Monthly Progress Report by State of Haryana regarding Ghaggar Action Plan

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

Sr. No.	Activity to be monitored	Timeline
1	Ensure 100% treatment of sewage at least in-situ remediation	31.03.2020
	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
2	Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning.	31.03.2021
5	Chief Secretaries may set up appropriate monitoring mechanism at State Level • 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
	• Monitoring at State Level must take place	Fortnightly Commencing 21.12.2019
6	Progress report may be furnished by the States/ UTs to • Secretary, Ministry of Jal Shakti • Member Secretary, CPCB	Monthly (Preferably before 20th of every month)

Progress report regarding Ghaggar Action Plan by State of Haryana

6.1 (i) Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment.

There are 11 major drains, i.e. Sukhna Nallah, Jatton Wala Nallah, STP Panchkula, MDC Drain, Sukhna Choe, Ambala Drain, Ghail drain, Markanda River, Sagarpara (Saraswati) Drain, Kaithal Drain and Ratia Drain falling out in River Ghaggar in the State of Haryana. The flow and water quality of all the drains is regularly being monitored by HSPCB.

6.1 (ii) Status of STPs, I&D and sewerage networks, Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline.

(a) Details for sewage management (in MLD)

River	Sewage Generated	Treatment Capacity	Gap
Ghaggar	**296.9**	**511.5**	**0**

Gap analysis- However, there is gap in treatment capacity of 15.8 MLD in Ambala only.

(b) Details of Sewage treatment plants

Existing STPs		Under Construction STPs		Proposed STPs	
No.	**Capacity**	**No.**	**Capacity**	**No.**	**Capacity**
59	511.5	11	49	10	61.5

Work of construction of new STPs will be completed latest by 30.06.2020.

(c) Laying of Sewerage in approved/notified areas

- Total length of sewer line to be laid- **478.8 Km**
- Length laid so far- **234.6** Km
- Sewer lines are proposed to be laid in 25 Towns
- Sewerage fully laid in 11 towns
- Work is under process at 14 locations
- Work will be completed latest by 31.08.2020

(d) Interception/diversion of sewage in the un-approved areas

183 MLD of effluent was proposed to be tapped/ diverted at 92 locations. Out of which 0.4 MLD effluent has been diverted at 1 location, so far.

6.1 (iii) Status of CETPs, Details of Existing CETP and ETP Infrastructure, Gap Analysis, Proposed along with completion timeline, No. of industries and complying status.

Details of Common Effluent treatment plants

Existing CETPs		Under Construction CETPs		Proposed CETPs	
No.	**Capacity**	**No.**	**Capacity**	**No.**	**Capacity**
4	6.1	0	0	2	3

- No. of industries in catchment of River Ghaggar -197
- No. of ETPs installed - 197
- Quantum of Industrial effluent generation -4.1MLD
- Gap in treatment -0

6.1 (iv) Status of Solid Waste Management & Details of Processing Facilities Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline.

There are 84 Urban Local bodies in the state of Haryana and generates 5568 TPD Municipal Solid Waste. Out of which 2108 TPD is being processed/treated and remaining quantity i.e., 3460.12 TPD is being sent to landfills.

The current status of SWM

Table 1: Current status of SWM activities in the State is given in as under:

Sr. No.	SWM Activities in State	Quantity (in Nos)
1.	Total No. of Wards	1540
2.	Quantity of Solid Waste generated	5568 TPD
3.	No. of wards with 100% Door to Door Collection	1422
4.	No. of wards where segregation is initiated	923
5.	No. of vehicles	4299
6.	No. of vehicle with Compartment	3192
7.	No. of vehicles with GPS	1546
8.	No. of Garbage Vulnerable Points Identified	744
9.	No. of BWG identified	2692
10.	No. of BWG processing on site	486
11.	No. of Solid Waste Challan done	1868
12.	No. of Plastic Waste Challan done	4848

Government of Haryana has adopted cluster based integrated approach for Solid Waste Management. The entire State has been broadly divided into fourteen (14) clusters out of which four (4) will be Waste To Energy i.e., Faridabad, Rohtak, Sonepat, Ambala and (10) will be waste to Compost/RDF processing i.e., Jind,

Hisar, Dabwali with Sirsa, Rewari, Panchkula, Bhiwani, Faruknagar, Yamuna Nagar, Punhana and Fatehabad.

- **Processing Facilities**

14 suitable sites for setting up of processing facilities in 14 clusters based on Integrated Solid Waste management approach have already been identified. It is informed by MC Hisar that international airport is proposed to be developed at a distance of 2 km from the proposed MSW site. In view of this, a new site should be identified for the project, till that time project is annulled for bidding. Out of 14 clusters for the development of Integrated Solid Waste processing facilities and Sanitary Landfill facilities, suitable sites for setting up of 12 clusters, have already been procured. The procurement of site (processing facilities and Sanitary Landfill) for Jind Cluster is under progress and will be procured at the earliest. As there is international Airport is about to set up within the range of 2Km of the site identified at hisar so the bidding process is annulled for Hisar cluster and MC Hisar has identified few sites, which are under the site feasibility process. As per the Annual Report for the year 2018, presently in the state there are 14 nos. Solid Waste Composting Facilities, 10 nos. Vermi Composting Facilities and 03 nos. RDF Facilities. Rejects and residues collected from the above mentioned processes are disposed in dumping sites and further proposed to be processed for energy recovery.

6.1 (v) Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;

(a) Water quality of river Ghaggar

River	Sr. No.	River Stretch	Flow	BOD	Faecal Coliform
Ghaggar	1.	Sukhana Nallah, Parwanoo Barrier, Himachal Pradesh	90	20	-
	2.	Jattan walla Nallah	20.09	80	-
	3.	Discahrge of STP, Sec-28, Panchkula at Vill-Kakrali, Punjab.	8.50	12	-
	4.	MDC Drain after meeting Manimaja domestic effluent Panchkula	17.5	80	-
	5.	Sukhna choe at Vill-Bhankarpur, Punjab	100	112	-
	6.	Ambala Drain	39.75	60	-
	7.	Ghail drain at Rampur, Ambala	17.95	12	-
	8.	Markanda River at Vill. Dhandhota	4.25	84	-

River	Sr. No.	River Stretch	Flow	BOD	Faecal Coliform
	9.	Sagar Para Drain at Vill. Sagra	625	64	440000
	10.	Kaithal drain at Vill. Khanauri	45	70	720000
	11.	Discharge of M.C. Ratia (Fatehabad)	4	24	18000

(b) Ground water quality status in the vicinity of river Ghaggar.

Ground water quality is being monitored at 75 locations in the catchment of river Ghaggar by HSPCB. Out of total 75 locations, ground water is found fit for drinking at 28 locations and non complying at 47 locations. Directions have already been conveyed to all the task forces to cap such water sources and a display board mentioning that "Water is not for drinking purpose" may be placed. The same has been compiled by the task forces.

Sr. No.	Region	No. of points monitored	Complying	Non-complying
1.	Panchhkula	7	7	0
2.	Ambala	7	7	0
3.	Jind	2	1	1
4.	Kaithal	13	7	6
5.	Sirsa	28	5	23
6.	Fatehabad	18	1	17
Total		**75**	**28**	**47**

6.1 (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.

(a) Bio Medical Waste Management

As per the Annual Report of 2018 Haryana state has generated 14217.88 KG/Day and same is processed/treated by the authorized 11 nos. of Common Bio Medical Waste Treatment Facilities. Total Incineration Capacity of these CBWTFs is 1650 Kg/hr.

As per Annual Report 2018, there are 4079 number of Health Care Facilities (HCFs) in the State including 2723 number Bedded HCFs and 1356 number Non Bedded HCFs. In all Bedded HCFs of State total numbers of Beds

are 53259. Total Bio Medical Waste (BMW) generated by all HCFs is 14217.88 Kg/day.

(b) Plastic Waste Rules Management

As per the detail provided by ULBD total 525.121 TPD plastic waste is being generated and out of which 283.06 TPD is being processed/Treated. There is gap of 242.061 TPD.

Under the notification no 2/8/2013/R issued in the official Gazette of Haryana Govt. dated 20th August 2013, complete plastic ban has been enforced in the whole State.

The Municipal Corporation/Committee/Council is doing door to door collection and segregation and through private parties. ULBD is framing a proposal for use of plastic waste in road construction as per Indian road congress guidelines for energy recovery and waste oil from plastic waste.

For plastic waste (including other dry waste) segregation, 373 Material Recovery Facilities have been set up in the whole State. Apart from Material recovery Facilities, ULBs have also identified 3524 and registered 3232 rag pickers and Kabariwalas's for collection and segregation of plastic waste. These rag pickers are also segregating the plastic waste on their own level and selling it to the recyclers directly.

At present 22 nos. Of Plastic Waste recyclers are registered in Haryana under PWM Rules, 2016.

6.1 (vii) Ground water regulation

The industries are being persuaded to obtain permission from CGWA for extraction of ground water.

6.1 (viii) Adopting good irrigation practices,

The major demand for river water is for Irrigation purposes and accordingly the State of Haryana has taken initiatives for water efficient farming practices which are given as under:-

(a) Pilot Project for installation of solar/grid powered micro irrigation infrastructure on sewage treatment plants for utilizing treated water for Irrigation.

With a view of augmenting water of assured supply to the every field, a new intervention has been proposed for the reuse of treated waste water from the existing Sewage Treatment Plants for the use of water in the best alternative which will help in enhancing the irrigation. Working on these lines this pilot project has been prepared on over exploited & critical blocks by selecting STPs of Ladwa, Shahabad and Pehowa towns for irrigation. The farmers of the are to be benefited from this water have already formed Water User Associations and also

given an undertaking to the effect that their area, to be covered under this project, is not covered by any canal command and they are willing to adopt this technology. The common Micro Irrigation Infrastructure will be provided for each STP outlet for supplying pressurized water supply at farm gate by providing pumping unit (grid/solar powered), filtration, HDPE pipe network etc. the water will be provided under pressure of 2-2.5 Kg/cm^2 So that farmers may utilize this for sprinkler and drip system. Farmers will be provided hydrant for every 4 acres or less if the holding of the farmers is less than four acres. In this manner the treated water, which was otherwise going unutilized in drain, will be put to proper use. It is also reported that sewage water from all these STPs is being properly monitored and tested by Public Health Engineering Department and parameters of this treated water meet with the standards for irrigation.

(b) Project of Recycle and Ruse of Treated Wastewater for Irrigation Purpose

3 projects are commissioned so far, in the catchment of river Ghaggar utilizing 5.69 MLD of treated sewage from 3 STPs. 5 villages are benefitted by irrigating 290 hectares of land. Total cost of the projects is Rs 378.00 lacs.

Further, the Irrigation Department has planned to utilize 158 MLD of treated sewage from 6 STPs for Irrigation of 12755 hectares of agriculture land. Total cost of the projects is Rs. 7199 lacs.

(c) Installation of community based solar/grid powered mirco-irrigaton infrastructure in existing canal commands

Six community based solar/grid powered mirco-irrigaton facilities have been installed for Irrigation of 768 hectare land.

6.1 (ix) Protection and management of Flood Plain Zones (FPZ).

All the construction activities are banned on river Yamuna/Ghaggar Flood Plains and no encroachment on river Yamuna is allowed as per section 45 of Haryana Canal and Drainage Act, 1974. However, if any encroachment exists on river Yamuna/Ghaggar is immediately removed in accordance of this Act.

6.1 (x) Rain water harvesting,

Following steps are taken for rain water harvesting / conservation of water/avoid exploitation of ground water

a. Roof Top Rain Water Harvesting Scheme

On 31.10.2001, a notification regarding making roof rain water harvesting-Conversation & Artificial recharge of ground water compulsory in Govt. buildings/HSVP Buildings, including all the private houses/buildings to be constructed in Urban Estates, in future having roof top surface area 100 Sqm. more was issued. Notification has already been circulated vide

No.9945-46 dated 29.11.2001 (copy enclosed) and the areas/Urban Estates in Haryana where this notification has been made applicable have also been notified vide letter no.1200 dated 10.12.2001. (copy enclosed).

Zonal Administrator/Estate Officers of HSVP ensure that occupation certificate is not issued in the absence of the implementation of above cited notification. 47 rain water harvesting systems have been constructed by HSVP.

b. Installation of Dual Button Flushing Cistern

Haryana Govt. has issued notification on 13.08.2014, making installation of dual button cisterns (capacity 10/5 Litre and 6/3 Litre) mandatory for all types of plot holders (new buildings) in HSVP areas in addition to all Govt. Buildings and Buildings in licensed areas. Occupation certificate shall not be issued in the absence of dual button flushing cisterns in these buildings.

c. Graded Tariff for Economic Use Of Water

The graded water tariff has been implemented in various Urban Estates in Haryana for economical domestic use of water.

d. Reuse of Tertiary Treated / Recycled Water

To avoid exploitation of ground water, tertiary treated water is being used for irrigation/flushing purpose in some of Urban Estates of HSVP. Efforts are being made for its implementation in other Urban Estates also.

6.1 (xi) Maintaining minimum environmental flow of river

It is brought out that Ghaggar river is not a perennial river and discharge varies from zero to maximum during flood seasons. Around 15-20% of the lowest possible discharge in the lean season is required for maintaining E-flow. In our case the discharge varies from zero to maximum so maintaining E-flow is not possible. However, the monthly flow of all the major drains joining river Ghaggar is being measured regularly on monthly basis and quantity of flow is as under:

6.1 (xii) Plantation on both sides of the river

Detail of plantation and Herbal/Bio-diversity Parks in catchment areas of Ghaggar river						
	Plantation 2018-2019		**Plantation Target 2019-2020**		**Herbal Parks for Bio-diversity conservation**	
District	**Ha.**	**No. of plants**	**Ha.**	**No. of plants**	**Name**	**Areas in Acre.**
Panchkula	1117	8,31,000	404	4,81,000	i) World Herbal Forest, Morni	12500
					ii) Kapoor Vatika at Mallah	25
					iii) Thapli Herbal Park at	10

Detail of plantation and Herbal/Bio-diversity Parks in catchment areas of Ghaggar river						
	Plantation 2018-2019		**Plantation Target 2019-2020**		**Herbal Parks for Bio-diversity conservation**	
					Village Thapli	
					iv) Tikka-Tal Herbal Park	20
Fatehabad	1519	11,41,000	855	7,20,000	i) Mulethi Vatika at Gilakhera	14
					ii) Er. Kanwar Sain Gupta Herbal Park at Tohana	25
Sirsa	863	8,81,000	624	5,27,000	i) Bahera Vatika at Village Fulkan Village	17
Total	3499	2853000	1883	1728000		12611

6.1 (xiii) Setting up biodiversity parks on flood plains by removing encroachment.

Already given at Sr. No. xii.