

National Mission for Clean Ganga

Punjab: Submission of Monthly Progress Report for May, 2020

(Hon'ble NGT in the matter of OA No. 673/2018 dated 06.12.2019)

Sr. No.	Activity to be monitored	Timeline	Submission of Progress by Punjab - Compliance Status
1	Ensure 100% treatment of sewage at least in-situ remediation	31.03.2020	<p>Department of Local Government has taken following measures for in-situ remediation:</p> <ul style="list-style-type: none">• In-situ treatment system based on Soil Bio Technology (known as vertical flow CWS) installed to treat wastewater of village Phullokheri, District Bathinda• Constructed Wetland System (CWS) followed by Waste Stabilization Pond (WSP) technology installed in village Issewal, Tehsil Nabha, Distt. Patiala.• Floating type CWS followed by WSP technology installed in village Singhpura, Near Kurali, Distt. SAS Nagar.• A bio-cleaner bio-remediation in-situ treatment system has been attempted in the pond of village Bhasour, Distt. Sangrur and its performance was found to be satisfactory. In this treatment system the microbes are hibernated on the ceramic media in immobilized state and oxygenation is carried out with the help of a floating type aerator.• An in-situ treatment system based on waste stabilization

			<p>pond (WSP) technology installed in village Bijanpur, Distt. Sangrur.</p> <ul style="list-style-type: none"> • Two different technologies for namely Nano Bubble Technology and Constructed Wet Land Technology are being piloted for in-situ remediation of two drains i.e Bhulana drain (near Jalandhar) and Sirhind Choe (Near Bhadson, District Patiala). • In 38 towns, where sewerage system does not exist, Feacal Sludge treatment has been started to convert black water into grey water. • The result of the above mentioned technologies will be analysed within next 3 months. After analysing the results, in-situ remediation through the said technologies will be replicated in rest of drains of the State in phased manner.
	Commencement of setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs must be ensured	31.03.2020	Out of 88 New STPs (including rehabilitation & up-gradation of existing 14 STPs), work in 15 STPs is under progress, 63 STPs are at tender stage and land not available in 10 STPs.
2	Timeline for completing all steps of action plan including completion of setting up of STPs and their commissioning	31.03.2021	<p>88 STPs (new/ up-gradation) are being set up in the catchment areas of rivers as per following details:</p> <ul style="list-style-type: none"> • 11 STPs by 31.03.21 • 25 STPs by 31.03.22 • 32 STPs by 31.03.23 • 20 STPs by 31.12.23
3	Chief Secretaries may set up appropriate monitoring mechanism at State Level:	22.01.2020	Govt. of Punjab had set up Directorate of Environment & Climate Change within the

	<ul style="list-style-type: none"> Specifying accountability of nodal authorities not below the Secretary level Chief Secretaries may have an accountable person attached in their office for this purpose. 	22.01.2020	Department of Science, Technology & Environment to coordinate implementation of Environment Protection Action Plans and compliance of NGT orders
	<ul style="list-style-type: none"> Monitoring at State Level must take place 	Fortnightly commencing 21.12.2019	<ul style="list-style-type: none"> Progress w.r.t implementation of Action Plans on Clean Rivers being reviewed regularly by State Level Apex Committee under the Chairmanship of Chief Secretary, Punjab. Thirteen meetings of State level Apex Committee held from Jan, 19 to May, 2020. The progress of implementation of Action Plans is being also reviewed on monthly basis by River Rejuvenation Committee under the Chairmanship of Principal Secretary, Deptt. of Environment and NGT appointed Sub Committees on monthly basis.
6	<p>Progress report may be furnished by the States/ UT to:</p> <ul style="list-style-type: none"> Secretary, Ministry of Jal Shakti Member Secretary, CPCB 	Monthly (preferable before 20 th of every month)	Progress Report for the month of March, 2020 submitted to Ministry of Jal Shakti vide email dated 15.04.2020 with copy to CPCB. The Progress Report for the month of April, 2020 could not be submitted, as no significant progress was made due to lockdown/curfew in the State.
6.1	Progress report may be comprised of details along with completion timelines on:		
(i)	Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment.		<ul style="list-style-type: none"> 4 polluted river stretches and major drains contributing to rivers identified. Punjab Pollution Control Board has been directed to monitor the drains. Department of Local

			Government has taken steps for in-situ treatment as brought out at Sr.No. 1
(ii)	<p>Status of STPs, I&D and sewerage networks</p> <p>Details of existing infrastructure, Gap Analysis, Proposed along with completion timeline.</p>		<ul style="list-style-type: none"> • Total 93 STPs are in operation in the catchment areas of rivers Sutlej (52), Beas (17) and Ghaggar (24). • The % age Non- compliance of STPs (as per number of STPs) reduced from 46 % in March, 19 (Base month) to 32% during 2019-20 and further to 20% in May, 2020. • The %age Non- compliance of STPs (as per capacity) reduced from 58 % in March, 19 (Base month) to 44% during 2019-20 and further to 34.6 % in May, 2020. • 78% of sewerage network is in place in the State. • 88 new STPs including rehabilitation/up-gradation of existing 14 STPs to be setup by 31.12.23. • Quantity of sewage generated from the ULB/town falling in the catchment area of river has been estimated 1916 MLD. Out of which, 1303 MLD (68%) being treated.
(iii)	<p>Status of CETPs</p> <p>Details of Existing CETP and ETP infrastructure, Gap Analysis, Proposed along with completion timeline, No. of industries and complying status.</p>		<ul style="list-style-type: none"> • 4 CETPs of total installed capacity of 20.535 MLD exist. • Out of 4 CETPs, 2 CETPs were complying the prescribed discharge norms. One CETP of 5 MLD capacity could not be checked as Leather Complex, Jalandhar has been shut down as per directions of Hon'ble Punjab & Haryana High Court. One newly setup 15 MLD CETP for textile dyeing at Ludhiana

			<p>is under stabilization.</p> <ul style="list-style-type: none"> • Out of 2 New CETPs for textile dyeing cluster with total capacity of 90 MLD, the work of 40 MLD and 50 MLD capacity CETPs have been completed to the tune of 74% and 55% respectively. • A total of 204.02 MLD of industrial effluent is generated, out of which, 203.57 is treated in captive ETPs installed by the industries. • 509 ETPs are under operation in the catchment area of rivers. • Approximately 10% of ETPs being monitored every month. • The %age Non-compliance of ETPs (as per number of ETPs) reduced from 31% in March, 19 (Base month) to 28 % during 2019-20. 26 ETPs were monitored during May,2020 and all were found to achieve the prescribed discharge standards.
(iv)	<p>Status of Solid Waste Management & Details of Processing Facilities</p> <p>Details of existing infrastructure, Gap Analysis, Proposed along with completion timeline</p>		<ul style="list-style-type: none"> • Out of 4100 TPD MSW generated in the State, 2706 TPD (66%) is being processed & 1394 TPD (34%) being sent to landfills. • D2D Collection: 97% House Holds covered. • Source Segregation: 71% HHs practicing segregation at source, with proposed target for 100% coverage by 31.03.2021. • 96.4% of Aerobic compost pits for processing of wet waste constructed. All Processing facilities for wet waste to be

			<p>commissioned by 31.03.2021.</p> <ul style="list-style-type: none"> • Setting of 2 no. Waste to Energy Plants (2 WTEs) proposed for 100 % processing of waste.
(v)	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river		<ul style="list-style-type: none"> • The range of water quality of polluted river stretches monitored in the month of May, 2020 as per CPCB: <ul style="list-style-type: none"> ○ Sutlej (Roopnagar to Harike Bridge): C to D ○ Ghaggar (Sardulgarh to Mubarkpur): D to E ○ Beas (Along Mukerian): B ○ Beas (Sultanpur Lodhi to Confluence point to Beas): B • Water quality status of some of major drains is attached at Annexure-I.
(vi)	Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing waste processing, including waste generated from hotels, ashrams, etc.		<ul style="list-style-type: none"> • State has strengthened Door to Door collection system by achieving 97% D2D collection in all ULBs to restrain open dumping of waste. • Total 1217 Bulk Waste generators (BWGs) have been identified and actions are being taken to ensure in-situ management of wet waste by BWGs, in compliance of SWM Rules, 2016. About 17% of BWGs are complying with the rules till date. • State has set up mechanism for scientific collection of biomedical waste through bar code system and its treatment at 4 Common Biomedical Waste Treatment Facilities. • Separate Material Recovery Facilities are being set up for effective sorting, channelizing and processing of recyclable &

			<p>non-recyclable fractions of plastic waste.</p> <ul style="list-style-type: none"> • Adopted decentralized model for processing of wet waste to minimize environmental impacts entailed with its transportation.
(vii)	Ground water regulation		<ul style="list-style-type: none"> • Directorate of Ground Water Management set up by State with the prime objective of conserving and managing water resources. • In order to deal with the problems of falling water table, increasing surface water pollution and water logging in the south-west Punjab etc., Govt. of Punjab signed an agreement with M/s Mekorot, National Water Company, Israel on 23rd October, 2018 to formulate Water Conservation and Management Master Plan (WCMMP) for the State of Punjab. M/s Mekorot will give recommendation to State on Current Situation of the water Sector, water based economy regulations, projection of water resources viz-a-viz demand, alternative water supply schemes within 18 months i.e by October, 2020. • Promulgation of Punjab Water Resources (Management and Regulation) Act, 2019 for the management and regulation of water resources to ensure judicious, equitable and sustainable utilization of water • Setting up of Punjab Water Regulation and Development Authority.
(viii)	Adopting Good Irrigations Practices		Good irrigation practice such as drip irrigation, sprinkler irrigation, laser

			leveling, etc are being adopted and promoted in the State by Department of Agriculture and Department of Soil and Water Conservation.
(ix)	Protection and Management of Flood Plain Zones (FPZ)		Department of Water Resources informed that flood protection embankment have been already constructed on both sides of the rivers in state. As the rivers are already channelized, therefore flood plain zoning is not technically feasible.
(x)	Rain Water harvesting		<ul style="list-style-type: none"> • Rain water harvesting is being carried out by Department of Soil and Water Conservation in Kandi area of Punjab by constructing check dams, rain water harvesting structures, silt detention structures, stream bank protection, contour bunding, runoff check and drop structures etc. • The State Government has made rainwater harvesting mandatory for all public and commercial establishments and all properties in plots covering more than 500 sq. m in urban areas.
(xi)	Maintaining minimum environmental flow of river		<ul style="list-style-type: none"> • Minimum 15% of average lean season flow is being maintained in river Sutlej (640 cusecs) & Beas (370 cusec) by Department of Water Resources in compliance of NGT order dated 9.8.2017 in O.A. No. 498 of 2015 in the matter of "Pushp Saini Vs MoEF&CC Gol. • As per Department of Water Resources, there is no regulation point in the State for Ghaggar, which is not a perennial river.
(xii)	Plantation on both sides of river		Plantation is regularly being carried by Department of Forest on the side

			slopes of embankments and berms of rivers which help in checking erosion of embankments and river berms/edges.
(xiii)	Setting up of bio-diversity parks on flood plains by removing encroachment		Matter is being taken up with Department of Forest to explore the feasibility of using CAMPA funds for setting up of Bio-diversity parks and plantation purposes in the catchment areas of the rivers to enhance the biodiversity.

Table 1 - Details of drains contributing to pollution in River Sutlej

Sr. No.	River Stretch:(Roop Nagar to Harike Bridge)			Priority : I	
	Drain	Type Domestic/ industrial/ mixed	Apprx Quantity (MLD)	Avg BOD (mg/l)	Avg FC (MPN/100ml)
1	Theing Drain	Mixed	3	42	376889
2	Budha Nallah	Mixed	650	170	1684444
3	East Bein	Mixed	350	61	150625

Apart from the above major drains, Punjab Pollution Control Board has been asked to monitor other drains also and progress in this regard will be reported in next quarter.

Table 2 - Details of drains contributing to pollution in River Ghaggar

Sr. No.	River Stretch :(Mubarakpur to Sardulgarh)			Priority: I	
	Drain	Type Domestic / industrial / mixed	Quantity (MLD)	Avg BOD (mg/l)	Avg FC (MPN/100ml)
1	Sukhna Choe	Drain originate from Chandigarh (UT)	1.23	62.7	84755
2	Dera Bassi Choe	Domestic	3.832	43.16	43733
3	Jharmal Choe	Domestic	4.532	61.77	24455
4	Basauli Drain	Domestic	0.5	53.22	20033
5	Pachisdara Drain (Dakansu Choe)	Domestic	55.054	24.57	9820
6	Patiala Nadi	Domestic	94.520	38.55	12911
7	Sagarpara Drain	Drain originate from Haryana	0.028	67.88	13788
8	Kaithal Drain	Drain originate from Haryana	2.641	25.22	7188
9	Jhambowali choe	Domestic	33.385	24.75	10977
10	Lehragagga Main	Domestic	9.016	18.55	10566
11	Sirhind Choe	Domestic	102.862	9.5	894

12	Miranpur Choe	Domestic	2.753	16	4866
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Table 3 - Details of drains contributing to pollution in River Beas

Sr. No.	River Stretch: (Along Mukerian)			Priority: V	
	Drain	Type Domestic/ industrial/ mixed	Apprx Quantity (MLD)	Avg. BOD (mg/l)	Avg. FC (MPN/100ml)
1	Swan Khadh	Mixed	2	3.1	261
2	ChakPhandian Drain	Domestic	12.2	2.7	230
3	Bhangala Drain	Domestic	2	3.9	244
4	Gazi Drain	Domestic	1	3.8	735
5	Nikas Mansar Drain	Domestic	2.5	21.1	4500
6	Tanda Ram Sahai Drain	Domestic	4	16.0	3300
7	River Chakki	Domestic	20	1.9	597

Table 4 – Details of drains contributing to river Beas

Sr. No.	River Stretch: (Sultanpur Lodhi to Confluence point to Beas)			Priority: IV	
	Drain	Type Domestic/ industrial/ mixed	Apprx Quantity (MLD)	Avg. BOD (mg/l)	Avg FC (MPN/100ml)
1	Wadala Drain	Mixed	25	6	220
2	Bhulana Drain	Domestic	6	4.0	250
3	Khane & Khane Extension Drain	Domestic	0.5	2	220
4	Sultanpur Drain	Domestic	3	5.0	250

Apart from the above major drains, Punjab Pollution Control Board has been asked to monitor other drains also and progress in this regard will be reported in next quarter.