H.P. STATE POLLUTION CONTROL BOARD

HIM PARIVESH, PHASE III, NEW SHIMLA-171 009.

No. HPSPCB (NGT) OA. No. 673/2018 (Polluted River Stretches) /Vol-VII/2020- **Dated:** 19/9/2020

15080-83

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 your letter No. Legal/ OA. No. 673/2018 NMCG/2020 dated 24th July, 2020 on the above cited subject addressed to the PS to Chief Secretary to the Govt. of HP, H.P Secretariat Shimla to submit Action Taken Report/ progress report to the Secretary Ministry of Jal Shakti (MoJS) on monthly basis for reference and apprise Hon'ble NGT.

In this context, the latest monthly progress report for the month of August-2020 in compliance to the 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", is hereby enclosed for your kind information and further necessary action please.

Thanking you,

Encl.: As above

Approved by
Member Secretary
HP State Pollution Control Board
(Vide N.N. 4)

Copy to:

1. **The Secretary (Env. Sci. & Tech.) to the Govt. of Himachal Pradesh** for kind information and necessary action please.
2. **The Member Secretary,** Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi- 110032 for kind information and necessary action please.
3. **Divisional Head,** WQM-I Division, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi- 110032 for kind information and further necessary action please.

(Er. Chandan Kr. Singh)
Assistant Environmental Engineer
HP State Pollution Control Board
Ph. No. 0177-2673766

National Mission for Clean Ganga

Format for Submission of Monthly Progress Report by State of HP for the month of August-2020 (Hon'ble NGT in the matter of OA. No. 673/2018 dated 06.12.2019)

<table>
<tr><th>Sr. No.</th><th>Activity to be monitored</th><th>Timeline</th><th>Submission of Progress by State/ UT- Compliance Status</th></tr>
<tr><td>1.</td><td>Ensure 100 % treatment of sewage at least in-situ remediation</td><td>31.12.2020</td><td>The work for Priority-I started and civil work and plantation work is completed. The tender work for Priority-II has been awarded.</td></tr>
<tr><td></td><td>Commencement of setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs must be ensured</td><td>31.12.2020 (Priority-I & II) 31.03.2021 (Prority-III)</td><td>The Progress report for setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs for all Priority Stretches is as under:
<table>
<tr><th>Sr. No.</th><th>Area & Priority</th><th>Proposal</th><th>Incremental Progress</th></tr>
<tr><td>1.</td><td>SUKHNA Nallah Stretch (Priority - I):- Parwanoo Town</td><td>Sewage Treatment Plant Proposal (2 No of 1 MLD capacity each including laying of sewerage lines in Zone-I and Zone-II in Parwanoo Town. The proposal of 49.82 Crore prepared by IPH Department.</td><td>• Sewer pipes has been procured.
• Land development work started for 1st STP.</td></tr>
<tr><td>2.</td><td>River MARKANDA Stretch (Priority II):</td><td>Kala Amb and Moginand Area: Laying of Sewerage Network and Pre-treatment of Sewage. The proposal is of Rs. 30.40 crore.</td><td>• The pipe line for sewer lines purchased.
• Work of Laying of network is in progress.
• 1650m sewer line laid till date.</td></tr>
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					Trilokpur Area: Laying of Sewerage Network & Setting up of Sewage Treatment Plant of 1 MLD capacity. The proposal is of Rs. 26.00 crores.	• 3.6 km sewer line has been laid. • Precast manhole chambers & covers have been procured.
			3.	River Sirsa Stretch (Priority III)	Execution of project proposal for sewage management by laying of pipelines and installation and commissioning of STP at Nalagarh of capacity 3.62 MLD. The cost is Rs. 16.36 crores.	• STP has been completed and commissioned. • The Sewerage connections are being released. • The Tender work for laying additional pipelines to cover near about areas is in process.
					Proper design, execution of Sewerage lines and Pretreatment of Sewage to be incorporated in CETP, Baddi. The capacity is 5.5 MLD. The cost is Rs. 33.34 crore.	• The Sewerage connections are being released and sewage is also received CETP, Baddi. • The Tender work for laying additional pipelines to cover near about areas is in process.
			4.	Ashwani Khad (Priority V)	The up-gradation of existing 3 STPs by providing Sequencing Batch Reactor (SBR) technology. The proposal is of Rs. 45.76 crores.	• The work for upgradation of STP has been awarded. • The work of up-gradation of STP Malyana regarding installation of centrifuge and online monitoring system has been started.
					Installation of a new STP of 2 MLD capacity for Panthagati area. The proposal is of Rs. 22 crore.	• Tender has been awarded. • Soil testing completed. • Surveying work is in progress.
			5.	River Beas (Priority V)	Proposal for Sewerage Scheme in Rangri, Manali, District- Kullu.	• Technical Sanction accorded and Draft Notice Inviting Tender under preparation.
					Proposal for Sewerage Scheme in Marhi, District- Kullu.	• Work of laying network is completed and work for setting up of STP is awarded and work is in progress.

					Proposal for the expansion of existing STP in Manali.	• Funds have been received. Hydraulic Design submitted for approval.	
					Proposal for Sewerage Scheme in Kullu Town, District- Kullu (Zone-I).	• The work for up-gradation of STP (Zone-I & Zone-II), Kullu has been awarded under AMRUT. The design and drawing stand approved. The work is in progress.	
					Proposal for Sewerage Scheme in Kullu Town, District- Kullu (Zone-II).		
					Proposal for Sewerage Scheme in Kullu Town, District- Kullu (Zone-III)	• The work of STPs (Kullu Zone –III and Bhunter Zone-III) completed and are functioning as prescribed norms of CPCB.	
					Proposal for Sewerage Scheme in Bhunter Town, District- Kullu (Zone-III).		
					Proposal for the expansion of existing STPs and installation of New STPs (District- Mandi).	• Tendering for STP and part of sewerage network in progress.	
					Proposal for sewer connection and sewer line up-gradation at Nadaun (District- Hamirpur).	• STP commissioned, estimate for additional pipe network approved.	
					Proposal for installation of STP (1.38 MLD) at Dehra, District- Kangra.	• STP has been commissioned. • Connections being released.	
					Proposal for installation of STP (60 KLD) at Industrial area, Kullu.	• Tender has been called for 3rd time on 6.08.2020 with some relaxation in terms & conditions and was opened on 22.08.2020. • Final negotiation with party to be held on 19th September.	
			6.	Giri (Priority V)	Installation of three STPs in these areas i.e. one at Theog (1.15 MLD) and two at Kotkhai (0.305 MLD & 0.16).	• The work for STP at Theog, and 02 STPs Kotkhai stand completed and commissioned and trial run is in progress.	

2.	Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning	31.03.2021	The Time line for completion of all sewage proposals, pertaining to Priority –I (Sukhna Nallah at Parwanoo) and Priority-II (River Markanda at Kala Amb) the timeline is **31.12.2020** and for Priority –V (Ashwani Kaha, River Beas, River Giri and River Pabbar) the timeline is **31.3.2021.**
3.	Chief Secretaries may set up appropriate monitoring mechanism at State level		
	• Specifying accountability of nodal authorities not below the Secretary level.		The Administrative Secretaries of Industries Deptt., Urban Dev. Deptt., Rural Dev. Deptt., Irrigation & Public Health Deptt. have been made accountable at State level.
	• Chief Secretaries may have an accountable person attached in their office for this purpose.		The Environment Cell has been notified vide notification No. STE-E (3)-16/2019 dated 19th February 2020 comprising of MS, PCB, Director, UD, Director, Environment and Joint Secy, (Env.). (copy of notification enclosed)
	• Monitoring at State level must take place	Fortnightly Commencing 21.12.2019	Regular monitoring of the progress on implementation of Action Plans is being undertaken at Chief Secretary level. Last meeting was held on **17.06.2020** w.r.t. reviewing the status.

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<tr>
<td>4.</td>
<td>Progress report may be furnished by the States/ UTs to
• Secretary, Ministry of Jal Shakti
• Member Secretary, CPCB</td>
<td>Monthly (preferably before 20th of every month)</td>
<td>The incremental progress report is enclosed as below:-

1. <u>SUKHNA Nallah Stretch (Priority - I):- Parwanoo Town</u>
<table>
<tr><th>Sr. No.</th><th>Organization Responsible</th><th>Work proposed for Execution along with cost and final Timeline.</th><th>Incremental Progress</th></tr>
<tr><td>1.</td><td>Irrigation and Public Health Department</td><td><u>Sewage Treatment Plant Proposal</u>
(2 No of 1 MLD capacity each including laying of sewerage lines in Zone-I and Zone-II in Parwanoo Town.
The proposal of 49.82 Crore prepared by IPH Department.</td><td>• <u>Sewer pipes has been procured.</u>
• <u>Land development work started for 1st STP.</u></td></tr>
<tr><td></td><td></td><td>Installation of Continuous Water Quality Monitoring Station. The proposal of 0.3 crore.</td><td>The Online Continuous Water Quality Monitoring Station (OCWQMS) has been installed and online data has been connected to HPSPCB server.</td></tr>
<tr><td></td><td></td><td>Radar system for depth and flow measurement.</td><td>The system has been provided by IPH and it is installed at River Kaushalya and is functioning properly.</td></tr>
<tr><td>2.</td><td>HIMUDA, Municipal Council, Parwanoo</td><td>Sewage Treatment Plant (1 No. of 70 KLD capacity in Sector - 5 Parwanoo) to cater to the</td><td>• The Sewage Treatment Plant of 70 KLD capacity installed at Sector -5, Parwanoo and also commissioned and is working properly.</td></tr>
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					additional load of Septic Tanks catering to the residential area. Cleaning and Overhauling of Septic Tanks.	• Latest report of Cleaning and Overhauling of septic tanks not received from MC Parwanoo.	
			3.	**Department of Urban Development**	Waste Recovery and Reprocessing of Existing Dumped Waste at Dumping site Sector 5, Parwanoo. Installation of Kiosk for Domestic Hazardous Waste Management.	• The legacy waste has been recovered, and dumping site has been cleared. • Domestic Hazardous waste Kiosk has been installed at Parwanoo.	
			4	**BBNDA, MC Parwanoo & HPSPCB**	For collection, Transportation, Processing and disposal of fresh waste at Baddi Cluster.	• The work of Production Shed, Weighbridge, Boundary Wall, CCTV Cameras, ETP for Leachate treatment, Stand Completed. • Plant and Machinery of RDF Section is installed. • Other miscellaneous work electrification is also completed. • The trommels, dryer along with hot air generator etc. completely installed. • Windrows for composting have been constructed.	
			5.	**Forest Department**	Plantation Proposal	• Bush Cutting, Fencing have been done. • 2200 Plants have been planted so far for 2019-20. • 4400 Plants have been planted in FY 2020-21	

			6.	**MC Parwanoo**	Phyto-remediation Proposal on Samtel Nallah	• Civil work and plantation of plants completed.
			7.	**HPSPCB**	Inventorization of Wastewater generating Industries and Legal Action against Non-complying Industrial Units	• The inventorization is completed, 48 Nos of Water Polluting industries exists.
			8.	**Health Department**	Health Camps and Health Study on the catchment of River.	• No Health Camps conducted in July, 2020 due to Covid-19 pandemic.

2. River MARKANDA Stretch (Priority II):

Sr. No.	Organization Responsible	Work proposed for Execution along with cost and final Timeline.	Incremental Progress
1.	**Irrigation and Public Health Department &**	Kala Amb and Moginand Area: Laying of Sewerage Network and Pre-treatment of Sewage. The proposal is of Rs. 30.40 crore.	• The pipe line for sewer lines purchased. • Work of Laying of network is in progress. • 1650m sewer line laid till date.

				Industries Department	Trilokpur Area: Laying of Sewerage Network & Setting up of Sewage Treatment Plants. The proposal is of Rs. 26.00 crores.	• Sewer pipes procured for sewer line. • The land handed over to contractor. • The hydraulic design has been approved by the competent authority. • 3.6 km sewer line has been laid. • Precast manhole chambers & covers have been procured.

			2.	**Irrigation and Public Health Department**	Installation of Continuous Water Quality Monitoring Station	The Online Continuous Water Quality Monitoring Station (OCWQMS) has been installed.
			3.	**Department of Industries.**	Kala Amb area : Proposal for setting up of CETP.	• Tender has been awarded on 31st August 2020.
			4.	**Special Area Development Authority, Kala Amb, District Administration, Rural Development Department.**	Proposal for setting up of Solid Waste Management Facility. The cost of the project is Rs. 3.5 crores.	• The construction of Shed has been started. Excavation work for foundation is completed. The construction work could not be carried out due to rains and will resume soon. • The electricity connection has been installed. • Water connection has also been applied and shall be installed after completion of work of shed. • Supply order for procurement of Bailing machine issued to Scientific & Technologies Equipment's Corporation on 07.03.2020. Advance 40% payment has been released.
			5.	**Forest Department**	Plantation Proposal	• 1600 plants have been planted in Trilokpur Devini Area in FY 2019-20. • 9600 plants planted during FY-2020-21. • A Vertical Garden with 2000 plantation done.

			6	**IPH Department**	Phyto-remediation Proposal on Jattan Wala Nallah	• <u>Tender has been awarded.</u>
			7	**HPSPCB**	Inventorization of Wastewater generating Industries and Legal Action against Non-complying Industrial Units	• The inventorization is completed, 94 Nos of Water Polluting industries exists.
			8	**Health Department**	Health Camps and Health Study on the catchment of River.	• No Health Camps conducted in July, 2020 due to Covid-19 pandemic.

3. **River SIRSA Stretch (Priority III):-**

Sr. No.	Organization Responsible	Work proposed for Execution along with cost and final Timeline.	Incremental Progress
1.	**Irrigation and Public Health Department and Urban Development Department**	Execution of project proposal for sewage management by laying of pipelines and installation and commissioning of STP at Nalagarh. The cost is Rs. 16.36 crores.	• STP has been completed and commissioned. • The Sewerage connections are being released. • The Tender work for laying additional pipelines is in process.
		Proper design, execution of Sewerage lines to be incorporated in CETP, Baddi. The cost is Rs. 33.34 crore.	• Laying of sewerage network and testing is completed. • The Sewerage connections are released and sewage is also received CETP, Baddi. • The Tender work for laying additional pipelines is in process.
	Irrigation and Public Health Department	To undertake channelization of River Sirsa from Sitomajri to Sainimajra (Nalagarh) including main drains contributing to River Sirsa.	• DPR submitted to CWC.

			2.	**M/s Baddi Infrastructure (CETP) Baddi, Distt. Solan.**	Improvement in functioning of existing CETP at Baddi w.r.t. connecting the near about areas with conveyance pipeline to treat the 1.10 MLD wastewater from Industries falling in River Sirsa Catchment. The cost is 2.70 crore.	• The pipeline laying work of Phase –I (Baddi- Barotiwala Sia Road to SWCA Building) approx. 1.7 KM is completed and Hydro testing is done. • Phase –II (Remaining work) Bank Guarantee to NHAI for obtaining permission of digging work of road side berms for laying pipelines has been received and work for 5000 meters is started.
			3.	**Department of Industries.**	Improvement in functioning of C.E.T.P Baddi.	• The matter has been taken up with the Additional Chief Secretary (Inds) to the Govt. of HP for grant of in-principle approval for preparation of DPR by M/s Baddi Infrastructure, which is under process at Govt. level.
			4.	**Department of Industries**	Cleaning of sewage tanks for industrial areas of Baddi, Jharmajri, Lodhimajra, Davni, Thana	• All the Sewage tanks falling under the jurisdiction of SWCA, Baddi and MD have been cleaned. • HPSIDC has been requested to clean Septic tanks (3nos) of HPSIDC Industrial Area. Tanks are being cleaned.

			5.	**BBNDA**	Setting up of Solid Waste Processing Plant at Baddi.	• The work of Production Shed, Weighbridge, Boundary Wall, CCTV Cameras, ETP for Leachate treatment, Stand Completed. • Plant and Machinery of RDF Section is installed. • Other miscellaneous work electrification is also completed. • The trommels, dryer along with hot air generator etc. completely installed. • Windrows for composting have been constructed.	

			5.	**Forest Department**	Plantation Proposal and Bio-diversity Proposal	• Total number of 8800 plants has been planted in FY 2019-20. • 18000 plants planted in FY2020-21. **Setting up of Bio-Diversity Park:** • Lantana eradication, forestry & ornamental plantation carried out, renovation of ponds, • Construction of path, boundary walls, contingency and gate. • Amount of Rs 32 lakhs for FY 2020-21 has been allotted
			6.	**IPH Department**	Installation of Real-Time Water Quality Monitoring Station at river Sirsa.	• The Site is identified, tender has been awarded.
			7.	**HPSPCB**	Inventorization of Wastewater generating Industries and Legal Action against Non-complying Industrial Units	• The inventorization is completed, 576 Nos of Water Polluting industries exists.

4. ASHWANI Stretch (Priority V):-

Sr. No.	Organization Responsible	Work proposed for Execution along with cost and final Timeline.	Latest Status
1.	**Shimla Jal Prabandhan Nigam Limited (SJPNL) & MC Shimla**	The up-gradation of existing 3 STPs by providing Sequencing Batch Reactor (SBR) technology. The proposal is of Rs. 45.76 crores.	• The work for upgradation of STP has been awarded. • The work of up-gradation of STP Malyana regarding installation of centrifuge and online monitoring system has been started.
		Installation of a new STP of 3.1 MLD capacity for Panthagati area. The proposal is of Rs. 22 crore.	• Tender has been awarded. • Soil testing completed. • Surveying work is in progress.
		Proposal for Septage Management under AMRUT-mission for the management of faecal sludge and septage management including drains contributing sewage into Ashwani Khad.	• Funds have been received. • The tender was called and 3 bids received. • Tender likely to be awarded soon.

					Proposal for improving the water quality of Ashwani Khad by installing various components, for the rejuvenation of water sources by improving the purity of water of Natural Nallahs by Phytorid Treatment at Ashwani Khad, Sanjuli-Malyana-Chamyana Khad, Shimla project.	• The preparation of estimate and acquiring of land is in progress.
			2.	**Forest Department**	Plantation proposal and Construction of Check Dams.	• 28600 Plants have been planted for 2019-20. • 11000 plants have been planted in FY 2020-21. • Construction of Check Dams on sub-catchment of Ashwani at Mansar ka Nallah, Jhokjri ka Nallah, Kurgal ka Nallah, Sewak Dhangil Nallah completed. • Construction of Check dams/water ponds of FY 2020-21 to be carried out after monsoon.

5. BEAS Stretch (Priority V) :-

Sr. No.	Organization Responsible	Work proposed for Execution (In the Catchment Area)		Latest Status
1.	**Irrigation and Public Health Department & Urban Development**	**I.** Proposal for Sewerage Scheme in Rangri, Manali, District- Kullu.	162.0 Crore	**I.** Technical Sanction accorded and Draft Notice Inviting Tender under preparation.
		II. Proposal for Sewerage Scheme in Marhi, District-Kullu.	1.14 Crore	**II.** Work of laying network is completed and work for setting up of STP is awarded and work is in progress.
		III. Proposal for the expansion of existing STP in Manali, installation of New STPs in Manali.	6.17 Crore	**III.** Funds have been received. Hydraulic Design submitted for approval.
		IV. Proposal for Sewerage Scheme in Kullu Town, District- Kullu (Zone-I).	1.88 Crore	**IV&V.** The work for up-gradation of STP (Zone-I & Zone-II), Kullu has been awarded under AMRUT. The design and drawing stand approved. The work is in progress.
		V. Proposal for Sewerage Scheme in Kullu Town, District- Kullu (Zone-II).	3.05 Crore	

					VI. Proposal for Sewerage Scheme in Kullu Town, District- Kullu (Zone-III). **VII.** Proposal for Sewerage Scheme in Bhunter Town, District- Kullu (Zone-III).	2.25 Crore 3.35 Crore	**VI & VII.** The work of STPs (Kullu Zone –III and Bhunter Zone-III) completed and are functioning as prescribed norms of CPCB.
					Proposal for the expansion of existing STPs and installation of New STPs (District- Mandi).	The Technical Sanction has been accorded to Rs. 61.14 Crores. Tendering for STP and part of sewerage network in progress.	
				Irrigation and Public Health Department (I&PH)	Proposal for sewer connection and sewer line up-gradation at Nadaun (District- Hamirpur).	• STP commissioned, estimate for additional pipe network approved.	
					Proposal for installation of STP (1.38 MLD) at Dehra, District-Kangra.	• STP has been commissioned. • Total Connection 850, out of which 312 connections sanctioned and 125 released.	
					Proposal for Channelization of River Beas from Palchan to Aut under HP Flood and River Management Project.	Snowfall data awaited from SASE.	
					Proposal for channelization of Suketi Khad in a stretch.	DPR submitted to Secy (Jal Shakti) to the Govt. of HP by E-in-C (Project) Jal Shakti Vibhag Mandi.	
			2.	**Urban Development**	Proposal for up-gradation of Solid Waste Management Facility for Mandi.	• **<u>The Work stand completed.</u>** • <u>Wet Composting is started.</u>	

				Department Mandi.		• Trommel, Shredder and De-watering machine have been installed for clearing legacy Waste. • Bailing machine have been installed for packing drying waste for co-processing in cement plants. • Out of 1lac ton legacy waste, 0.15lac ton has been cleared. • One additional trammel machine to be installed.	
			3.	**Department of Industries.**	Proposal for installation of STP (60 KLD) at Industrial area, Kullu.	• Tender has been called for 3rd time 6.08.2020 with some relaxation in terms & conditions and will be opened on 22.08.2020. • Final negotiation with party to be held on 19th September.	
					De-sludging of Septic Tanks for Industrial Area, Mandi (District- Mandi).	• The work has been completed.	
			3.	**Forest Department**	• Proposal for Plantation (Kullu) by Forest Department • Proposal for Soil Conservation and Plantation (District- Mandi). • Proposal for Plantation (District- Hamirpur) • Proposal for Plantation (District- Kangra)	• A total of 17,800 plants have been planted in Kullu, Mandi, Hamirpur, Kangra, the work stand completed. • Total 35,100 plants have been planted in FY2020-21 • Total 110 soil conservation work (Check Dams and Crate Walls work) completed for FY-2019-2020 • Construction of check dams of FY 2020-21 to be carried out after monsoon.	

6. GIRI Stretch (Priority V):-

Sr. No.	Organization Responsible	Work proposed for Execution (In the Catchment Area)	Existing Status
1.	**IPH Department**	Installation of three STPs in these areas i.e. one at Theog and two at Kotkhai.	• The work for STP at Theog, and 02 STPs Kotkhai stand completed and commissioned and trial run is in progress.
2.	**Forest Department**	Plantation proposal. The proposal is of 0.73 crore	• Plantation of total 3300 plants is completed. • Total 4400 plants have been planted in FY 2020-21.

7. PABBAR Stretch (Priority V):-

Sr. No.	Organization Responsible	Work proposed for Execution (In the Catchment Area)	Existing Status
1.	**Department of Urban Development.**	Proposed facility for setting up of common SWM facility for areas Rohroo, Jubbal, Hatkoti and other areas.	• The work for decentralized processing is completed. • Material Recovery Facility in Jubbal is under construction.
2.	**Forest Department**	Plantation proposal.	• Plantation of total 3300 plants planted in 3 hectare area for 2019-20. • Total 7700 plants have been planted in FY 2020-21.

<table>
<tr><td>4.1</td><td>Progress Report may be comprised of details along with completion timelines on:</td><td></td><td></td></tr>
<tr><td>(i)</td><td>Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment</td><td></td><td>The action plan of <u>Priority – I to V</u> are prepared based on following identified polluting sources :
1. Domestic Sewage generation and its treatment and proposed timeline to meet the gaps.
2. Industrial Wastewater generation and its treatment and proposed timeline to meet the gaps.
3. Existing solid wastes, bio-medical waste, hazardous waste, e-waste and other waste processing along the cat of River stretches, gaps and proposed timeline to meet the gap.</td></tr>
<tr><td>(ii)</td><td><u>Status of STPs, I&D and sewerage networks</u>
Details of Existing Infrastructure, Gap Analysis, proposed along with completion timeline</td><td></td><td>Detailed Gap analysis for the approved action plan for Priority – I and Priority – II is enclosed as under<u>.</u>
Gap Analysis and the Proposed Action Points as per submitted Action Plans : <u>(P-I & II stretches)</u>
<table><tr><th colspan="2">Details</th><th>Generation</th><th>Existing Capacity</th><th>Gap</th><th>Proposed Treatment facilities</th></tr><tr><td rowspan="2">Sewage Management</td><td>Sukhna Nallah</td><td>(Residing & Floating) 1357.414 KLD (1.357 MLD)</td><td>• 29 Captive ETP cum STPs
• 16 Common Septic tanks
• 70 KLD STP

Total capacity: 858.004 KLD

(0.858 MLD)</td><td>499.41 KLD (0.499 MLD)</td><td>➢ 02 STPs proposed of 01 MLD each.

Total Capacity: 2 MLD
Timeline: 31/12/2020.</td></tr><tr><td>River Markanda</td><td>(Residing & Floating) 1146.24 KLD

(1.146 MLD)</td><td>• 06 Captive STPs
• Local Household inadequate Designed Septic Tanks.

Total: 0.1 MLD</td><td>1046.24 KLD

(1.046 MLD)</td><td>➢ 1 STP proposed for Trilokpur Area having capacity 1 MLD and Sewerage network and pre-treatment of sewage at Kala Amb (1.5 MLD)</td></tr></table></td></tr>
<tr><td>(iii)</td><td><u>Status of CETPs</u>
Details of Existing CETP and ETP Infrastructure, Gap Analysis, Proposed along with completion timeline, No. of industries and complying status</td><td></td><td></td></tr>
<tr><td>(iv)</td><td><u>Status of Solid Waste Management & Details of Processing Facilities</u></td><td></td><td></td></tr>
</table>

	Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline	**31.12.2020**						Total capacity 2.5 MLD Timeline: 31/12/2020.
				River Sirsa	(Residing & Floating) 9.12 MLD	• 20 Captive ETP cum STPs (0.954 MLD) • 16 Common Septic tanks (01 MLD) • 5.5 MLD (Sewerage Network and Pre-treatment & To CETP, Baddi) • 3.62 MLD STP at Nalagarh. • Total Capacity – 11.074 MLD	No Gap	➢ STP at Nalagarh commissioned in Feb 2020. ➢ Sewerage connections and pre-treatment at CETP Baddi completed.
		31.12.2020		**River Ashwani along Yashwant Nagar (Shimla & Solan)**	20.51LD	03 nos of STPs with existing treatment: • Dhalli STP capacity 0.76 MLD • Malyana STP capacity 4.44 MLD • Lalpani STP capacity 10 MLD Total Capacity – 15200 KLD (15.2 MLD).	5.31 MLD	• Upgrdation of 03 nos of STPs at Dhalli, Malyana and Lalpani and New STP at Panthghati of 02 MLD. Total Up gradation Capacity – 13.35 MLD Timeline: 31/3/2021
		31.12.2020		**River Beas at Kullu to Dehra Gopipur**	23.71 MLD	• STPs (07 Nos) at Manali and Kullu. STP Dehra and STP Jawala Ji. Total Capacity – 19300 KLD (19.3 MLD).	4.41 MLD	• Up gradation of STPs at Kullu (06) and Manali (01), 02 New STPs at Manali, Marhi. • STP at Industrial area Kullu.

								Proposal Capacity – 25.52 MLD
				River Giri along Sainj	1.18 MLD	• Septic Tank and Soak Pits • 02 Nos of STPs at Kotkhai and 01 at Theog (0.305, 0.16 MLD at Kotkhai and 1.15 MLD at Theog). Total Capacity - 1565 KLD (1.565MLD), Treated Sewage – 1.18 MLD).	No Gap	No proposal.
				River Pabbar along Rohru	2.24 MLD	• STPs at Rohru, JUbbal and Sarswati Nagar (1.754, 0.651 and 0.65 MLD) Total 3055 KLD (3.055 MLD) Treated Sewage – 2.24 MLD).	No Gap	No proposal.
				Effluent Management	**Sukhna Nallah**	0.4798 MLD (48 industries)	(1.6383 MLD) 19 Captive ETPs 29 Captive ETP cum STPs	No Gap	➢ NO Proposal
					River Markanda	5.5404 MLD (94 Industries)	7.196 MLD (78 ETPs 06 STPs)	No Gap	➢ 01 CETP of 2.5 MLD capacity at Kala Amb. Timeline: 31.12.2020

				River Sirsa	20.779 MLD (576 industries)	CETP: 25 MLD, Captive STPs, ETPs Total Capacity -27.88 MLD	No Gap	Nil	
				River Ashwani along Yashwant Nagar	1.0165 MLD (197 industries)	Captive ETP/ STPs with Capacity 24905 KLD (24.905 MLD)	No Gap	-	-
				River Beas at Kullu to Dehra Gopipur	1.0112 MLD (110 sindustries)	ETP/ STPs with Capacity 1493.9 KLD (1.493 MLD)	No Gap	-	-
				River Giri along Sainj	0.07099 MLD (17 industries)	ETP/ STPs: 92 KLD	No Gap	-	
				River Pabbar (Priority – V)	0.0475 MLD (18 Industries)	63 KLD	No Gap	-	

			Solid Waste Management	**Sukhna Nallah**	07-08 MTD	1 MTD	6-7 MTD	➢ Common Facility at Baddi (40 MTD).
				River Markanda	1.5 MTD	1 MTD Composting	0.5 MTD	➢ Proposal for RDF manufacturing (4-6 MT/ Month) at Kala Amb.
				River Sirsa	25-30	Nil	25-30 MTD	➢ Common Facility at Baddi (40 MTD).
				River Ashwani along Yashwant Nagar	50 MTD	100 MTD	Nil	NA
				River Beas at Kullu to Dehra-Gopipur	63.5 TPD	62.5 MTD Waste to Energy Plant at Manali Waste processing site at Mandi (24 MTD), Hamirpur (10 MTD) and Dehra (2.5 MTD)	1 MTD	NA
				River Giri along Sainj	4.5 MTD	6.5 MTD	No Gap	NA
				River Pabbar at Rohru	6-7 MTD	14 MTD	No Gap	NA

(v)	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;		The water quality of polluted rivers for month of **August, 2020**:

Polluted river Stretch	**Priority**	**pH**	**D.O.**	**BOD**	**F.C.**	**T.C**	**Fecal Streptococci**
			mg/l	**mg/l**	**MPN/100ml**	**MPN/100ml**	**MPN/100ml**
Sukhna Nallah D/s Water Quality at Kalka Barrier.	I	8.15	5.7	0.8	14	39	5.5
River Markanda D/s Jattan Wala Nallah at Sadhora	II	7.55	5.1	6.5	1300	9200	2
River Sirsa D/s Nalagarh Town	III	8.1	7.5	0.4	17	38	<1.8
Ashwani Khad U/s Yashwant Nagar	V	8.12	8	1.2	14	32	<1.8
River Beas (Right Bank) D/s Dehra Town)	V	7.75	8.7	0.3	2	48	<1.8
River Giri D/s of Lift Water Supply Scheme at Sainj (at boundary District Shimla)	V	8.75	7.8	0.7	33	350	<1.8
River Pabbar D/s of TRT of Sawara Kuddu	V	8.42	7.8	0.6	40	350	<1.8

(vi)	Preventing dumping of waste and scientific management including bio-medical wastes, plastic wastes and decentralizing waste processing, including waste generated from hotels, ashrams etc.		**Solid Waste Management** **Priority – I (Sukhna Nallah at Parwanoo)** • At Priority – I, (Sukhna at Parwanoo), total solid waste generation is 7-8 MT/Day. • The legacy waste has been recovered, and dumping site has been cleared. Domestic Hazardous waste Kiosk has been installed at Parwanoo. • The dry waste generated along the stretch of River Sukhna at Prawanoo has been regularly collected and further transported to the Waste processing site at Baddi • The wet waste is processed into Composting Pits constructed. **Priority – II (River Markanda at Kala Amb)** • Total solid waste generation is 3-4 MT/Day • The waste generated along the stretch of River Markanda at Kala Amb is disposed in the waste processing site at Nahan. • The Solid waste processing facility is proposed for Kala Amb which is to be completed by 31.12.2020. **Priority – III (River Sirsa at Baddi, Nalagarh in District Solan)** • Total solid waste generation is 25-30 MT/Day. • The dry waste generated along the stretch of River Sirsa has been regularly collected and further transported to the Waste processing site at Baddi. • The facility is under construction and likely to be completed soon. **Priority – V (River Ashwani, District- Shimla HP)** • Total solid waste generation is 50MT/Day. • The dry waste generated along the stretch of River Ashwani has been regularly collected and further transported to the Waste to RDF plant at Shimla. **Priority – V (River Beas from Kullu to Dehra-Gopipur at District- Kullu, Mandi, Hamirpur and Kangra of Himachal Pradesh)** • Total solid waste generation is 63.5 MT/Day. • The dry waste generated along the stretch of River Beas has been regularly collected and further transported to Waste to RDF Plant at Manali (100 MTD), Waste processing site at Mandi (24 MTD) and Hamirpur (10 MTD) and Dehra (2.5 MTD)

			Priority – V (River Giri at Sainj, District- Shimla HP) • Total solid waste generation is 4.5 MT/Day. **Priority – V (River Pabbar along Rohru, District- Shimla HP)** • Total solid waste generation is 6-7 MT/Day. • The dry waste generated along the stretch of River Pabbar has been regularly collected and further transported to the Waste processing site at Rohru and Jubbal. **Hazardous Waste Management :** **Priority – I (Sukhna Nallah at Parwanoo)** • There are 48 industrial units falling in the stretch of Sukhna Nallah out of which 06 units are closed. • Total Hazardous waste generation inform ETP Sludge is 504 MT per year. • There is no common TSDF site in Parwanoo area. • All hazardous waste is being collected by M/s Shivalik Solid Waste Management Ltd (TSDF), Village Dabhota, Tehsil: Nalagarh, District Solan by the TSDF GPS enabled vehicle and same is further treated and landfilled. • The industries have provided separate storage facilities under covered shed within their premises. • No incident/accident regarding illegally dumping of hazardous waste has ever been reported • The capacity of landfill site at Dhabota is 10 Lac MT, hence there is no Gaps in treatment of Industrial Hazardous Waste Treatment. **Priority – II (River Markanda at Kala Amb)** • There are 94 industrial units falling in the stretch of River Markanda. • Total Hazardous waste generation inform of ETP Sludge is 987 MT per year. • There is no common TSDF site in Kala Amb area. • All hazardous waste is being collected by M/s Shivalik Solid Waste Management Ltd (TSDF), Village Dabhota, Tehsil: Nalagarh, District Solan by the TSDF GPS enabled vehicle and same is further treated and landfilled. • The industries have provided separate storage facilities under covered shed within their premises. • No incident/accident regarding illegally dumping of hazardous waste has been reported yet. • The capacity of landfill capacity of Landfill site at Dhabota is 10 lacs MT, hence there is no Gaps in treatment of Industrial Hazardous Waste Generated by industrial units along River Markanda Stretch.

			Priority – III (River Sirsa at Baddi, Nalagarh in District Solan) • There are 576 industrial units falling in the stretch of River Sirsa. • Total Hazardous waste generation inform of ETP Sludge is 6048 MT per year. • All hazardous waste is being collected by M/s Shivalik Solid Waste Management Ltd (TSDF), Village Dabhota, Tehsil: Nalagarh, District Solan by the TSDF GPS enabled vehicle and same is further treated and landfilled. • The capacity of landfill site at Dhabota is 10 Lac MT, hence there is no Gaps in treatment of Industrial Hazardous Waste Treatment. **Priority – V (River Ashwani, District- Shimla HP)** • There are 140 industrial units falling in the stretch of River Ashwani which generates Hazardous Waste. • Total Hazardous waste generation inform of used oil is 40-50 LPD. • All hazardous waste is being collected and stored at Common facility for collection and Storage at Nalagarh/ Authorized recycler **Priority – V (River Beas from Kullu to Dehra-Gopipur at District- Kullu, Mandi, Hamirpur and Kangra of Himachal Pradesh)** • There are 110 industrial units falling in the stretch of River Beas which generates Hazardous Waste. • Total Hazardous waste generation inform of used oil is 54 LPD. • All hazardous waste is being collected and stored at Common facility for collection and Storage at Nalagarh/ Authorized recycler **Priority – V (River Giri at Sainj, District- Shimla HP)** • There are 5 industrial units falling in the stretch of River giri which generates Hazardous Waste. • Total Hazardous waste generation inform of used oil is 0.76 LPD. • All hazardous waste is being collected and stored at Common facility for collection and Storage at Nalagarh/ Authorized recycler **Priority – V (River Pabbar along Rohru, District- Shimla HP)** • There are 3 industrial units falling in the stretch of River Pabbar which generates Hazardous Waste. • Total Hazardous waste generation inform of used oil is 0.43 LPD. • All hazardous waste is being collected and stored at Common facility for collection and Storage at Nalagarh/ Authorized recycler

			Bio-medical Waste Management: **Priority – I (Sukhna Nallah at Parwanoo)** • The bio medical waste generated is being disposed to M/s Enviro Engineers, a Common Bio Medical Waste Disposal Facility having capacity 100 Kg/hr, located at Shalaghat, District - Solan (H.P). • One Hospital in the name and Style of ESIC Hospital, Parwanoo and 5 other HCF units generate 4.7 Kg/Day and disposes Bio-medical Waste at afore-mentioned site. **Priority – II (River Markanda at Kala Amb)** • The bio medical waste generated is being disposed to M/s Enviro Engineers, a Common Bio Medical Waste Disposal Facility having treatment capacity 100 Kg/hr, located at Shalaghat, District - Solan (H.P). • One Hospital in the name and Style of ESIC Hospital, Kala Amb and 5 other HCF collectively generate 0.2 Kg/Day and disposes Bio-medical Waste at afore-mentioned site. **Priority – III (River Sirsa at Baddi, Nalagarh in District Solan)** • The bio medical waste generated is being disposed to M/s Enviro Engineers, a Common Bio Medical Waste Disposal Facility having capacity 100 Kg/hr, located at Shalaghat, District - Solan (H.P). • 75 Health Care Facilities and 117 Industries collectively produce 765 kg/day and disposes Bio-medical Waste at afore-mentioned site. **Priority – V (River Ashwani, District- Shimla HP)** • The bio medical waste generated is being disposed to M/s Enviro Engineers, a Common Bio Medical Waste Disposal Facility having capacity 100 Kg/hr, located at Shalaghat, District - Solan (H.P). • 25 Health Care Facilities produce 130 kg/day and disposes Bio-medical Waste at afore-mentioned site. **Priority – V (River Beas from Kullu to Dehra-Gopipur at District- Kullu, Mandi, Hamirpur and Kangra of Himachal Pradesh)** • The bio medical waste generated is being disposed to M/s Enviro Engineers, a Common Bio Medical Waste Disposal Facility having capacity 100 Kg/hr, located at Shalaghat, District - Solan (H.P). • 31 Health Care Facilities produce 203 kg/day and disposes Bio-medical Waste at afore-mentioned site.

			<u>Priority – V (River Giri at Sainj, District- Shimla HP)</u> • The bio medical waste generated is being disposed to M/s Enviro Engineers, a Common Bio Medical Waste Disposal Facility having capacity 100 Kg/hr, located at Shalaghat, District - Solan (H.P). • 2 Health Care Facilities produce 6 kg/day and disposes Bio-medical Waste at afore-mentioned site. **<u>Priority – V (River Pabbar along Rohru, District- Shimla HP)</u>** • The bio medical waste generated is being disposed to M/s Enviro Engineers, a Common Bio Medical Waste Disposal Facility having capacity 100 Kg/hr, located at Shalaghat, District - Solan (H.P). • 10 Health Care Facilities produce 28 kg/day and disposes Bio-medical Waste at afore-mentioned site. **<u>Plastic Waste Management:</u>** • **Buy back Policy:** 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. • **EPR Implementation:** Directions are issued to plastic waste Producers and Brand owners to set up waste collection system along Priority- I, II, III V.
(vii)	Ground water regulation		Presently Jal Shakti Department has stopped drilling of new bore wells for extraction of ground water in Himachal Pradesh as per order of the Hon'ble High Court of Himachal Pradesh. The Himachal Pradesh Ground Water Regulation & Control of Development & Management Act is under formulation will be notified after approval from the Government.
(viii)	Adopting good irrigation practices,		The Jal Shakti Department now totally discourages Flood irrigation and convergence of water through open channels. The use of irrigation water in the fields is optimized by extension services offered by Horticulture and Agriculture Department by micro irrigation methods.
(ix)	Protection and management of Flood Plain Zones (FPZ)		No flood plain zone have been identified in Himachal Pradesh till date.
(x)	Rain Water Harvesting,		As per Town & Country Planning Act, 1977 (Act No. 12 of 1977), it is mandatory for all the commercial buildings roof top rain water harvesting system and recharging pit. The guidelines for capturing, storage, integration and distribution of rain water harvesting is as under as per the aforementioned Act :-

			1. The Rain Water Harvesting Structures are allowed to be constructed in setbacks below ground level. If the storage is desired at any level above ground level, it has to be away from setbacks within the permitted covered area. 2. The community Rain Water Harvesting Structure shall also be permissible. 3. Proper system for rain water capturing, storage as well as integration and distribution shall be ensured. 4. The stored rain water shall be utilized regularly for non-drinking usages including firefighting, landscaping, gardening apart from domestic usages. 5. No water supply connection shall be given to any building till Rain Water Harvesting System is put in place and subsequently operationalized. 6. The minimum capacity of Rain Water Harvesting Structure shall be worked out @ 20 Liters per square Metre of the roof top area. 7. Violator shall be liable for disconnection of Public Water Supply connection. 8. The owners of existing buildings without Rain Water Harvesting System shall have to install Rain Water Harvesting System within eighteen months after coming into the operation of these Regulations.
(xi)	Maintaining minimum environmental 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. • 3 low height dams and 3 rain water harvesting structure will be constructed in Markanda (Priority-II) at Kala Amb during 2020-21.
(xii)	Plantation on both sides of the river	Completed	As per the latest progress on Plantation carried out at Priority – I and Priority – II is as below :- **Priority-I (Sukhna Nallah 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 Trilokpur Devini Area in FY 2019-20 • 9600 plants planted during FY-2020-21.

			Priority – III (River Sirsa 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 Kangra of 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.
(xiii)	Setting up of biodiversity parks on flood plains by removing encroachment		• 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. • However, for the Setting up of Bio-diversity Park, for Priority-III the total financial targets estimated by the Department of Forests for the years 2019-20 and 2020-21 are 25.0 Lakh and 32.0 Lakh respectively. For the financial year 2019-20, total budget amounting to Rs. 25 Lakh has been spent for Lantana eradication, forestry & ornamental plantation, renovation of ponds, Construction of path, boundary walls, contingency and gate etc. Amount of Rs 32 lakhs for FY 2020-21 has been allotted and Rs. 6 lakhs has been spent for filling, cleaning, dressing of boulders, plantations etc.