspur	57980	29.7
Nagar Palika Mahuadhabra	7766	4.7
Nagar Palika Parishad Bazpur	27044	13.2
Nagar Palika Parishad Khatima	17097	8.7
Nagar Palika Shaktigarh	6495	5.0
Nagar Palika Mahuakheraganj	15672	7.9
Nagar Palika Kelakhera	11373	6.2
Nagar Palika Parishad Sitarganj	21673	11.1
Nagar Palika Dineshpur	13806	6.2
Nagar Palika Sultanpur Patti	10229	6.9
Nagar Palika Parishad Gaddarpur	20446	10.0

The composition of solid waste and their characteristics (% by weight) is as follows:

S.No.	1	2	3	4	5	6	7	8
Town	Nainital	Pauri	Tehri	Uttarkashi	Rudraprayag	Bageshwar	Chamoli	Kashipur
Compostition								
Kitchen Waste%	3.15	2.92	7.45	4.94	7.46	3.24	9.97	3.14
Paper%	39.22	36.29	17.74	5.23	18.64	40.34	26.22	39.04
Textile%	6.14	5.68	14.53	9.62	8.56	6.32	6.34	6.11
Grass & Wood%	12.02	11.12	18.53	18.84	10.22	12.36	25.66	11.96
Compostable%	60.53	56.01	58.26	38.62	44.88	62.26	68.19	60.25
Plastic%	17	15.73	14.52	26.64	28.37	15.03	2.11	16.92
Others< 10mm%	4.39	7.18	10.24	6.57	2.25	4.52	13.01	4.37
Glass%	9.04	10.85	8.44	14	12.18	9	11.55	9
Ceramic & Stone%	1	1.93	2.02	1.57	1.51	1.03	3.14	1.1
Metal%	8.04	8.3	6.52	12.6	10.81	8.16	2	8.36
Moisture Content%	30.87	41.36	5.28	35.32	47.23	48.69	59.26	32
Calorific value Kcal/Kg	1432.55	1421.02	1512.36	2001.52	1006.31	1054.22	741.26	1081.18
pH	6.2	6.6	6.3	7.1	6.7	6.9	6.2	7.1
Organic Carbon%	39.1	31.36	16.75	26.22	35.21	81.88	36.01	32.44
Nitrogen%	0.93	1.38	1.24	0.77	2.56	0.60	0.79	1.09
Phosphate% as P2O5	0.61	0.78	0.36	0.85	0.72	0.68	0.65	0.66
Potash% as K2O	0.51	0.42	1.04	1.00	0.77	0.79	1.02	0.54
C/N Ratio	42.0	22.7	13.5	34.1	13.8	136.5	45.6	29.8
Volatile Matter%	38.02	49.52	29.51	18.65	52.99	34.04	26.67	44.2
Total Sulphur%	0.36	0.32	0.41	0.22	0.20	0.16	0.44	0.28
Total Chloride%	0.19	0.32	0.31	0.25	0.21	0.27	0.24	0.38
COD mg/L (from leach ate)	1213	1121	769	961	1124	1104	831	623
Total chromium (mg/kg)	0.36	0.45	0.88	0.25	0.56	0.84	0.71	0.63
Total Copper (mg/kg)	0.56	0.12	0.57	0.81	0.98	0.93	0.74	0.07
Total Lead (mg/kg)	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Mercury (mg/kg)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Total Nickel (mg/kg)	0.23	0.08	<0.01	<0.01	0.06	0.09	0.18	<0.01
Total Zinc (mg/kg)	6.8	11.34	3.01	16.88	2.22	4.24	6.66	8.37

Source : Sampling conducted

5.4 Biomedical Waste Management

The Uttarakhand health systems constitute a larger network of health care facilities based on three-tier system. The objective of the system is to reduce diseases burden through preventive and curative health services and also to work on other indirect health determinant like water and sanitation, health education etc.

The National Health Mission(NHM) acts as convergence medium for departments of medical and health care with the departments of national programs at state and district level.

The Uttarakhand state health system falls under state ministry of health and family welfare, which is further headed by principal health secretary (PHS). State health system is divided into four department's i.e.

Directorate of Medical and Health is responsible to regulate administration and medical education. It looks after the affairs related to drugs & logistics, medical treatment, mobile health components, public private partnership (PPP) communicable and non-communicable disease, IDSP, birth and death registration system.

Director of national programme is responsible to regulate all national health programmers through its corresponding departments, including RNTCP, National vector Borne Disease Control Programme, RCH-II, universal Immunization programme, Leprosy, and Blindness control, HIV/AIDS, NACP ARSH, prevention and control of Non Communicable Disease, National Mental Health Programme, Menstrual Hygiene etc. The department is also responsible to generate awareness through IEC and to map implementation progress.

As per Bio-medical Waste Management Rules, 2016 suggested coverage area of development of a CBWTF is as follows:

Considering the economic viability and feasibility and to have minimal impacts on the environment, in any area, only one CBWTF may be allowed to cater only up to 10,000 beds, at the approved rate by the Prescribed Authority.

A CBWTDF shall be allowed to cater healthcare units with 10,000 beds situated at a radial distance of 75KM. However, in an area where 10,000 beds are not available within a radial distance of 74KM, existing CBWTF in the locality may be allowed to cater the healthcare units situated outside the said 75KM radius, provided if there is no facility in the next 75KM radial distance.

In case, number of beds is exceeding>10,000 beds in a locality, in such a case, new CBWTF may be allowed in such locality in compliance to various provision notified under the E (P) Act, 1986 to cater services only to such additional bed strength of the HCFs, without hampering the economic viability of the existing CBWTF in operation in that area.

In case of Hilly States, considering the geography, only one CBWTDF with adequate treatment capacity may be developed in each district to cater treatment services to the HCFs located in the respective District, as per the treatment charge to be prescribed in consultation with CPCB by the respective SPCB/PCC.

There are two CBWTF's along with disposal facility exist in the state.

The hospitals located in foothills of Garhwal area and Kumaun areas are utilizing the facility of M/S Medical Pollution Control Committee at Manadvar in Haridwar district. This facility has incinerator along with deep burrial facility. Second facility is located in Udham Singh Nagar of M/s Global BMW Services, which also has deep burrial and incinerator of 100kg/hr capacity. In the hills state, Government Order(GO) dated March 10th, 2006 is being followed for captive treatment of waste (deep burial) option for Biomedical Waste. The Regional Office wise health care facilities and quantum of bio medical waste generation is as follows :

S.No.	Regional Office	No of Health Care Facilities	Quantity of Bio Medical Waste generated Kg/d
1	Regional Office, Dehradun	434	1392
2	Regional Office, Roorkee	187	468
3	Regional Office, Kashipur	145	315
4	Regional Office, Haldwani	103	717

5.5 Plastic Waste Management

In order to regulate the manufacturer, sale , distribution and use of recycled plastic carry bags and recycle plastic containers, Govt. of India has promulgated the " Plastic Waste Management Rules 2016. The type of plastic container, its uses and types of regin used for its manufacturing is as follows:

Items	Shape	Use and Contents	Type of Resin	
Bottles and tubes	Beverage bottles, Soft drinks	Juice, cola, drinking water, tea, alcoholic beverages	PET	
	Lactic acid beverages	Yogurt	Polystyrene	
	Food and condiment bottles	Tempura and salad oil, soy sauce, mirin, sauce	PET, Polyethylene, polypropylene	
	Condiment tubes	Mayonnaise, Ketchup, dressings, wasabi and mustard paste	Polyethylene, polypropylene	
	Bottles and tubes for daily necessities	Toiletries, gardening supplies, car supplies, liquid detergent, fabric softener, toothpaste, cosmetics, shampoo, hair conditioner, bleach, body shampoo	PET, composite materials, polyethylene, polypropylene	
Packs and cups	Food packs (EPS and non EPS packs)	Margarine, tofu, natto, fruit, vegetables, processed foods, prepared foods, packed lunches	EPS	Polystyrene
			Non-EPS	Polystyrene, polypropylene, PET
	Food cups (EPS and Non EPS cups)	Miso, steamed egg custard, miso soup, yogurt, ramen, yakisoba, jelly, custard pudding, desserts, food cups	EPS	Polystyrene
			Non-EPS	Polystyrene, polyethylene, PET, polypropylene
	Cup and pack lids		Polystyrene, PET, polypropylene, polyethylene	
Trays and blister packs	(ESP and non ESP trays)	Meat, fish, sashimi, sliced ham, vegetables, processed foods	EPS	Polystyrene
			Non-EPS	Polystyrene, polypropylene, PET
	Blister packs	Drugs (tablets), processed meat and fish products, roast ham, bacon, curry roux, household tools, toothbrushes, cosmetics	Polyethylene, polypropylene, PET, polystyrene, PVC resin	
	Egg boxes		PET, polystyrene	
	Large, medium and plain bags	Rice, gardening bags, fish, fruit, confectionery, frozen foods, ramen, vacuum packed foods, pickles, food boiled in soy, miso, bread, dried fish, cleaning	Polyethylene, polypropylene	

	Carrier bags		Polyethylene
	Rubbish bags		Polyethylene
	Small bags	Quail's eggs, ginger, pickles, condiments, ramen stock, Japanese confectionery, candy, wafers, chocolate	Polypropylene, polyethylene, composite material
Caps and stoppers		Beverages, foods, daily necessities, other plastic bottles	Polypropylene, polyethylene, Polypropylene, polyethylene
Cellophane and film	Cellophane		Polyvinyl chloride resin, PVC resin, polyethylene
	Film	Tofu, curry roux, plastic food decorations, Japanese confectionery, cheese, frozen foods, cod roe, sausages, frozen noodles	Polypropylene, polyethylene, composite material
	Labels	Bottles, caps	Polystyrene, polyethylene, PET, polypropylene
Boxes and cases		Detergent boxes and lids, foods, underwear, powder compacts, lotion cases, dehumidifiers, deodorizers	Polypropylene, polystyrene, polyethylene, PVC resin,
Protection and fixing		Urethane sponge, foam products, nets, air caps	Polystyrene, polyethylene
Others		Baskets, handles, multipacks, sieves, replanting pots	Polyethylene, PET, polypropylene, PVC resin, polystyrene

It is to mention that no authentic estimation is available on total generation of plastic waste in the country however, considering 70% of total plastic consumption is discarded as waste, thus approximately 5.6 million tons per annum (TPA) of plastic waste is generated in country, which is about 15342 tons per day (TPD).

Quantum of Plastic Waste in the State of Uttarakhand

The quantification of plastic waste generation in the state of Uttarakhand is estimated based on assumption of 17% average of composition of the solid waste generation is as follows:

S.N.	Name of the ULB	Population Census 2011	Population 2017 (Survey)	MSW Status (TPD)* At Present 2017	Quantum Detail of Plastic Waste based on assumption of 17% avg. Composition of MSW based on Survey (TPD)* At Present 2017
1	Nagar Palika Gauchar	7955	9290	10.9	1.85
2	Nagar Palika Nandprayag	1641	1953	2.8	0.48
3	Nagar Palika Karanprayag	8283	9480	10.2	1.73
4	Nagar Palika Parishad Chamoli Gopeshwar*	21447	25733	12.8	2.18
5	Nagar Palika Parishad Joshimath	16709	19367	9.8	1.67
6	Nagar Palika Badrinath	2307	3527	3.0	0.51
7	Nagar Palika Pokhari (new)	6119	6666	3.3	0.56
8	Nagar Palika Gairsain (new)	8665	9185	4.5	0.77

S.N.	Name of the ULB	Population Census 2011	Population 2017 (Survey)	MSW Status (TPD)* At Present 2017	Quantum Detail of Plastic Waste based on assumption of 17% avg. Composition of MSW based on Survey (TPD)* At Present 2017
9	Nagar Nigam Dehradun	583679	700563	327.9	55.74
10	Nagar Palika Parishad Vikasnagar	13927	15310	7.7	1.31
11	Nagar Palika Parishad Mussoorie	28897	30797	19.3	3.28
12	Nagar Palika Herbertpur	9771	10610	6.1	1.04
13	Nagar Palika Parishad Rishikesh	70499	86308	41.4	7.04
14	Nagar Palika Doiwala	8705	9227	4.5	0.77
15	Nagar Palika Parishad Shivalik Nagar (new)	17307	18345	8.9	1.51
16	Nagar Nigam Haridwar	231139	269635	236.5	40.21
17	Nagar Nigam Roorkee	118188	131686	79.3	13.48
18	Nagar Palika Parishad Mangalore	52994	56174	27.4	4.66
19	Nagar Palika Jhabrera	11186	11857	5.8	0.99
20	Nagar Palika Laksar	21760	23066	11.2	1.90
21	Nagar Palika Landhora	18370	19472	9.5	1.62
22	Nagar Palika Bhagwanpur (new)	17304	18342	8.9	1.51
23	Nagar Palika Parishad Pauri	25440	28537	21.5	3.66
24	Nagar Palika Parishad Kotdwara	33031	35530	23.8	4.05
25	Nagar Palika Parishad Srinagar	20091	21296	14.8	2.52
26	Nagar Palika Satpuli (New)	4226	4480	2.2	0.37
27	Nagar Palika Parishad Dogadda	2423	2568	1.3	0.22
28	Nagar Palika Swargashram Jauk (New)	4669	4949	3.3	0.56
29	Nagar Palika Parishad Rudraprayag	9313	10450	5.0	0.85
30	Nagar Palika Sri Kedarnath	612	834	4.9	0.83
31	Nagar Palika Ukhimath (New)	2920	3095	1.5	0.26
32	Nagar Palika Augustmuni (New)	7367	7809	3.8	0.65
33	Nagar Palika Parishad Muni-ki-Reti	28636	31509	18.7	3.18
34	Nagar Palika Parishad Narendra Nagar	6034	6549	3.3	0.56
35	Nagar Palika Chamba	7771	8237	4.9	0.83
36	Nagar Palika Parishad New Tehri	24012	25453	16.0	2.72
37	Nagar Palika Ghansali (New)	7775	8242	4.0	0.68
38	Nagar Palika Kirti Nagar	1517	1608	2.6	0.44
39	Nagar Palika Dev Prayag	2868	2983	1.5	0.26
40	Nagar Palika Barkot	6720	7123	3.5	0.60
41	Nagar Palika Gangotri	1100	1514	1.6	0.27
42	Nagar Palika Chinyalisaur (New)	8844	9375	4.6	0.78
43	Nagar Palika Parishad Uttarkashi	17480	18529	9.0	1.53
44	Nagar Palika Nauvgaon (New)	3875	4108	2.0	0.34
45	Nagar Palika Purola (New)	5306	5624	2.7	0.46
46	Nagar Palika Dwarhat	2749	2914	2.3	0.39

S.N.	Name of the ULB	Population Census 2011	Population 2017 (Survey)	MSW Status (TPD)* At Present 2017	Quantum Detail of Plastic Waste based on assumption of 17% avg. Composition of MSW based on Survey (TPD)* At Present 2017
47	Nagar Palika Parishad Almora	34125	36736	22.3	3.79
48	Nagar Palika Chaukutiya (New)	4796	5084	2.5	0.43
49	Nagar Palika Parishad Bageshwar	9079	9624	5.6	0.95
50	Nagar Palika Kap Koth (New)	5365	5687	2.8	0.48
51	Nagar Palika Parishad Champawat	11029	13799	6.8	1.16
52	Nagar Palika Lohaghat	7926	8402	4.1	0.70
53	Nagar Palika Parishad Tanakpur	17622	18679	9.1	1.55
54	Nagar Palika Banbasa (New)	7990	8469	4.1	0.70
55	Nagar Palika Parishad Nainital	41377	42244	25.9	4.40
56	Nagar Nigam Haldwani	171351	181632	88.5	15.05
57	Nagar Palika Lalkuan	7644	8103	3.9	0.66
58	Nagar Palika Bhimtal	7722	8185	4.9	0.83
59	Nagar Palika Parishad Ramnagar	54787	64353	39.2	6.66
60	Nagar Palika Parishad Bhowali	6308	6686	4.1	0.70
61	Nagar Palika Kaladhungi	7611	8068	4.8	0.82
62	Nagar Palika Didihat	6522	6913	4.3	0.73
63	Nagar Palika Parishad Pithoragarh	56044	71442	34.9	5.93
64	Nagar Palika Parishad Dharuchula	7039	7461	4.5	0.77
65	Nagar Palika Beri Naag (New)	7641	8099	4.8	0.82
66	Nagar Palika Gangolihaat (New)	7112	7539	4.6	0.78
67	Nagar Palika Munisyari (New)	3620	3837	2.8	0.48
68	Nagar Palika Parishad Kiccha	41810	55225	25.9	4.40
69	Nagar Nigam Rudrapur	154514	204552	99.2	16.86
70	Nagar Nigam Kashipur	121610	143900	71.6	12.17
71	Nagar Palika Parishad Jaspur	50520	57980	29.7	5.05
72	Nagar Palika Mahuadhabra	7326	7766	4.7	0.80
73	Nagar Palika Parishad Bazpur	25513	27044	13.2	2.24
74	Nagar Palika Parishad Khatima	15087	17097	8.7	1.48
75	Nagar Palika Shaktigarh	6309	6495	5.0	0.85
76	Nagar Palika Mahuakheraganj	12584	15672	7.9	1.34
77	Nagar Palika Kelakhera	10929	11373	6.2	4.05
78	Nagar Palika Parishad Sitarganj	19978	21673	11.1	1.89
79	Nagar Palika Dineshpur	11342	13806	6.2	1.05
80	Nagar Palika Sultanpur Patti	9848	10229	6.9	1.17
81	Nagar Palika Parishad Gaddarpur	19289	20446	10.0	1.70
	Total	**2501000**	**2884208**	**1601**	**272.22**

Uttarakhand is an ecologically sensitive state that has been fighting for the problem of plastic waste which is plaguing its hills and water bodies. The state government has proposed establishment of plastic densification plant of 300 Kg/hr. capacity in Garhwal region for collection and disposal of plastics waste from Char Dham pilgrimage.

The plant is proposed to be located in Kathgodam in Kumaun. The plant would be set up by the Uttarakhand Tourism Development Board and it would be outsourced to the All-India Plastic Manufacturers' Association. The plant will manufacture high density underground drain pipes, The purpose behind setting up recycling unit is that annually at Char Dham temples of Gangotri, Yamunotri, Badrinath and Kedarnath while he situation is even grimmer at Rishikesh and Haridwar.

5.6 E-waste Management

The Basel Action Network and SVTC (2002) defines E-Waste as follows: 'E-Waste encompasses a broad and growing range of electronic devices, ranging from large household devices such as refregerators, air conditioners, cell phones, personal stereos, and consumer electronics to computers, which have been discarded by their users'. Electronic waste, "E-Waste" or "Waste Electrical and Electronic Equipment" ("WEEE") is a waste consisting of any broken or unwanted electrical or electronic appliance. It is a point of concern considering that many components of such equipment are considered toxic and are not biodegradable.As per the survey conducted, the following segments contribute to E-Waste within the state of Uttarakhand:

IT/Software Companies	25%
Electronic Good Manufactures (Process Waste)	15%
TSDF Customers & Other Industries	20%
E-Waste Tenders (Online & General)	15%
House Holds	5%
MOU with Government Organizations	10%
Schools/Colleges/Hospitals/Commercial Complexes	10%
Total	100%

Following E-Waste recycling units are in operation in the State of Uttarakhand. The total capacity of E-waste-reccycling is 23350 tpa.

1. **M/s. Attero Recycling Pvt. Ltd.**

   Plant location: Khasra No. 173, Village Bhagwanpur, Raipur Industrial Area, Roorkee, Distt. Haridwar, Uttarakhand.

   Plant Capacity: 12000 MTA

   Details: The plot area of the facility is 10,300 m2, with a built up area of 15,450 m2. The proposed project is located 180 Km north of Delhi at Dehradun Road, Roorkee.

   Status:Operational.

   Geographic Location Coordinates: 29.95235'77.798213.

   Attero Recycling Pvt Ltd. Project's activity process includes preliminary manual sorting and separation of the incoming E-Waste, followed by mechanical processing to reduce the selected recyclable waste to small size fractions. A fully automated sorting process of the crushed material further separates the waste into five main categories: glass, ferrous metal, non ferrous

metals (except aluminium), aluminium, and plastics for further processing. Non ferrous metals are processed to extract and refine metals such as gold, silver, tin, lead, copper, palladium, zinc, nickel. Ferrous materials, aluminium and glass are shipped to external processors for recycling. Recyclable plastics are currently sorted into Acrylonitrile Butadiene Styrene (ABS), High Impact Polystyrene (HIPS), and mixed plastics to be processed into regenerated pellets by external recyclers. The project involves collection and processing of E-Waste to separate recyclable fractions that are either processed within the facility or shipped to external processors to complete the recycling procedure.

2. **M/s. Bharat Oil and Waste Management Ltd.**

Plant Location: Mauza Mukimpur, Roorkee-Laksar Road, Roorkee, Distt. Haridwar, Uttarakhand.

Plant Capacity: 1000MTA.

Details: E-Waste received by M/s Bharat Oil & Waste Management Ltd. Roorkee for processing in the FY 2013-14 was 191564.00 Kg/ 211 Ton or 191.56 MT.

Status:Operational

3. **M/s. Anmol Paryavaran Sanrakshan Samiti**

Plant Capacity: 150 MTA

Status: Operational

4. **M/s. Resource E-Waste Solutions**

Plant Location: F-97, Industrial Area, Daulatpur, Hazratpur, Haridwar

Plant Capacity: 1200 MTA

Details: Recycling & Dismantling

Status: Operational

5.7 Battery Waste Management

The typical Lead-acid battery comprises of: metal grids, electrode paste, Sulphuric acid, connection and poles of Lead alloy, and grid separators made up of PVC. The battery components are contained in corrosion and heat-resistant housing usually composed of plastic (polycarbonate, polypropylene, or polystyrene). The major Component of Lead Acid Battery Waste

Lead (alloy) components (grid, poles, ...) 25-30

Electrode paste (fine particles of Lead oxide and 35-45 Lead sulphate)

Sulphuric acid (10-20 % H_2SO_4) 10-15

Polypropylene 5-8

Other plastics (PVC, PE, etc.) 4-7

Ebonite 1-3

Other materials (glass etc.) <0.5

5.8 Sewage Management :

Status of Sewage Management in Uttarakhand

The State is drained by various rivers of the Ganges (Ganga) system. The westermost watershed is formed by the Yamuna river and its major tributary, the Tons. The land to the east of this basin is drained by the Bhagirathi and the Alaknanda which join to form the Ganges at the town of Devprayagg and the Mandakini, Pindar, and hauliganga, all principal tributaries of the Alaknanda. To the east again are the southward -flowing Ramganga and Kosi rivers, and draining to the southeast in the same region are the Sarju and Goriganga, both of which join the Kali at Uttarkhands eastern border with Nepal.

The sewage pollution is damaging for natural water resources. This implies destruction of economic value of fresh water by making it unfit for use. Sewage is generated mainly from houses shools, factories and industries. It includes waste from residential areas, liquids from toilets, bathrooms, showers, and kitchen etc that are disposed through sewers. At Uttarakhand state sewage is partially un-sewered and waste water finds its way into the river through open drains in most of the prominent towns.

The sewage management in Uttarakhand is at partially unmanaged state. The larger towns are residing 50-90 percent population and medium size town's 30-50 percent poulation as per Cencus 2011. In smaller towns, generally onsite sanitation implementation is required. The sewer networks and septic tank presently have a coverage limited to TOWN CORE AREAS whereas, in the OUTSKIRT AREAS-feeble extensions have been worked out by respective municipalities.

S.No.	Name & Address of STP	City/Town	Year of STP Commissioning	Operational Capacity	Operational Status (functioning/non-operational/under construction/constructed & commissioned)	Installed Capacity (MLD)	Utilized Capacity (MLD)	Technology/process STP based
STPs in the towns on Main Stem of River Ganga								
1	Jagjeetpur	Haridwar	1990	18.00	Operaional	18.00	18.00	ASP
2	Jagjeepur	Haridwar	2010	27.00	Operational	27.00	27.00	SBR
3	Sarai	Haridwar	2013	18.00	Operational	18.00	12.00	SBR
Total Haridwar Town						**63.00**		
4	Lakharghat	Dehradun	1990	6.00	Operational	6.00	6.00	OP
5	IDPL Rishikesh	Dehradun		14.00	Operational	14.00	14.00	
6	Bah Bazar	Tehri Garhwal	2016	1.40	Operational	1.40	0.40	SBT
7	Shanti Bazar	Tehri Garhwal		0.075	Operational	0.075		SBR
8	Sangam Bazar	Tehri Garhwal		0.15	Operational	0.15		SBR
9	Gyansu	Uttarkashi	2012	2.00	Operational	2.00	1.00	MbBR
10	Bamni Gaon	Chamoli		0.26	Operational	0.26		SBR
11	Bus Station	Pauri	2009	3.50	Operational	3.50	1.50	MBBR
12	Rafting Camp	Tehri Garhwal	2016	3.50	Operational	3.50	0.50	SBR
13	New Tehri	Tehri Garhwal	2006	5.00	Operational	5.00	3.00	ASP
14	Gangotri	Uttarkashi			Under Construction	1.00		SBR
15	Parmarth Niketan	Pauri	2010	3.00	Operational	3.00	2.00	SBR
Total				**101.885**				

Status of STPs bank of other river								
STPS in other towns of Uttarakhand								
16	Mothorowala	Dehradun	2014	20.00	Operational	20.00	8.00	SBR
17	Mothorowala	Dehradun			Under Construction	20.00		SBR
18	Karrgi	Dehradun	2015	68.00	Operational	68.00	16.00	SBR
19	Indra Nagar	Dehradun			Under Construction	5.00		SBR
20	Jakhan	Dehradun			Under Construction	1.00		SBR
21	Vijay Colony	Dehradun			Under Construction	0.42		SBR
22	Salawala	Dehradun	2015	0.72	Operational	0.72	0.10	SBR
23	Bhatta Fall	Mussorrie	2016	3.12	Operational	3.12		SBR
24	Landhor S	Mussorrie			Under Construction	1.30		SBR
25	Landhor N	Mussorrie			Under Construction	0.80		SBR
26	Kulri	Mussorrie			Under Construction	0.9		SBR
27	Happy Valley	Mussorrie			Under Construction	1.20		SBR
28	Soliyar	Roorkee			Under Construction	33.00		SBR
29	Bakh	Almora	2004	2.00	Operational	2.00	1.00	MBBR
30	Bhimtal	Bhimtal	2009	1.25	Operational	1.25	0.75	UASB
31	Rusi	Nainital	2009	10.00	Operational	10.00	10.00	PST
32	Harinagar	Nainital	2016	0.45	Operational	0.45	0.30	SBR
33	Krishnapur	Nainital	2016	0.80	Operational	0.80	0.50	SBR
Total				106.34				

Present Sewage generatio has been assessed as 80% of water supply to the town.

Effluent Characterstics of Sewarage Treatment Plant

STP	Parameters	Month											
		April	May	June	July	August	September	October	November	December	January	February	March
27 MLD STP Jagjeetpur Haridwar (outlet)	Color	Colourless	Colourless	Colourless	Colourless	Turbid	Turbid	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
	Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless
	pH	7.35	7.42	7.18	7.25	7.38	7.41	7.36	7.12	7.64	7.80	7.71	7.38
	TSS (mg/L)	14	22	14	10	12	10	10	16	14	10	12	15
	TDS (mg/L)	368	458	406	371	364	284	340	406	264	278	266	272
	TS (mg/L)	382	580	420	381	376	294	350	422	278	288	178	287
	BOD (mg/L)	9.2	14	11	9.2	9.6	9.2	9.6	8.4	12	10	8.8	12
	COD(mg/L)	34	92	52	42	44	34	38	38	44	46	36	42
18 MLD STP Jagjeetpur Haridwar (outlet)	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
	Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless
	pH	7.24	7.81	7.22	7.19	7.25	7.21	7.16	7.31	7.36	7.89	7.42	7.62
	TSS (mg/L)	12	17	11	9	10	9	10	14	14	12	16	18
	TDS (mg/L)	319	388	410	328	318	252	236	390	286	264	278	286
	TS (mg/L)	331	405	421	337	328	261	246	404	300	276	294	304
	BOD (mg/L)	10	11	10	8.4	9.2	9.6	10	11	14	12	10	14
	COD(mg/L)	38	56	48	36	32	36	34	44	48	42	36	44
06 MLD Oxidation Pond Lakarghat Rishikesh (outlet)	Color	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid
	Odor	Unpleasant	Unpleasant	Sewage like	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant
	pH	7.75		6.24	7.74	7.84	7.67	7.84	6.92	7.38	7.65	7.80	7.68
	TSS (mg/L)	54		127	88	68	61	52	115	84	62	58	64

	TDS (mg/L)	324		688	384	398	288	312	628	470	386	347	344
	TS (mg/L)	378		815	472	466	349	364	743	554	448	405	408
	BOD (mg/L)	34		35	34	32	34	32	35	36	32	34	36
	COD(mg/L)	162		258	196	186	192	184	214	190	168	162	168
03 MLD STP Swargashram Rishikesh (outlet)	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
	Odor	Odorless	Odorless	Odorless	Odourless	Odourless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless
	pH	7.39	7.21	7.24	7.38	7.46	7.36	7.45	7.21	7.42	7.38	7.48	7.45
	TSS (mg/L)	14	36	10	10	12	10	10	13	16	10	16	14
	TDS (mg/L)	216	458	388	277	284	226	220	388	309	288	310	218
	TS (mg/L)	230	494	398	287	296	238	230	401	325	298	326	232
	BOD (mg/L)	9.6	19	9	9.6	9.2	9.6	9.2	11	12	10	8	12
	COD(mg/L)	40	84	42	36	34	32	36	44	48	46	32	38
Mixing Point of both STP27 & 18 MLD STP, Jagjeetpur, Hairdwar	Color	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid
	Odor	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Not Specific	Not Specific	Sewage like	Sewage Like	Not Specific	Not Specific	Not Specific
	pH	7.81	6.84	6.88	7.68	7.82	7.92	7.81	6.42	7.82	7.80	7.86	7.91
	TSS (mg/L)	71	122	121	86	77	68	54	124	76	62	70	66
	TDS (mg/L)	408	588	612	482	462	314	392	618	442	386	412	396
	TS (mg/L)	479	710	733	568	539	382	446	742	518	448	482	462
	BOD (mg/L)	32	45	43	34	32	34	32	39	32	30	34	32
	COD(mg/L)	168	248	278	204	192	176	164	192	148	124	146	138
18 MLD STP, Vill-Sarai, Jwalapur,	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
	Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless

	pH	7.16	8.02	7.14	7.25	7.14	7.18	7.24	7.41	7.52	7.81	7.68	7.58
	TSS (mg/L)	16	32	10	10	10	10	10	11	13	10	14	16
	TDS (mg/L)	292	452	403	312	288	221	284	372	210	228	242	238
	TS (mg/L)	308	484	413	322	298	231	294	383	223	238	256	254
	BOD (mg/L)	9.6	15	9	9.6	9.2	8.8	9.2	10	10	10	12	13
	COD(mg/L)	32	68	36	32	34	30	36	42	38	42	44	42
M/s 3.5, M LD STP Tapovan Rishikesh	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
	Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless
	pH	7.38	7.84	7.22	7.25	7.38	7.46	7.38	7.42	7.56	7.48	7.65	7.42
	TSS (mg/L)	12	40	10	10	10	10	12	12	14	10	15	18
	TDS (mg/L)	226	466	362	286	262	208	198	418	294	264	282	210
	TS (mg/L)	236	506	372	296	272	218	210	430	308	274	297	228
	BOD (mg/L)	10	19	8	9.2	9.6	9.2	9.6	10	14	10	12	14
	COD(mg/L)	42	88	36	34	42	34	38	40	46	42	36	46

5.9 Noise Pollution (Regulation& Control) Rules, 2006 as amended

The Ministry of Environment & Forest, Govt. of India has promulgated the Noise Pollution (Regulation & Control) Rules, 2000 as amemded. According to the provisions of the Rule the State Pollution Control Boards or Pollution Control Committees in consultation with the Central Pollution Control Board shall collect, compile and publish technical and statistical data relating to noise pollution and measures devised for its effective prevention, control and abatement. Standards for Ambient Noise Pollution is as follows: The statistical data Noise Pollution compiled by State is shown in the table Along with standards.

Monitoring Station	Zone	NoiseLeveldB(A)(DayTime)											
		April	May	June	July	August	September	October	November	December	January	February	March
SurveyChowk, Dehradun	Commercial	75.1	75.8	75.3	74.3	75.1	74.0	-	76.0	75.0	76.0	75.0	74.0
GandhiPark, Dehradun	Silence	52.4	53.2	54.0	52.0	53.0	54.0	65.4	53.0	54.0	52.0	54.0	51.0
ClockTower, Dehradun	Commercial	73.2	74.4	75.0	76.0	75.0	74.0	70.0	75.0	74.0	75.0	74.0	75.0
DoonHospital, Dehradun	Silence	55.0	54.0	53.0	52.0	53.0	52.0	55.9	53.0	54.0	51.0	54.0	52.0
CMIHospitalChowk, Dehradun	Commercial	74.0	75.0	75.3	75.1	75.6	74.2	60.1	73.2	74.3	73.4	74.1	76.1
RaceCourse, Dehradun	Residential	55.3	52.3	53.0	54.0	55.0	53.0	67.0	52.0	54.0	52.0	53.0	55.0
NehruColony, Dehradun	Residential	60.0	61.0	62.0	60.0	63.0	62.0	66.3	63.0	64.0	53.0	54.0	53.0
Tikonia Chowk, Haldwani	Commercial	62.9	70.7	63.8	56.0	59.1	57.2	54.5	61.9	61.3	77.4	63.9	66.3
Beershiva School, Haldwani	Commercial	54.5	57.1	60.2	51.4	53.6	52.4	51.0	53.5	54.6	61.2	60.9	57.6
54.2Awas-Vikas Cho52.9wk, Haldwani	Residential	57.6	53.5	53.1	53.5	51.2	53.7	53.9	57.3	50.2	66.7	53.5	54.2
Nainital(Mallital), Haldwani	Commercial	56.1	56.4	52.9	55.3	48.6	55.3	.54.5	49.1	47.6	68.2	52.4	52.9

AreaCode	Category of Area / Zone	Limits in dB(A) Leq*	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note:-

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m
3. Silence zone is an area comprising not less than 100 metres around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority
4. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

6.0 CONSENT MANAGEMENT UNDER AIR (PREVENTION& CONTROL OF POLLUTION) ACT, 1981 & WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974

6.1 Consent/Authorization Management

Consent under the provisions of the Water (Prevention & Control of Pollution) Act,1974 and the Air (Prevention & Control of Pollution) Act,1981 is one of the most important functions of the Board. The guidelines for obtaining the Consent for the entrepreneurs are illustrated below:

6.2 Consent to Establish (NOC):

Before establishing/constructing a plant the proposed industry should obtain NOC under the Water Act and/or the Air Act. The application form for NOC (Consent to Establish) under the Water Act / Air Act is to be submitted in the office of the Board through online.

The amount is to be submitted as DD in favour of the Member Secretary, Uttarakhand Environment Protection & Pollution Control Board, Dehradun. Those who have obtained NOC need not submit application again in the above forms. NOC is to be obtained prior to carrying out any work at the site proposed for the project. The basic requirement for NOC is as follows :

- the site is suitable
- the application for NOC is accompanied by prescribe fee
- the required pollution control measures are provided.
- The validity of NOC is one year. NOC should be renewed if the unit is not commissioned by then.

The documents to be submitted along with the consent application form for processing of the application are

- Land Documents / Lease agreements
- Project report with total investment.
- Non-agricultural Land Certificate from the competent authority.
- A site plan map showing location of the proposed site including surrounding location in details
- Details of layout plan indicating different processes and point sources of effluent discharge /air emission/solid waste/hazardous waste and position of stack / effluent treatment plant, including D.G. set capacity in KVA.
- Manufacturing process of each product with flow diagram, chemical reactions and material balance with water budget.
- A details list of raw material and inputs with quantity / amount to be utilized daily / monthly.
- Details of Water Pollution Control/Air Pollution Control Devices and Solid Waste / Hazardous Waste Management proposed to be provided.

- Details of land available for disposal of effluent and its are.
- Details of green belt development with area details.
- N.O.C. from the Directorate of Industries, Govt. of Uttarakhand.
- N.O.C. from the Urban / Rural Authority of the concerned site / location.

6.3 Consent to Operate (Initial) under Water and Air Act

The application form for Consent to Operate under the Water Act and Air Act should be submitted along with processing fee. The amount is to be submitted as DD in favour of the Member Secretary, Uttarakhand Environment Protection & Pollution Control Board, Dehradun.

The documents to be submitted along with the Renewal of Consent application form for processing of the application are :

- Land Documents / Lease agreements.
- Project report with total investment.
- Non-agricultural Land Certificate from competent authority.
- Details of water pollution control/air pollution control devices and solid waste / hazardous waste management facilities provided.
- Copy of environmental clearance or any other permission from Government of Uttarakhand or Govt. of India in case of first consent to operate, incase of industries / process requiring environmental clearance.
- Laboratory analysis report of the trade effluent / Ambient and Stack emissions.

6.4 Consent to Operate (Renewal).

Application for Consent to Operate (Renewal) is to be submitted in the 4th month before the expiry of the Consent order. The application form for Consent to Operate (Renewal) under the Water Act and Air Act should be submitted alongwith renewal fee as DD in favour of the Member Secretary, Uttarakhand Environment Protection & Pollution control Board, Dehradun.

The documents to be submitted along with the Renewal of consent application form for processing of the application are :

- Balanced Sheet Certified by C/A
- Previous CONSENT copy.
- Details of water pollution control/air pollution control devices and solid waste / hazardous waste management facilities provided.
- Copy of latest cess return / payment statement.
- CONSENT FEE in the form of Demand Draft drawn in favour of Member - Secretary, Uttarakhand Environment Protection & Pollution Control Board, Dehradun.

- Copy of environmental clearance or any other permission from Government of Uttarakhand in case of first consent to operate, incase of industries / process requiring environmental clearance.
- Laboratory analysis report of the trade effluent and Ambient & Stack emissions.
- Compliance report of the previously issued consent.

The fee structure for consent to establish', consent to operate and consent to renewal is as follows:

S.No.	Red/Oraange Category Industries			Green Category Industries		
	Capital Investment	Initial Fee (Rs)	Renewal Fee (Rs)	Capital Investent	Initial Fee (Rs)	Renewal Fee (Rs)
1	All projects above Rs.10,000 Crore	`10,00,000	`7,50,000	...	...	...
2	More than 5000 Crore and upto 10,000 Crore	`7,50,000	`5,00,000	...	...	...
3	More than 1000 Crore and upto 5000 Crore	`5,00,000	`4,00,000	...	...	...
4	More than 600 Crore and upto 1000 Crore	`4,00,000	`2,50,000	...	...	...
5	More than 300 Crore and upto 600 Crore	`2,50,000	`1,50,000	...	...	...
6	More than 100 Crore and upto 300 Crore	`1,50,000	`1,00,000	...	...	...
7	More than 50 Crore and upto 100 Crore	`1,00,000	`75,000	...	...	...
8	More than 5 Crore and upto 50 Crore	`75,000	`50,000	above 5 Crore	`20,000	`7,000
9	More than 01 Crore and upto 5 Crore	`50,000	`25,000	1 Crore to 5 Crore	`10,000	`4,000
10	More than 50 Lakh and upto 1 Crore	`25,000	`15,000	50 Lakh to 1 Crore	`5,500	`2,000
11	More than 10 Lakh and upto 50 Lakh	`15,000	`10,000	10 Lakh to 50 Lakh	`2,000	`1,000
12	Minimum Fee	`10,000	`5,000	1 Lakh to 10 Lakh	`1,000	`350
13.	-----	-----	----	Up to 1 Lakh	`100	`20

There are 44 industrial estate in the State of Uttarakhand. The districtwise distribution of the Industrial estates are shown in table.

Industrial State in Uttarakhand State:

S.N.	District	Name of Industrial Area/Estate/Complex/Growth Centre	Area occupied (Acr)
1.	Pauri Garhwal	a) Bubakhal	2.15
		b) Sitabpur	7.00
		c) Shrikot	11.63
		d) Jashodarpur (UPSIDC)	81.96
		e) Balbhadrapur (UPSIDC)	26.0
2.	Dehradun	a) Ranipokhri	2.55
		b) Chabra	2.55
		c) Ragwar	3.22
		d) Patel Nagar	10.0
		e) Vikas Nagar	4.0
		f) Selaqui	260.0

3.	Haridwar	a) Laksar	2.50
		b) Roorkee	30.227
		c) Ranipur	16.00
		d) Haridwar (UPSIDC)	106.13
		e) Bahadrabad (UPSIDC)	132.55
		f) Landhaura (UPSIDC)	102.99
		g) IIE- Haridwar	1500
4.	Tehri Garhwal	a) Nagni	1.67
		b) Lakshmoli	1.71
		c) Sorath	2.57
		d) Dhalwala (UPSIDC)	25.47
5.	Chamoli	a) Kaleshwar	2.07
		b) Shimli (UPSIDC)	28.85
6.	Rudraprayag	a) Bhatwanisaun	2.50
7.	Uttarkashi	a) Mori	2.68
		b) Dunda	1.11
		c) Gawana	1.10
		d) Purola	1.60
8.	Nainital	a) Betalghat	2.50
		b) Bhimtal	7.0
		c) Bhimtal (UPSIDC)	107.85
		d) Pipalsana (UPSIDC)	30.18
9.	Udham Singh Nagar	a) Kichha	2.45
		b) Kashipur	19.99
		c) Rudrapur	11.26
		d) Bazpur – 1. (UPSIPC)	43.76
		e) Bazpur – 2. (UPSIPC)	46.75
		f) Kashipur - (UPSIPC)	97.78
		g) Hempur (UPSIPC)	803.00
		h) Khatima (UPSIPC)	25.79
		i) IIE, Pantnagar	10,000
10.	Champawat	a) Champawat (Punethi)	2.50
		b) Shaktipur (UPSIDC)	8.30

The category wise and district wise distribution of Industrial units in Uttarakhand is shown in the table:

S.No.	District	Red	Orange	Green
1	Dehradun	18	285	789
2	Haridwar	277	1130	2724
3	Tehri	08	90	186
4	Uttarkashi	03	24	47
5	Chamoli	04	41	74
6	Rudraprayag	01	23	28
7	Nainital	25	189	385
8	Pauri	04	125	269
9	Pithoragarh	14	18	51
10	Bageshwar	45	12	71
11	Champawat	02	10	28
12	Almora	11	29	94
13	U.S. Nagar	163	572	1174
Total		**575**	**2548**	**5920**

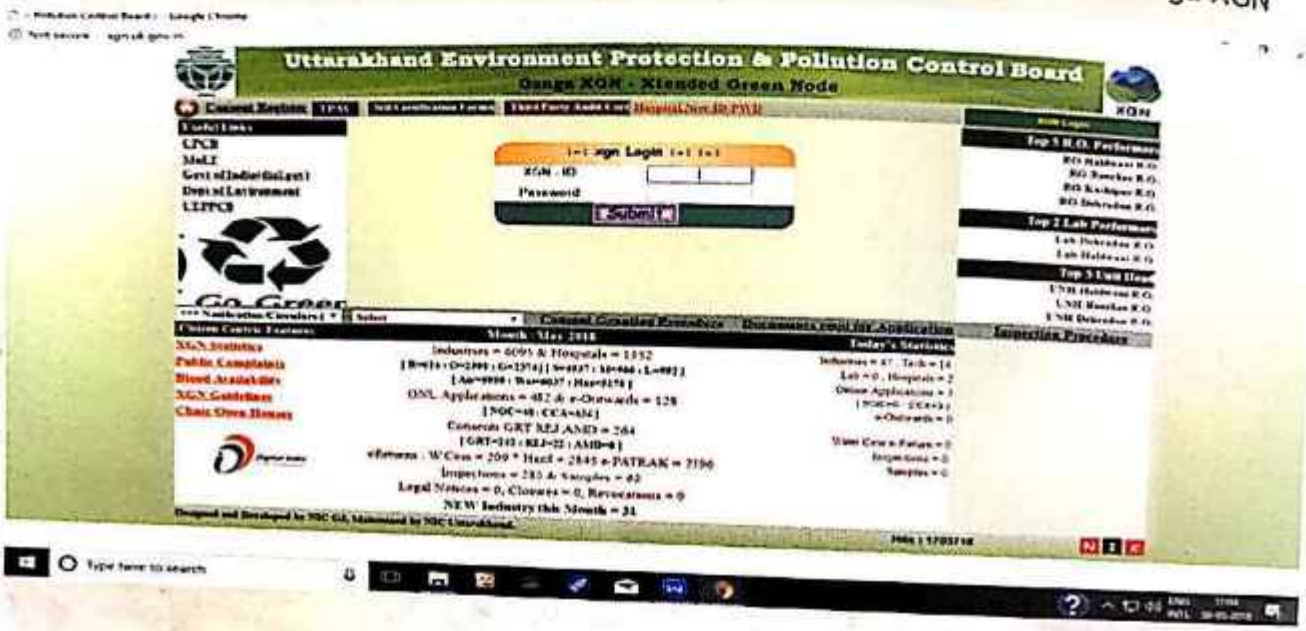
7.0 Online Consent Management Guideline

Web Address: www.ueppcb.uk.gov.in

Ganga-XGN: http://xgn.uk.gov.in

Obtain User ID/PCB ID and Password:

1. Click on Ganga-XGN (http://xgn.uk.gov.in) for Registration. Fill all required details. For multiple Units same PAN card number may be used.
2. Aftering entering all information click on Save. You will get PCB ID and password through the SMS in registered mobile number. Password can be changed once you login at Ganga-XGN



Online Application for Consolidated Consent and Authorization

Login Ganga -XGN at http://xgn.uk.gov.in with PCB ID and Password. Click on Menu →Online Application–Following screen consisting 11-steps will appear :

Seq.	Heading	Action	Result
1.	Please update Your Profile Precisely & Accurately	YES	
2.	Pls Update Technical Pasas -Air, Water, Hazd Acts	-------	
3.	Please File Your e-Return of Water Cess	-------	
4.	Entry of Sample Parameters PERMISSIBLE Values (AS per LAST CONSENT)	-------	
5.	Please Update PRODUCTS with Capacity/Month and RAW MATERIAL	-------	
6.	LAB Bils NOT Paid Off even after 25 days of Billing	-------	
7.	Download/Merge/Upload/Applicable/STREAMILNE PDFs	-------	
8.	W.C. Outstanding Principal+Interest	-------	
9.	Update Water Tech Paras (Tank Size and Catg. Wise Breakup)	-------	
10.	Environment Audit Report	-------	
11.	PCB Queries raised, But NOT Replied !!!	-------	

Step-1: Click on Open and fill up Performa precisely and click on Save.

Step-2: This steps requires technical information about Air, Water and Hazardous Wastes.

i) Click on Water Profile and fill all inofrmation about water source, like-daily consumption for industrial uses and domestic uses, Discharge generation, ETP/STP details, their capacity etc. as desired and click on Update.

ii) Click on Air Profile and fill all information about Air, like- boiler, DG sets etc. types of fuel, fuel consumption, Stack height etc. as required and click on Update. New stack can be added with click on New Stack.

iii) Click on Hazardous Profile and fill all information abot hazardous wastes, like-types of waste, category of waste, Approxmate generation per year, mode of disposal, as required and click on Update.

Step-3: Water Cess Return. Monthly water consumption record will be required to update. After entering data click on Update.

Step-4: Entry of Sample Parameters with permissible values (to be entered as per last CCA order) and click on Save.

Step-5: List of Product(s) their production capacity (per month) in given Units and list of raw materials will be added in this step. New product will be added by new product and save all details by click on Update.

Step-6: This step is for any pending bill (if applicable)

Step-7: List of Download/Merge/Upload/Applicable will appear.

i) Click on Applicable. List of enclosures will appear. Select only applicable list to the Industry which will be uploaded through pdf. File(s) by click on Upload and click on Update.

ii) Click in Upload. List of selected items in Applicable will appear only. Now upload pdf. File by click on Upload and Browse/Select the pdf.file(which file you want to upload) and click in () given in front of each item. Similar steps can.be repeat and upload all desired information and save all by clicking on Update.

Note : pdf.file should be maximum of 200 dpi black and white and size should be below 4 MB and not to exceed maximum 9 pages in one file.

Step-8: Water Cess Outstanding+interest. It is applicable once water ces bill raised by the UEPPCB.

Step-9: Technical Parameters of Water: Enter components of ETP/STP, their capacity alongwith breakup and click on Update.

Step-10: Upload Environment Audit Report/Environment Statement Form-V of EP Rules. Upload as applicable to the Unit by click on Upload and save by click on Update.

Step-11: PCB Query Raised : Click on Open. It will show any queries raised by the UEPPCB. Query can be replied by click on Query→Reply and →send reply. In case query is for additional pdf.file, then Step-6 will be repeated by clicking on Applicable and Upload for additional file only.

To Obtain INWARD No.

Click on Menu→Online Application→Add Inward→Add required comments and Save. You will get INWARD No. This means your application has been moved for Scrutiny to the concerned Regional Office of the UEPPCB. In case of query on application you will get SMS at your registered mobile number.

Payment of CTE (Consent to Establish) / CCA (Consolidated Consent & Authorization) fee:

Inward application will be scrutinize by the concerned Regional Office and if application is complete with all respect based on record submitted, application is moved for payment and applicant will also receive SMS alert. After login to PCB ID and password, required fee can be submitted thorough NET BANKING/RTGS. Once payment is submitted successfully, application will be allotted for site inspection.

The Applicant gets SMS alert through registered mobile number at various stages of processing of application. Once decision on application is taken by the Competent Officer, PROVISIONAL ORDER can be downloaded immediately therafter and subsequently signed order can be access through the Ganga-XGN.

8.0 Prosecutions launched and convections secured for environmental pollution control

The Board has initiated legal action against the the following Units in the designated court. The status of caese is as follows :

Stats of complaints filed before the Designated Court under EPA/Water/Air Acts (as on June, 2017)

S.No.	Name of Party Unit	Matter of	Date	Act(s)	Present Status
1.	Nagar Nigam, Haridwar	MSW	24.08.2012	EPA	Under Trial
2.	Nagar Panchayat, Laksar	MSW	24.08.2012	EPA	Under Trial
3.	Nagar Panchayat, Landhoura	MSW	24.08.2012	EPA	Under Trial
4.	Nagar Panchayat, Manglore	MSW	24.08.2012	EPA	Under Trial
5.	Nagar Panchayat, Jhebreda	MSW	24.08.2012	EPA	Under Trial
6.	Cantt. Board, Roorkee	MSW	21.11.2012	EPA	Under Trial
7.	Nagar Palika Parishad, Rishikesh	MSW	24.08.2012	EPA	Under Trial
8.	Nagar Palika Parishad,	MSW	24.08.2012	EPA	Under Trial
9.	Nagar Palika Parishad, Jaspur	MSW	07.11.2012	EPA	Under Trial
10.	Nagar Nigam, Haldwani, Distt. Nainital	MSW	26.10.2012	EPA	Under Trial
11.	Nagar Palika Parishad, Ramnagar, Distt. Nainital	MSW	26.10.2012	EPA	Under Trial
12.	Nagar Palika Parishad, Bhowali, Distt. Nainital	MSW	26.10.2012	EPA	Under Trial
13.	Nagar Palika Parishad, Kashipur (Now Nagar Nigam)	MSW	07.11.2012	EPA	Under Trial
14.	Graphic Era Hill University, Clement Town, Dehradun	EC-Building & Construction	06.03.2014	EPA	Penalty of Rs 10000.00
15.	Sushila Devi Centre for Profesional Studies, Premnagar, Dehradun	EC-Building & Construction	06.03.2014	EPA	Penalty of Rs 10000.00
16.	G.T.M Builders and Promotors Pvt. Ltd. , GTM Forest and Hills, Mokhampur, Haridwar Road, Dehradun	EC-Building & Construction	06.03.2014	EPA	Penalty of Rs 1.0 Lakh
17.	Parvatiya Mines proponent of Kunoli-Seonara Soapstone Mining Project, located in Vill Kunoli, Tehsil & Distt.	EC-Mining	06.03.2014	EPA	Under Trial
18.	Jay Peee Residency Minor, Mussooriee, Dehradun	EC-Building & Construction	06.03.2014	EPA	Penalty of Rs 10000.00
19.	NS Corporation proponent of Kiroli Soapstone Mines, Kiroli, Bageshwar	EC-Mining	14.10.2014	EPA	Case disposed with Penalty of Rs. 2.0 Lakh
20.	Mahesh Bhauriyal proponent of Sirala Soapstone Mines, Kiroli, Bageshwar	EC-Mining	14.10.2014	EPA	Case disposed with Penalty of Rs. 2.0 Lakh
21.	Community Health Centre (CHC), Vikas Nagar	BMW	17.03.2015	EPA	Under Trial
22.	Jwala Nursing Ho,e. Balliwala Chowk, Dehradun	BMW	17.03.2015	EPA	Under Trial
23.	Nagar Palika Parishad, Herbertpur, Dehradun	MSW	24.03.2015	EPA	Under Trial
24.	Nagar Palika Parishad, Vikas Nagar, Dehradun	MSW	24.03.2015	EPA	Under Trial
25.	Nagar Palika Parishad, Doiwala, Dehradun	MSW	24.03.2015	EPA	Under Trial
	2015-16				
26.	Multiwal Pulp & Board Mills Pvt. Ltd, Bazpur Road, Kashipur	Operation without consent	25.08.2015	Water/ AirActs	Under Trial
27.	Shiron Bio-Tech, Centr al Hope Town, Selaqui, Dehradun	EC-Doon Valley	04.02.2016	EPA	Under Trial
28.	Deffohills India Ltd., UPSIDC, Selaqui, Dehradun	EC-Doon Valley	04.02.2016	EPA	Under Trial
29.	Pacific Estate, Naman Buildcon, Near Anurag Chowk, Vasant Vihar, Dehradun	EC- Building & Construction	04.02.2016	EPA	Under Trial
30.	Neesu Construction(P) Ltd., Roorkee	EC	25.02.2016	EPA	Under Trial
	2016-17				
31.	SPS Hospitsl, Dehradun Road, Rishikesh	BMW	04.07.2016	EPA	Under Trial
32.	The Executive Engineer, Maintenance Division, Jal Sansthan, Kandoli, Pauri Garhwal	STP-Srinagar Operation	04.07.2016	Water Act	Under Trial
33.	Jeevan Rekha Hospital, Kashipur, U.S. Nagar	BMW	03.08.2016	EPA	Under Trial
34.	Jindla CETP, Sitarganj, U.S. Nagar	Non-performance of CETP	11.01.2017	Water/ AirActs	Under Trial
35.	Nagar Palika Parishad, Muni-Ki-Reti, Rishikesh	MSW	02.02.2017	EPA	Under Trial
36.	Station Master, Northern Railway, Kathgodam, Nainital	Wastewater discharge	23.03.2017	Water Act	Under Trial

9.0 Finance & Accounts of the Board.

Budget for the financial year 2017-18 (Amt in Lac)					
Sl.No.	Account Head	Actual Income 2015-16	Actual Income f.y 2016-17	Budgeted Income for F.y 2016-17	Proposed Budget Income for F.y 2017-18
I	Operational Income :				
1	Consent fee	1870.76	1347.36	1800.00	2000.00
2	NOC fee	120	99.71	225.00	250.00
3	Hazardus Fee	94.50	2.2	120.00	120.00
4	Stack & Analysis Fee	20.84	0.38	40.00	40.00
5	Bio-Medical Fee	7.91	1.82	15.00	18.00
6	Interest On FDR & Saving	1180.93	994.39	1002.00	952.00
7	Cess Reimb. from MoEF	182.54	201.98	200.00	300.00
8	Other Fee receipts	1.92	1.37	3.00	3.00
9	Bank Gaurantee forefitted	21.00	26.00	40.00	50.00
10	Public Hearing Fee	15.75	4.50	25.00	50.00
11	Environment Compensation	8.00	17.62	0.00	0.00
12	NAMP/NWMP CPCB Reimb.)	43.51	0	50.00	75.00
	Total :	3567.66	2697.33	3520.00	3858.00

Sl.No.	Account Head	Actual Expenditure F.y 2015-16	Actual Expenditure F.y 2016-17	Budgeted Expenditures F.y 2016-2017	Proposed Budgeted Expenditures F.y 2017 - 18
II	Operational & Capital Expenditure :				
1	Head Office	1095.08	810.48	1382.00	2846.5
2	RO Dehradun	85.65	84.25	102.75	121.25
3	RO Roorkee	59.94	63.76	94.00	109.25
4	RO Kashipur	54.8	60.20	91.00	119.25
5	RO Haldwani	51.21	61.15	89.75	118.75
	Total :	1346.68	1079.84	1759.50	3315.00

Budget Summery f.y 2017-18		
Total Proposed Budgeted Income		3858.00
Less : Totel Proposed Budgeted Expenditures		3315.00
Proposed Budgeted Surplus Funds		543.00

Budgeted Income for the financial year 2017-18 (Amt in Lac)

Sl.No	Head	Previous Year (2016-17)		Budgeted Income for F.Y 2017 -18					
		Achivemnets/ Receipts Unaudited 2016-17	Budgeted Income for f.y 2016-17	Head Office Ddun	Regional Office Dehradun	Regional Office Roorkee	Regional Office Kashipur	Regional office Haldwani	Budgeted Income for f.y 2017-18
1-	Air Water Consent fee	1347.36	1800		350.00	650.00	650.00	350.00	2000.00
2-	NOC fee	99.71	225.00		75.00	75.00	75.00	25.00	250.00
3-	Hazardus Fee	2.2	120		40.00	40.00	40.00	40.00	120.00
4-	Satck & Analysis Fee	0.38	40		10.00	10.00	10.00	10.00	40.00
5-	Bio-Medical Fee	1.82	15.00		4.00	5.00	5.00	4.00	18.00
6-	Interest On F.D.R & Saving	994.39	1002.00	950.00	0.50	0.50	0.50	0.50	952.00
7-	Cess Reimb. from MoEF	201.98	200.00	300.00					300.00
8-	Other Fee	1.37	3.00	1.00	0.50	0.50	0.50	0.50	3.00
9-	Bank Gaurantee Forfitted	26.00	40.00	50.00					50.00
10-	Public Hiring fee	4.50	25.00	50.00					50.00
11-	Environment Compensation	17.62	0.00	50.00					0.00
12-	NAMP- CPCB Programe	0	50.00	75.00					75.00
	Grand Total- Receipts :	**2697.33**	**3520.00**	**1476.00**	**480.00**	**781.00**	**781.00**	**430.00**	**3858.00**

Particulars	Actual Expenses of the f.y 2016-17 (Un-Audited)							Budgeted expenditures for the F.Y 2017-18 (Proposed)					
Account Head	Head Office	RO Ddun R-OD	RO Roorkee R-OR	RO Kashipur R-OK	RO Haldwani R-OH	Total Exp. Total	Budget Target Total	Head Office	RO Ddun R-OD	RO Roorkee R-OR	RO Kashipur R-OK	RO Haldwani R-OH	Total
Pay & Allowences :													
Salary, wages & allowences	140.85	43.14	26.99	26.02	37.51	**274.51**	**310**	200.00	60.00	50.00	50.00	50.00	**140.00**
Graduity	0.00	0.00	0.00	0	0	**0**	**0**	120.00	0.00	0.00	0.00	0.00	**120.00**
EPF- Employer Contributions	38.08	0.00	0	0	0	**38.08**	**30**	30.00					**30.00**
Total :	**178.93**	**43.14**	**43.14**	**26.02**	**37.51**	**312.59**	**340.00**	**350.00**	**60.00**	**50.00**	**50.00**	**50.00**	**560.00**
Remunerations & Fee :													
Fees to Board Members	0.00	0.00	0	0	0	**0.00**	**5.00**	5.00					**5.00**
Tech. Consultancy & Seminar	0.62	0.00	0	0.84	2.02	**3.48**	**100**	100.00					**10.00**
Total :	**0.62**	**0.00**	**0.00**	**0.84**	**2.02**	**3.48**	**105**	**105.00**	**0.00**	**0.00**	**0.00**	**0.00**	**105.00**
Administrative Expenses :													
Travelling & Conveyance	1.55	0.49	0.29	0.42	0.09	**2.84**	**8**	4.00	1.00	1.00	1.00	1.00	**8.00**
Rent, Rates & Taxes	7.18	0.00	2.97	6.57	0	**16.72**	**25**	20.00	1.00	1.00	6.00	1.00	**29.00**
Income Tax	0.00	0.00	0	0	0	**0**	**0**	0.00					**0.00**
Office & Misc. Expenses	0.65	0.62	0.40	1.56	0.5	**3.73**	**9**	5.00	1.00	1.00	1.00	1.00	**9.00**
Printing, Stationary & Postage	4.96	0.82	0.49	0.38	0.39	**7.04**	**10**	6.00	1.00	1.00	1.00	1.00	**10.00**
Vehicle Maint. & Fuel	9.9	3.42	3.72	2.98	1.34	**21.36**	**40**	30.00	6.00	6.00	6.00	6.00	**54.00**
Adverts & Public Hearing	5.63	0.14	0	0	0	**5.77**	**21**	25.00	0.5	0.50	0.50	0.50	**27.00**
Hospitality & Emp. Welfare	3.12	0.43	0.2	0	0	**3.75**	**4.00**	5.00	0.5	0.50	0.5	0.5	**7.00**
Training, Workshops & Books	0.13	0.00	0	0	0	**0.13**	**4**	5.00	0.25	0.25	0.25	0.25	**6.00**
Leaseline/ Online- BSNL	0.00	0.00	1.42	0	0.00	**1.42**	**10.5**	42.00	2	2.00	2.00	2.00	**50.00**

Electricity & Water Charges	0.55	0.74	0.33	0.23	1.32	3.17	5	5.00	0.75	0.75	0.75	0.75	8.00
Building Maintenance	0.00	0.00	0.01	0.76	2.85	3.62	7.5	10.00	0.5	0.50	0.50	3.00	14.50
Legal & Audit & Professional	38.86	0.11	0.23	0	0	39.2	50	70.00					70.00
Outsourcing & Contractors	30.93	19.71	17.84	5.37	8.64	82.49	96	40.00	20.00	20.00	15.00	15.00	110.00
Telephone Expenses	1.75	0.13	0.1	1.92	1.29	5.19	5	3.00	0.50	0.50	0.50	0.50	5.00
Vehicle Hire Charge	0.00	1.46	1.18	0	0	2.64	4.5	3.00	1.00	1.00	1.00	1.00	7.00
Total :	**105.21**	**28.07**	**29.18**	**20.19**	**16.42**	**199.07**	**299.5**	**273.00**	**36.00**	**36.00**	**36.00**	**33.50**	**414.50**
Other Expenses :													
SOE Report	0.00	0.00	0	0	0	0.00	3.00	3.00					3.00
Public Awareness	1.82	0.00	0	0	0	1.82	50.00	300.00					300.00
Environment Surveillance Squid	0.00	0.00	0	0	0	0.00	0.00	20.00					20.00
Total	**1.82**	**0.00**	**0.00**	**0.00**	**0.00**	**1.82**	**53.00**	**323.00**	**0.00**	**0.00**	**0.00**	**0.00**	**323.00**
Laboratory Expenses :													
Sample Testing & Lab. exp.	2.83	1.81	1	0.93	1.07	7.64	17.00	10.00	3.00	3.00	3.00	3.00	22.00
Transport for Sampling kits	0.00					0.00	5.00	3.00	0.50	0.50	0.50	0.50	5.00
Total :	**2.83**	**1.81**	**1.00**	**0.93**	**1.07**	**7.64**	**22.00**	**13.00**	**3.50**	**3.50**	**3.50**	**3.50**	**27.00**
Loans & Advances :													
Vehicle Loan Advance						0.00	10.00	10.00					10.00
House Loan Advance						0.00	50.00	50.00					50.00
Computer Loan Advance						0.00	3.00	3.00					3.00
Festival other Advance						0.00	5.00	5.00	0.00	0.00	0.00	0.00	5.00
Total :	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**68.00**	**68.00**	**0.00**	**0.00**	**0.00**	**0.00**	**68.00**

Capital Expenditures :													
Motor Vehicle Purchase	0.32	0.00	0	0	0	**0.32**	**20.00**	30.00			10.00	10.00	**50.00**
Land & Building Proposed	425.15	0.00	0	0	0	**425.15**	**500.00**	1500.00	0	0.00	0.00	0.00	**1500.00**
Computer, Laptop & Printers	3.6	1.16	0.44	0	0	**5.2**	**7**	6.00	0.50	0.50	0.50	0.50	**8.00**
Furniture & Fixture	0.39	0.00	0.17	0	0	**0.56**	**6**	19.00	0.25	0.25	0.25	0.25	**20.00**
Coolers, Fan & AC	0.05	0.00	0.01	0	0	**0.06**	**4.00**	2.50	0.50	0.50	0.50	0.50	**4.50**
Office Equipments	2.95	0.00	0.01	0.00	0	**2.96**	**9**	8.00	0.50	0.50	0.50	0.50	**10.00**
Fax,EPBAX & Photocopier etc.	0.59	0.00	0	0.00	0	**0.59**	**5**	6.00	0.05	0.50	0.50	0.50	**8.00**
Video Conferencing	88.02	0.00	0	0	0	**88.02**	**100**	25.00	0	0.00	0.00	0.00	**25.00**
Laboratory Equipments-New	0.00	0.00	0	0	0	**0.00**	**65.00**	100.00	4.00	3.50	3.50	4.00	**115.00**
Total :	**521.07**	**1.16**	**0.63**	**0.00**	**0.00**	**522.86**	**716.00**	**1696.50**	**6.25**	**5.75**	**15.75**	**16.25**	**1740.50**
NAMP-Cpcb (Programme):													
Sampling & Analysis Cost													
Chemicals, Filter Papers etc.	0.00	1.61	0	1.44	0.93	**3.98**	**12.00**	5.00	4.50	3.00	3.00	4.50	**20.00**
Maintanance & Other Expenses	0.00	0.00	0.1	0.45	0.1	**0.65**	**8.00**	5.00	2.00	2.00	2.00	2.00	**13.00**
Manpower Cost :													
Salary of Scientific Asst.	0.00	2.16	2.16	10.33	3.1	**17.75**	**12.00**	5.00	3.00	3.00	3.00	3.00	**17.00**
Salary of Lab. Field Asst.	0.00	6.3	3.7	0	0	**10.00**	**24.00**	3.00	6.00	6.00	6.00	6.00	**27.00**
Total	**0.00**	**10.07**	**5.96**	**12.22**	**4.13**	**32.38**	**56.00**	**18.00**	**15.50**	**14.00**	**14.00**	**15.50**	**77.00**