

I/157785/2022

**H.P. STATE POLLUTION CONTROL BOARD**

"HIM PARIVESH" PHASE-III, NEW SHIMLA-171 009 (H.P)

Phone: 0177 2673766, 2673274 Fax: 0177 2673018



No. HPSPCB (NGT) OA. No. 673/2018 (Polluted River Stretches) /Vol-IX/22-

Dated: 17.09.22

1265761

To

Sh. D.P. Mathuria**Executive Director-Technical**

National Mission for Clean Ganga, Ministry of Jal Shakti

First Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi 110002

Subject:

Submission of Monthly Progress Reports for ensuring compliance to Hon'ble NGT order in OA. No. 673/2018 in the matter of news item published in "The Hindu" titled "More river stretches are now critically polluted: CPCB".

Sir,

This is in reference to the Hon'ble NGT orders vide OA. No. 673/2018 (Polluted River Stretches) and directions by the Ministry of Jal Shakti, GoI on the above cited subject.

In this context, the latest monthly progress report for the month of August-2022 in compliance to the aforesaid Hon'ble NGT orders, is hereby enclosed for your kind information and further necessary action please.

Thanking you,

Yours faithfully

-Sd-

Encl.: As above

(Apoorv Devgan, IAS)

Member Secretary

HP State Pollution Control Board

Copy to:

1. **The Director General**, National Mission for Clean Ganga, Ministry of Jal Shakti, First Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi- 110002 for kind information and necessary action please.
2. **The Additional Chief Secretary (Env. Sci. & Tech.) to the Govt. of Himachal Pradesh** for kind information and necessary action please.
3. **The Member Secretary**, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi- 110032 for kind information and necessary action please.
4. **Divisional Head**, WQM-I Division, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi- 110032 for kind information and further necessary action please.

Signed by Apoorv Devgan

Date: 17-09-2022 16:14:21

(Apoorv Devgan, IAS)

Member Secretary

HP State Pollution Control Board

National Mission for Clean Ganga

**Format for submission of Monthly Progress Report for the Month of August 2022 in the NGT
Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)**

For the State of Himachal Pradesh

Overall status of the State:

I. Population

Total Population: 68, 64,602

Urban Population: 6, 88,552

Rural Population: 61, 76,050

II. Estimated Sewage Generation (MLD):190.53 MLD

III. Details of Sewage Treatment Plant:

- Existing no. of STPs: 76
- Total Treatment Capacity of STPs(in MLD):126.026
- Capacity Utilization of existing STPs: 84.715 MLD
- MLD of sewage being treated through Alternate technology: 105.815 (Soak Pits, Septic Tanks)
- Gap in Treatment Capacity in MLD: 64.5
- No. of Operational STPs: 76
- No. of Non-complying STPs: 04

Details of each existing STP in the State

Jal Shakti Vibhag

Sr. No.	Location	Existing STP Capacity in MLD	Capacity being utilized in MLD	Operational Status of STP	Compliance Status
1	Sh. Naina Devi Ji (Kola Toba dry nallah)	1.35	0.8	Operational	Complying
2	Ghumarwin (Bajohra MC ward)	1.2	1.15	Operational	Complying
3	Chamba -STP Barga -1	1.501	1.501	Operational	Complying
4	Chamba -STP Barga-2	0.77	0.67	Operational	Complying
5	Chamba -STP Sitla Bridge	0.2	0.2	Operational	Complying
6	Chamba -STP at Bhagot	0.89	0.89	Operational	Complying
7	Chamba-STP at Karian	0.49	0.49	Operational	Complying
8	STP NIT Hamirpur	0.27	0.27	Operational	Complying
9	STP NIT Hamirpur (New STP)	0.6	0.6	Operational	Complying
10	Hamirpur Town-Zone	3.13	1.65	Operational	Complying

	No. I				
11	Hamirpur Town -Zone No. II	1.35	1.3	Operational	Complying
12	Hamirpur Town- Zone No. III	0.68	0.68	Operational	Complying
13	Hamirpur- STP Ward No. 11	0.58	0.1	Operational	Complying
14	Nadaun/Nagarda Nr Hospital	1.69	0.7	Operational	Complying
15	Sewerage scheme to Sujanpur Town(Zone 1) Near HPSEB sub Station Sujanpur	1.5	0.98	Operational	Complying
16	Sewerage scheme to Sujanpur Town(Zone II) Near Govt ITI Doli Sujanpur	1.75	0.65	Operational	Complying
17	Dehra- Near Shamshan Ghat Dehra	1.38	0.62	Operational	Complying
18	Jawalamukhi- Near Petrol Pump Ganju Bag	2.83	2.03	Operational	Complying
19	Nurpur- On the left bank of Jabber Khad near Bodh	3.13	0.2	Operational	Complying
20	Dharamshala- Chellian	5.15	3.61	Operational	Complying
21	Dharamshala -Old Charri Road	0.2	0.2	Operational	Complying
22	Dharamshala - Ramnagar	0.03	0.03	Operational	Complying
23	Dharamshala- Bhagsu	0.052	0.05	Operational	Complying
24	Dharamshala- Chellian Near Nag Mandir	0.165	0.155	Operational	Complying
25	Dharamshala-Mela ground Gamur	1.4	0.44	Operational	Complying
26	Nagrota (village Tharu near Baner Khad)	1.34	1.34	Operational	Complying
27	Kangra- STP Zone -I Near Senior Sec. School Kangra	1.68	1.54	Operational	Complying
28	Kangra-STP Zone -II Near Bye pass Kangra	1.46	1.05	Operational	Complying
29	Kangra- STP Zone -III Old Kangra near Fort	0.63	0.51	Operational	Complying
30	Palampur- Left Bank of Bihral Khad Bear Insp. Hut Palampur	0.35	0.35	Operational	Complying
31	Tanda-Right side bank of BanerKhad at Dr. RPGMG Tanda	1.4	1.4	Operational	Complying
32	R/Peo -Sarbo	1	0.85	Operational	Complying

33	Providing Sewerage Scheme to Sangla (Phase - II & III) in District Kinnaur (HP)	0.13	0.09	Operational	Complying
34	Rampur-Khopri	1	0.85	Operational	Complying
35	Rampur-Chuhabag	0.5	0.5	Operational	Complying
36	Jakhri	1	0.75	Operational	Complying
37	Sarahan (4 No. Septic Tank)	0.124	0.124	Operational	Complying
38	Kullu Town- Lanka Bekar	2.57	2.57	Operational	Complying
39	Kullu Town-Bhootnath	2.5	2.5	Operational	Complying
40	Kullu Town-Badah	0.38	0.38	Operational	Complying
41	Manali-Near Police Station Manali (Capacity enhanced from 1.82 MLD to 3.00 MLD)	3.00	3.00	Operational	Complying
42	Marhi-Manali	0.2	0.2	Operational	Operational
43	Bhunter -Mela Ground	0.99	0.99	Operational	Complying
44	Bhunter- Sarabai	0.46	0.46	Operational	Complying
45	Bhunter- Jarad	0.87	0.87	Operational	Complying
46	Jogindernagar-Village Majahrnoo	1.74	1.3	Operational	Complying
47	Mandi –Raghunath ka Padhar	3.83	3.65	Operational	Complying
48	Mandi- Khaliyar	0.47	0.46	Operational	Complying
49	Sundernagar (Chandpur)	3.55	3.22	Operational	Complying
50	Sarkaghat-Paplog Zone B	0.7	0.58	Operational	Complying
51	Sarkaghat-Barchhwar Zone-C	1.67	0.9	Operational	Complying
52	Rohru- Near Radha Swami Petrol Pump	1.75	1.745	Operational	Non-Complying
53	Jubbal- Below 22 KV Sub-Station HPSEB Jubbal Ghunglidhar (Kanhhol)	0.651	0.63	Operational	Complying
54	Kotkhai Town - Zone I Septic Tank (200 users)	0.105	0.1	Operational	Operational
55	Kotkhai Town - Zone II	0.305	0.1	Operational	Operational
56	Kotkhai Town - Zone III	0.163	0	Commissioned recently	
57	Narkanda	0.45	0.27	Operational	Complying
58	Theog	1.15	0	Commissioned recently	

59	Sunni	0.65	0.1	Commissioned recently	
60	Paonta Sahib -Zone -1 (Devi Nagar)	0.44	0.44	Operational	Complying
61	Paonta Sahib-Zone -II (Main Bazar)	1	0.6	Operational	Complying
62	Solan, Shamti	2.9	1.5	Operational	Complying
63	Parwanoo	1	0.25	Operational	Non-Complying
64	Arki Town	0.7	0.54	Operational	Complying
65	Kunihar	0.9	0.68	Operational	Complying
66	Baddi Town-Kenduwal	5.5	1	Operational	Complying
67	Nalagarh Town- Mandiyapur	3.62	2.4	Operational	Complying
68	Una- Chandarlok Colony for Zone D	0.65	0.24	Operational	Complying
69	Una- Rampur for Zone A&B	2.53	0.58	Operational	Complying
70	Mehatpur- Zone D Basdhera (Septic Tank)	0.1	0.08	Operational	Complying
		90.396	61.655		

SJPNL

Sr. No.	Location	Existing STP Capacity (MLD)	Capacity Being Utilized(MLD)	Operational Status of STP	Compliance Status of STP
1	Sanjauli Malyana (Below Malyana Bus Stand)	4.44	3.22	Operational	Non-Complying
2	Dhalli	0.76	0.76	Operational	Complying
3	North Disposal, Shimla (Golcha)	5.8	3.6	Operational	Complying
4	Snowdon (Bermu)	1.35	0.7	Operational	Complying
5	Lalpani near Badagaon	19.35	8	Operational	Non-Complying
6	Summer Hill (Below Andri)	3.93	0.7	Operational	Complying
	Total	35.63	16.98		

Details of under construction STPs in the State

Jal Shakti Vibhag

Sr. No.	Location of STP	Capacity (in MLD)	Physical Progress (STP) in % age	Completion Timeline
1.	Mehatpur- Zone A, B & C -Basdhera	0.73	100%	August-2022
2.	Trilokpur –Kheri Johron	1.5	100%	Sep-2022
3.	Kala Amb	1.7	100%	Sep-2022
4.	Paonta Sahib Zone -III (Jambukakhala)	1.72	100%	Oct-2022
5.	Dharamshala -Naddi	0.15	80%	Sep-2022
6.	Dalhousie	2.15	26%	Sep-2022
7.	Rewalsar (Chalahar)	0.35	95%	Dec-2022
8.	Gagret	3.14	100%	Dec-2022
9.	Chamba- Parel	0.87	80%	Dec-2022
10.	Chowari	1.45	95%	March-2023
11.	Mandi –Raghunathka Padhar	9.08	35%	Dec-2022
12.	Mandi- Khaliyar	1.5	30%	Dec-2022
13.	Sewerage Scheme Hatkoti (Rural opp. Nandpur Kanch left bank of Pabbar River)	0.651	78%	March-2023
14.	Santokhgarh	2.5	75%	March-2023
15.	Sewerage Scheme to Rampur-Dakolar	1.16	80%	July-2023
16.	Sewerage Scheme to Rampur-Khaneri	1.2	10%	July -2023
17.	Hamirpur - Bajuri	1.06	Work Awarded (Land Dispute)	June-2023
18.	Bhota	1.15	Work Awarded (Land Dispute)	Dec-2022
19.	Talai	1.65	5%	Dec-2022
20.	Sundernagar	4.3	Work Awarded (Design & drawings approved)	March-2023
21.	Parwanoo Zone-II	1	FCA clearance case is in progress	March-2023
	Total	39.011 MLD		

Under Construction Detail of SJPNL

Sr. No	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
1	STP Lalpani (Upgradation work)	14.2 MLD	60%	16950	October, 2022
2	STP Malyana (Upgradation work)	5.2 MLD	85%	3313	October, 2022
3	STP Dhalli (Upgradation work)	1.5 MLD	50%	960	October, 2022
4	STP Snowdon	1.35 MLD	Retrofitting of these 3 no. of STPs is in progress 40% work completed rest is in progress	840	December, 2022
5	STP North Disposal	5.80 MLD		3500	
6	STP Summer Hill	3.93 MLD		1770	

Details of proposed STPs in the State

Jal Shakti Vibhag

Sr. No.	Location of STP	Capacity of STP proposed (in MLD)	Status	Likely Date of Completion
1	Nerchowk	3.36	Under- Tendering	Dec-2022
2	Rajgarh	1.5	Under- Tendering	Dec-2022
3	Chopal	0.2	At DPR Stage	Dec-2022
4	Banjar	0.55	Under- Tendering	Dec-2022
5	Jawali Town	1.35	At DPR Stage	Dec-2022
6	Baijnath-Paprola	3.64	At DPR Stage	Dec-2022
7	Mehatpur-Zone- E &F Basdhera	3.14	At DPR Stage	Dec-2022
8	Chirgaon	0.5	At DPR Stage	Dec-2022
9	Shahpur Town	0.4	At DPR stage	Dec-2022
10	Anni	0.55	At DPR stage	Dec-2022
11	Nirmand	0.75	At DPR stage	Dec-2022
12	Solan-Zone-1 (Below Khundi Dhar) near Shamti	1	At DPR stage	Dec-2022
13	Solan-Dadhog	2.5	At DPR stage	Dec-2022
14	Solan-Below Power house	1.6	At DPR stage	Dec-2022
15	Kandaghat	0.4	At DPR stage	Dec-2022
16	Tahliwal	1	At DPR stage	Dec-2022
17	Daulatpur	2	At DPR stage	Dec-2022
18	Amb	1.9	At DPR stage	Dec-2022

Sr. No.	Location of STP	Capacity of STP proposed (in MLD)	Status	Likely Date of Completion
19	Nerwa	0.95	At DPR stage	Dec-2022
20	Bilaspur - below Luxmi Narayan Temple (STP-1)	5	At DPR stage (Under AFD)	Dec-2022
21	Bilaspur - Lower Lakhanpur (STP-2)	2	At DPR stage (Under AFD)	Dec-2022
22	Palampur	0.45	At DPR stage (Under AFD)	Sep-2022
23	Karsog	0.9	At DPR stage (Under AFD)	Dec-2022
24	Manali- Rangri	16.33	Tender for eligibility criteria for sewerage network opened on 19.07.2022. 3 bidders participated 2 bidders qualified Financial bid to be opened with AFD permission (Under AFD)	Dec-2022
25	Nahan-Zone-I	1	At DPR stage (Under AFD)	Dec-2022
26	Nahan –Zone-II	2.5	At DPR stage (Under AFD)	Dec-2022
27	Nahan-Zone -III	1.6	At DPR stage (Under AFD)	Dec-2022
	Total	57.07 MLD		

SJPNL

Sr. No.	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
1	Dogra Bridge	3.1 MLD	Awarded (FCA case is in progress)	--
2	At Totu Bhariyal	2.0 MLD	Awarded (Land use transfer case with forest is in process)	--
3	STP Dhalli-II & Mashobra	2.5 MLD	At DPR Stage	--

IV. Details of Industrial Pollution:

- No. of industries in the State: **11422**
- No. of water polluting industries in the State: 3741
- Quantity of effluent generated from the industries in MLD: **45.42 MLD**
- Quantity of Hazardous Sludge generated from the Industries in TPD: **6.808 MT approx.**
- Number of industrial units having ETPs: **1067 ETPs are operational**
- Number of industrial units connected to CETP: **456**
- Number and total capacity of ETPs (details of existing/ under construction / proposed): **total treatment capacity 52.41 MLD (including 25 MLD CETP)**
- Compliance status of the ETPs: **Nil**
- Number and total capacity of CETPs (details of existing/ commissioned / proposed)
Existing: CETP Baddi (25 MLD), Proposed: Poanta Sahib (2 MLD), Commissioned: CETP Kala Amb (5 MLD)

No. of CETP existing: **1**

No. of CETP proposed: **1**

No. of CETP under-construction: **0**

No. of CETP commissioned 1

- Status of compliance and operation of the CETPs

Sr. No.	Location	Capacity	Status
1	CETP at Kenduwal, Baddi, District- Solan (HP)	25	Operational, Complying
2	CETP at Paonta Sahib, District- Sirmour HP	2	Proposed
3	CETP Kala Amb, District- Sirmour	5 (Phase-I 2.5 MLD)	Commissioned in May, 2022.

Regional Office	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
Poanta Sahib	Total 1267 (140 are water polluting industries)	10.75 MLD	140 ETPs operational	Commissioned in May, 2022: CETP Kala Amb of capacity 5 MLD (Phase-I: 2.5 MLD) Proposed: Paonta

				Sahib of capacity 2 MLD
Parwanoo	Total 1114 (105 are water polluting industries)	0.9761MLD	105 ETPs are operational	Nil
Bilaspur	Total 816 (57 are water polluting industries)	0.6693 MLD	39 ETPs are operational	Nil
Shimla	Total 719 (435 are water polluting industries)	0.213 MLD	32 ETPs operational	Nil
Dharamshala	Total 1716 (1567 are water polluting industries)	4.97MLD	65 ETPs operational	
Baddi	Total 2443 (576 are water polluting industries)	23.2 MLD	576 (456 units connected to CETP Baddi Rest has captive ETPs)	CETP Baddi of capacity 25 MLD is Operational
Kullu	Total 1507 (129 are water polluting industries)	0.166 MLD	17 units have ETPs and are operational	Nil
Rampur	Total 386 (330 are water polluting industries)	0.112 MLD	6 ETPs are operational	Nil
Chamba	Total 514 (317 are water polluting industries)	0.011 MLD	2 ETPs are operational	Nil
Una	Total 940 (85 is water polluting industries)	4.36MLD	85 ETP is operational	Nil

- **Solid Waste Management:** Total number of Urban Local Bodies and their Population:61 ULBs and population: 7,12,575
- Current Municipal Solid Waste Generation: 383 TPD approx.
- Number, installed capacity and utilization of existing MSW processing facilities in TPD (bifurcated by type of processing eg- Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, decentralized pit composting), bimethanation, MRF etc:
- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%): **(Gap is less than 20%)**
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction):**Nil**
- Total no. of wards: 558
- No. of wards having door to door collection service: 509
- No. of wards practicing segregation at source :509

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology): **Upgradation of MSW facilities are proposed to enhance the capacity of different ULBs.**
- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills.:
- No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers:**3 (Mandi, Kullu & Manali)**
- No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers:

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
61	383	Treated 269 Land filled 80	48		Up gradation of existing facilities & development of SWM facilities in new ULBs proposed. Completion timeline is Dec, 2022.

V. Bio-medical Waste Management: (Scientific)

- Total Bio-medical generation:4130.30 Kg/day (2021-2022)
- No. of Hospitals and Health Care Facilities:9064 (2021-2022)
- Status of Treatment Facility/ CBMWTF:
 - There are three Common Biomedical Waste Treatment Facilities (CBWTFs) operating in the State with incineration capacity is 6.4 MT/day.
 - M/s Enviro Engineers, Biomedical Waste Treatment Facility, Sandli, Tehsil Arki, District Solan having incinerable capacity 100 Kg/hr covering District Shimla, Solan, Mandi, Kullu, Bilaspur, Sirmour.
 - M/s Enviro Engineers, CBWTF, Una having capacity of 250kg/hr covering District Una
 - M/s Suraksha Bio Sanitizer, Common Biomedical Waste Treatment Facility, Dhugiari, P.O Gaggal Tehsil & District Kangra having incinerable capacity 50 Kg/hr covering District Kangra, Chamba and Hamirpur.

VI. Hazardous Waste Management:

- Total Hazardous Waste generation: 27849.4 MT for the year 2020-21
- No. of Industries generating Hazardous waste:- 2447 nos
- Treatment Capacity of all TSDFs: 50,000 Tonne Per Annum and Overall capacity : 10 lakhs tonne
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated:- 19,020 MT
- Details of on-going or proposed TSDF: - Nil.

VII. Plastic Waste Management:

- Total Plastic Waste generation: 9654.45 TPA
- Treatment/ Measures adopted for reduction or management of plastic waste:
Used for road construction, sent to Cement Plant as RDF, The Government of Himachal Pradesh has notified a Policy regarding Buy-back of non-recyclable and Single Use Plastic Waste including plastic bags in the Himachal Pradesh from the Rag pickers and households, providing Minimum Support Price of Rs. 75/- (Rupees Seventy Five) only per kilogram.

VIII. Details of Alternate Treatment Technology being adopted by the State/UT:

All STPs in Himachal Pradesh are operational on convention technology with MBBR (Moving Bed Bio-Film Reactor) system in secondary treatment. However now all STPs are being upgraded with tertiary treatment and proposed STPs will be equipped with tertiary treatment and septage treatment.

However Upgradation of 3 nos of STPs namely Dhalli, Malyana and Lalpani through Sequencing Batch Reactor (SBR) technology is under process.

Septic tanks have been provided either at Community Level or by the individual households and Himachal Pradesh is one of the states in the country which has achieved ODF status. In Rural Areas double pit (septic tanks) treatment is being provided under Swachh Bharat Mission.

In addition, in-situ Phytoremediation technique is being applied in nallahs for treatment of water.

IX. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment:

The work of in-situ remediation in Priority-I (Sukhna Nallah) has been completed and is operational.

The work of in-situ remediation in Jattan Wala Nallah (catchment of Priority-II river stretch) was completed however was damaged during rainy season.

- X. Details of Nodal Officer appointed by Chief Secretary in the State/UT:** An “Environment Monitoring Cell” comprising of following officers has been formed on 19th Feb, 2020 to facilitate coordination and compliance of directions of Hon’ble NGT and assist in organizing review by the Chief Secretary:-
1. The Member Secretary, H.P. State Pollution Control Board
 2. The Director, Environment, Science & Technology
 3. The Director, Urban Development
 4. The Joint Secretary (Env., Sci. & Technology) to Govt. of HP.
- XI. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:**
- 3 nos. of Review Meeting have been held under the Chairmanship of Worthy Chief Secretary to Govt. of H.P. in year FY **2020-21** (17.06.2020, 6.10.2020, 12.01.2021). 2 2
3nos of Review Meeting have been held under the Chairmanship of Worthy Chief Secretary to Govt. of H.P. in year FY **2021-22** (19.06.2021, 26.10.2021& 29.03.2022).
- XII. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river**
- Details attached as **Annexure-I (August 2022)**.
- XIII. Ground water regulation:**
- Himachal Pradesh has enacted the Groundwater Act in 2005 to regulate extraction of groundwater in the vulnerable areas of the state, which has now been extended all over the state.
The extraction of groundwater in any form is controlled and regulated by the provisions of the act.
The State has formulated and implemented a regulatory regime to ensure and promote wise use of groundwater.
- XIV. Good irrigation practices being adopted by the State:**
- Promotion of water use efficiency by providing piped irrigation network instead of open channel; micro irrigation through sprinklers and drip.
- XV. Rain Water Harvesting:**
- The Jal Shakti Vibhaghas taken up water conservation initiative under various programmes like MNREGA, Sustainability component of NRDWP, CRF, D.C. Funds, AIBP, NABARD, PARVATDHARA etc.
- XVI. Demarcation of Floodplain and removal of illegal encroachments:**

XVII. Maintaining minimum e-flow of river:

The following steps have been taken to maintain environmental flow in the river/ Nallah

- The RTWQMS along with Radar system for water quality monitoring and flow measurement, respectively, have been installed in river Markanda near Viii Ogli, Kala Amb town and in river Kaushalya near village Kamli.
- Installation of RTWQMS at river Sirsa, the Site is identified, tendering work is in progress.
- Total 27 nos of Check Dams constructed in Sukhna (Priority-I) at Parwanoo.
- Total 45 nos of Check Dams constructed in Ashwani (Priority-V) along Yashwant Nagar.
- Total 110 nos of Check Dams constructed in Beas (Priority-V) at Mandi and Jogindarnagar.

Further, Hydro-Electric Projects (HEP) located on the catchment of rivers are mandated to ensure minimum 15% discharge of lean season flow on the downstream of the HEP into river body.

XVIII. Plantation activities along the rivers:

Priority-I (SukhnaNallah at Parwanoo)

- 2200 Plants have been planted in FY 2019-20.
- 4400 Plants have been planted in FY 2020-21

Priority-II (River Markanda at Kala Amb)

- 1600 plants have been planted in TrilokpurDevini Area in FY 2019-20
- 9600 plants planted during FY-2020-21.

Priority – III (RiverSirsa at Baddi, Nalagarh in District Solan

- 8800 plants has been planted in FY 2019-20.
- 18000 plants planted in FY2020-21.

Priority – V (River Ashwani, District- Shimla HP)

- 28600 Plants have been planted in 2019-20.
- 11000 plants have been planted in FY 2020-21.

Priority – V (River Beas from Kullu to Dehra-Gopipur at District- Kullu, Mandi, Hamirpur and Kangraof Himachal Pradesh

- 17,800 Plants are planted in FY 2019-20.
- 35,100 plants have been planted in FY2020-21

Priority – V (River Giri at Sainj, District- Shimla HP)

- 3300 Plants are planted in FY 2019-20.
- 4400 plants have been planted in FY 2020-21.

Priority – V (River Pabbar along Rohru, District- Shimla HP)

- Total 3300 Plants are planted in FY 2019-20.
- 7700 plants have been planted in FY 2020-21.

XIX. Development of biodiversity park:

- As per the Action Plan of Priority I & II, Bio-diversity Park is proposed.
- No suitable land is available for the construction of Bio-Diversity Park in catchment of Priority-I ~ SukhnaNallah.
- Setting up of Bio-diversity Park, for Priority-III (River Sirsa)
The work has been completed
- Development of Eco-Park in Paonta Sahib:
The work has been completed
- Bio-Diversity Park in Kala Amb:
Work has been completed.

XX. Reuse of Treated Water:

JSV is providing facility for bulk water user at all the STPs to enable drawing the effluent for reuse. Tertiary treatment shall also be provided as per requirement of the Bulk Users.

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

River Beas (Kullu to Dehra Gopipur) which is currently categorized as Priority-V Polluted River Stretch in HP, upon implementation and completion of various action points mentioned in approved action plan, has shown considerable improvement in the water quality and the matter of delisting it from polluted river stretch has already been taken up with CPCB.

XXII. Status of Preparation of Action Plan by the 13 Coastal States:No coastal area in HP

XXIII. Regulation of Mining Activities in the State/UT:Mining activities are being regulated under HP Mines and Mineral Act and also Water (Prevention and Control of Pollution)Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

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

All action plans are being implemented. State Board conduct regular monitoring as per the schedule and action against polluters in terms of issuing show cause notices, power disconnection &Environmental Compensation is initiated accordingly.

The water quality of polluted rivers for month of **August, 2022:**

Entry Point

Polluted river Stretch	Priority	pH	D.O.	BOD	F.C.	T.C
			mg/l	mg/l	MPN/100ml	MPN/100ml
SukhnaNallah upstream of Parwanoo Town at Shivloti Temple, Village – Ambota	I	8.11	6.8	0.8	2	17
River Markanda Upstream Kala Amb	II	7.95	7.3	2.6	70	350
River Sirsa U/s SitomajriNallah	III	8.16	6	1	4	24
Ashwani Khad w.r.t U/s of weir site of WTP near Ashwani Bridge	V	7.48	7.9	7.4	12	920
River Beas, U/s Manali	V	7.86	8.1	0.1	63	280
River Giri at U/s Chailla	V	7.66	7.8	BDL	17	140
River Pabbar U/s Dhambari	V	7.94	8.9	BDL	6.8	540

Exit Point

Polluted river Stretch	Priority	pH	D.O.	BOD	F.C.	T.C
			mg/l	mg/l	MPN/100ml	MPN/100ml
SukhnaNallah D/s Water Quality at Kalka Barrier.	I	7.97	5.8	2	21	170
River Markanda D/s JattanWalaNallah at Sadhora	II	7.58	4.1	2.8	3900	43000
River Sirsa D/s Nalagarh Town	III	8.06	6	0.8	4.5	40
AshwaniKhad U/s Yashwant Nagar	V	7.79	7.2	6	11	220
River Beas (Right Bank) D/s Dehra Town)	V	7.95	6.7	0.2	4	94
River Giri D/s of Lift Water Supply Scheme at Sainj (at boundary District Shimla)	V	7.88	7.8	BDL	20	1600
River Pabbar D/s of TRT of Sawara Kuddu	V	7.58	8.5	BDL	12	280