



HARYANA STATE POLLUTION CONTROL BOARD
C-11, SECTOR-6, PANCHKULA
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No. HSPCB/WC/2020/ 3590-3591

Dated:- 14-09-2020

To

1. The Secretary, Government of India,
Ministry of Jal Shakti, Department of Water Resources,
River Development & Ganga Rejuvenation,
Shram Shakti Bhawan, Rafi Marg,
New Delhi.
2. The Member Secretary, CPCB,
Parivesh Bhawan, East Arjun Nagar,
New Delhi

Sub:- Monthly progress Report by State of Haryana regarding Ghaggar and Yamuna Action Plan for the month of July,2020.

Sir,

Kindly refer to the subject noted above.

In this connection, it is intimated that there are two polluted river stretches in the State of Haryana i.e. river Ghaggar and Yamuna. I have been directed to enclose herewith the progress report of Ghaggar Action Plan (**Annexure-A**) and Yamuna Action Plan (**Annexure-B**) of Haryana on the prescribed format for your kind information and necessary action please.

DA/ As above

K.A.
Sr. Env. Engineer(HQ)
For Member Secretary

Before the Hon'ble National Green Tribunal, New Delhi

In the matter of O.A. No. 673/ 2018, dated 6.12.2019 and O.A. No. 593/ 2017, dated 21.5.2020, monthly progress report by State of Haryana regarding Ghaggar Action Plan- July, 2020.

The State of Haryana submits that the following progress report for the month of July, 2020-

- 1) **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 Haryana State pollution Control Board.

The Officers of Haryana State Pollution Control Board, Urban Local Bodies Department, Haryana Shahari Vikas Pradhikaran, Public Health Engineering Department and Panchayat Department have been deputed to visit the sites of phyto-remediation in Punjab State on 11.08.2020. So that similar projects can be established/ commissioned in Haryana.

- 2) **Status of Sewage Treatment Plants, Interception & Diversion and Sewerage Networks, Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline.**

- (a) **Details for Sewage Management (in Million Litres per day)**

River	Sewage Generated	Treatment Capacity	Gap
Ghaggar	258.17	514	0

Gap analysis- However, there is gap in treatment capacity of 0.71 MLD in Ambala only. The town wise details of sewage management is enclose as Annexure 1.

- (b) **Details of Sewage treatment plants**

Existing STPs		Under Construction STPs		Proposed STPs	
No.	Capacity	No.	Capacity	No.	Capacity
59	514	14	68	10	51.5

Work of construction of new STPs will be completed latest by 31.12.2020. The list of existing STPs is attached as Annexure-2. The latest status of under construction and proposed STPs are enclosed at Annexue 3 & 4.

- (c) **Laying of Sewerage in approved/notified areas**

- Total length of sewer line to be laid- 430 Km
- Length laid so far-318 Km
- Total towns in catchment area of Ghaggar-27
- Sewerage fully laid in 20 towns
- Work is under process at 7 locations
- Work will be completed latest by 31.12.2020

The details are enclosed at Annexure-5.

(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 19.47 MLD effluents has been diverted at 12 locations, so far.

3) 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 - 107
- No. of ETPs installed - 107
- Quantum of Industrial effluent generation - 4 MLD
- Gap in treatment - 0

The list of existing and proposed CETPs are enclosed at Annexure-6 and 7.

4) 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	98526.926 (MT/A)
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, Sonapat, 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.

5) **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**

Sr. No.	Name of drains	Flow	BOD(mg/l)	F.Coli (MPN/100ml)
1	Sukhna Nallah	3.50	11	-
2	Jatton Wala Nallah	15.00	290	-
3	STP Panchkula	8.50	3.8	580000
4	MDC Drain	17.00	12	-
5	Sukhna Choe	100.00	92	-
6	Ambala Drain	39.75	26	-
7	Ghail drain	17.95	19	-
8	Markanda River	24.05	24	22000
9	Sagarpara (Saraswati) Drain	28.57	7.5	21000
10	Kaithal Drain	30.25	42.00	180000
11	Ratia Drain (STP)	4.00	18	48000

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

Ground water quality is being monitored at 72 locations in the catchment of river Ghaggar by HSPCB. Out of total 72 locations, ground water is found fit for drinking at 30 locations and non complying at 42 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	Panchkula	8	8	0
2	Ambala	7	7	0
3	Jind	2	0	2
4	Kaithal	15	1	14
5	Hisar	5	2	3
6	Sirsa	24	16	8
	Fatehabad	18	4	14
Total		79	38	41

- 6) 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.

7) Ground water regulation

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

8) 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 area 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/cm² 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.

9) 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.

10) 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.

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.

List of Harvesting Well in various Urban Estates of HSVP w.e.f. 01.01.2002 to 29.02.2020

Sr. No.	Name of Urban Estate	Nos. of Harvesting Well
1	Panchkula	11443

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.

11) 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:

12) Plantation on both sides of the river

➤ **Urban Estate Wise Plantation Done in HSVP Area**

Sr. No.	Name of U/E	Plantation Done in the Year 2016-17	Plantation Done in the Year 2017-18	Plantation Done in the Year 2018-19	Plantation Done in Year 2019-20 (upto 29.02.2020)
1	Panchkula	11238	6929	5000	7820
2	Ambala	3800	2317	1500	3626
3	Pehowa	125	0	0	0
4	Naraingarh	125	0	0	0
5	Kurukshetra	3430	2050	2000	3472
6	MTS Gulha	100	0	0	0
7	MTS Pundri	100	0	0	0
8	Kaithal	675	2120	1000	3160
		19593	13416	9500	18078

➤ **Plantation done in catchment of River Ghaggar by Forest Department.**

Detail of plantation in catchment areas of Ghaggar river				
	Plantation 2018-2019		Plantation Target 2019-2020	
District	Ha.	No. of plants	Ha.	No. of plants
Panchkula	1117	8,31,000	404	4,81,000
Fatehabad	1519	11,41,000	855	7,20,000
Sirsa	863	8,81,000	624	5,27,000
Total	3499	2853000	1883	1728000

Forest Department has selected around 51 villages in the catchment areas of river Ghaggar and has proposed to plant around 2.5 lakh plants in the coming season. The sites for development of Parks have also been identified and a plan has also been prepared. The details are as under:-

District	No of Villages	No. of Plants to be planted
Panchkula	30	71150
Ambala	2	43000
Kaithal	3	3650
Fatehabad	12	131930
Sirsa	4	9000
Total	51	258730

13) Setting up biodiversity parks on flood plains by removing encroachment.

Herbal Parks for Bio-diversity conservation		
District	Name	Areas in Acre.
Panchkula	i) World Herbal Forest, Morni	12500
	ii) Kapoor Vatika at Mallah	25
	iii) Thapli Herbal Park at Village Thapli	10
	iv) Tikka-Tal Herbal Park	20
Fatehabad	i) Mulethi Vatika at Gilakhera	14
	ii) Er. Kanwar Sain Gupta Herbal Park at Tohana	25
Sirsa	i) Bahera Vatika at Village Fulkan Village	17
	Total	12611

Water consumption and waste water generation in the towns along River Ghaggar

Annexure-1

S.No.	District	Name of Town	Total Population (As per Census 2011)	Present Population 2020	Existing STPs No. & Capacity in MLD							Treatment Capacity required upto 2019 (in MLD)	Gap in treatment upto 2019 (in MLD)			
					No.	PHED	No.	HSVP	No.	ULBO	No.			Garrison	Total No.	Total Capacity
1			2													
1	Ambala	Naraingarh	22832	27969	1	3	0	0	0	0	0	0	1	3	2.5	0
2		Ambala	300127	367656	10	37	1	2	0	0	0	0	11	39	39.71	0.71
3	Fatehabad	Rata	37152	45511	1	6.5	0	0	0	0	0	0	1	6.5	4.92	0
4		Tolana	63871	78242	1	10	0	0	0	0	0	0	1	10	8.45	0
5		Jhakai Mandi	7788	9540	1	3	0	0	0	0	0	0	1	3	1.03	0
6		Fatehabad	70777	86702	2	15	1	10	0	0	0	0	3	25	9.36	0
7	Hisar	Hisar	307024	376104	3	59	1	15	0	0	0	0	4	74	40.62	0
8		Narnand	17742	21121	1	4	0	0	0	0	0	0	1	4	2.28	0
9	Jind	Narwana	62090	76060	3	9.25	0	0	0	0	0	0	3	9.25	8.21	0
10		Uchana	16815	20598	2	3.5	0	0	0	0	0	0	2	3.5	2.22	0
11		Jind	167592	205300	3	27	1	10	0	0	0	0	4	37	22.17	0
12		Safidon	34728	42542	1	9	0	0	0	0	0	0	1	9	4.59	0
13	Kaithal	Cheeka	38952	47716	1	10	0	0	0	0	0	0	1	10	5.15	0
14		Kaithal	144915	177521	3	30	1	7.5	0	0	0	0	4	37.5	19.17	0
15		Kalayar	18660	22859	1	5	0	0	0	0	0	0	1	5	2.47	0
16		Pundri	33484	23118	1	3.5	0	0	0	0	0	0	1	3.5	2.5	0
17	Kurukshetra	Shahbad	42607	52194	1	11.5	0	0	0	0	0	0	1	11.5	5.64	0
18		Pehowa	38853	47595	1	8	0	0	0	0	0	0	1	8	5.14	0
19		Thanesar	155152	190061	1	25	1	15	0	0	0	0	2	40	20.53	0
20	Panchkula	Kalka	34134	41814	2	4.75	0	0	0	0	0	0	2	4.75	4.52	0
21		Pinjore	35912	43992	1	5	0	0	0	0	0	0	1	5	4.75	0
22		Panchkula	211355	236718	0	0	3	72	0	0	0	1	4	81	0	0
23	Sirsa	Mandi Dabwali	52873	64769	1	16.5	0	0	0	0	0	0	1	16.5	7	0
24		Kolarwali	22095	27066	1	9.5	0	0	0	0	0	0	1	9.5	2.92	0
25		Sirsa	182534	223604	4	45	0	0	0	0	0	0	4	45	24.15	0
26		Ranik	25123	30776	1	6	0	0	0	0	0	0	1	6	3.32	0
27		Efenabad	36623	44863	1	7.5	0	0	0	0	0	0	1	7.5	4.85	0
			2181310	2632011	49	373.5	9	131.5	0	0	0	1	59	514	258.17	0.71

Annexure-2

Compliance status of Existing STPs in Ghaggar Catchment

Sr. No.	Name and Region of STPs	Collection date	Remarks
1	3 MLD STP Naya Gaon , Unit.I , Ambala City by PHED in January, 2011	26.05.2020	Complying
2	3.25 MLD STP Naya Gaon , Unit.II Ambala City by PHED in 1.4.2016	26.05.2020	Complying
3	5 MLD Baldev Nagar , Unit.I , Ambala City by PHED 1.12.2012	26.05.2020	Complying
4	3.25 Baldev Nagar , Unit.II ,Ambala City by PHED in 1.4.2016	26.05.2020	Complying
5	5 MLD Moti Nagar, Unit.I , Ambala City by PHED in June 2010	26.05.2020	Complying
6	5 MLD STP Moti Nagar , Unit.II , Ambala City by PHED Ambala in 1.8.2016	26.05.2020	Complying
7	6 MLD STP Modal Town, Ambala City by PHED in 1.7.2012	26.05.2020	Complying
8	3.25 Nasirpur Ambala City by PHED in 31.9.2016	26.05.2020	Complying
9	0.25 MLD Sadopur , Ambala PHED in 31.12.2016	26.05.2020	Complying
10	3 MLD Devi Nagar , Ambala City by PHED on 31.5.2013	26.05.2020	Complying
11	3 MLD STP Nariangarh , Ambala by PHED in 1.7.2014	27.05.2020	Complying
12	25 MLD STP Thanesar, Kurukshetra by PHED in 31.05.2019	26.05.2020	Complying
13	8 MLD STP Model Town , Pehowa Kurukshetra by PHED in May dt. 2015	26.05.2020	Complying
14	11.5 MLD STP Ladwa Road , Shahbad Kurukshetra by PHED in May dt. 2016	26.05.2020	Complying
15	4.5 MLD Kalka Panchkula by PHED in 30.3.2015	24.06.2020	Complying
16	0.25 MLD Kalka Panchkula by PHED in 28.5. 2017	24.06.2020	Complying
17	5 MLD STP Nalagarh Road, Manakpur, Pinjore Panchkula by PHED 31.1.2015	24.06.2020	Complying
18	15 MLD STP by PHED Jind in Jan, 2009	27.06.2020	Complying
19	3.5 MLD Patiala Road , Narwana by PHED in Jan , 2011	27.05.2020	Complying
20	3.75 MLD STP Narwana Jind by PHED in Jan , 2011	27.05.2020	Complying
21	02 MLD STP, PHED , Dablain Road, Narwana, Jind (24.5.2017)	27.05.2020	Complying
22	2 MLD STP Uchana Jind by PHED in 22.2.2012	27.05.2020	Complying
23	1.5 MLD Uchana by PHED in 31.5.2013	27.05.2020	Complying
24	5 MLD STP Jind by PHED in 1.4.2016	27.06.2020	Complying
25	7 MLD STP, Jind by PHED in	Under Trial Run	
26	9 MLD STP Safidon , Jind by PHED in 31.05.2018	27.06.2020	Complying
27	10 MLD STP Cheeka , Kaithal by PHED in 1.4.2013	26.06.20	Complying
28	10 MLD STP , Jind Road Kaithal by PHED in September , 2012	26.06.2020	Complying
29	10 MLD STP Manas Road, Kaithal by PHED in June , 2006 (MBBR)	26.06.2020	Complying
30	10 MLD Manas Road,Kaithal bby PHED in Sep , 2012 (SBR)	26.06.2020	Complying
31	5 MLD STP Kalayat , Kaithal by PHED in 1.4.2014	26.06.2020	Complying
32	3.5 Pundri Kaithal by PHED in 4.7.2014	26.06.2020	Complying
33	15 MLD STP Azad Nagar, Rajgarh Road Hisar by	18.06.2020	Complying

Sr. No.	Name and Region of STPs	Collection date	Remarks
	PHED in 31.12.2014		
34	40 MLD STP Rishi Nagar , Hisar by PHED in 02.12.2017	29.06.2020	Complying
35	4 MLD STP Narnaund, Hisar by PHED	20.06.2020	Complying
36	4 MLD STP Kaimri Road, Hisar by PHED in 2018	19.06.2020	Complying
37	15 MLD STP dt. Shamsabad patti , Kalania Road, Sirsa by PHED in 1.7.2012	12.06.2020	Complying
38	5 MLD STP ,Vill. Nattar 1 , Sirsa by PHED in 1.5.2013	12.06.2020	Complying
39	5 MLD STP , Vill. Nattar 2 , Sirsa by PHED in 14.09.17	12.06.2020	Complying
40	7.5 MLD STP Ellenabad Sirsa by PHED in 11.5.2015	22.06.2020	Complying
41	9.5 MLD STP, Daddu Road,Kalanwali , Sirsa by PHED in 17.02.2018	23.06.2020	Complying
42	6 MLD STP Rania Sirsa by PHED in 30.6.2017	23.06.2020	Complying
43	16.5 MLD STP Dabwali, Sirsa by PHED in 04.12.2017	23.06.2020	Complying
44	20 MLD STP at Kelnia Sirsa by PHED	30.06.2020	Complying
45	10 MLD STP Vill. Bhodia Khera, Bhattu Road,Fatehabad by PHED in 1.4.2013	17.07.2020	Complying
46	10 MLD STP Vill.Amani, Tohana, Distt. Fatehabad by PHED in 1.4.2013	15.07.2020	Complying
47	6.5 MLD STP Ratia , Fatehabad by PHED in 1.9.2014	08.07.2020	Complying
48	5 MLD STP Kharati Khera Road, Fatehabad by PHED in 31.10.2018	17.07.2020	Complying
49	3 MLD STPJhakkhal Mandi, Fatehabad by PHED in 30.9.2019	08.07.2020	Complying
	HSVP		
1	2 MLD STP Sec.7 , Urban Estate , Ambala City Ambala by HUDA in 10.9.2015	27.05.2020	Complying
2	18 MLD STP Panchkula by HUDA in 31.12.2002	22.06.2020	Complying
3	39 MLD STP Panchkula by HUDA in Nov. 2011	22.06.2020	Complying
4	15 MLD STP Sector- 28, Panchkula by HUDA in 2012	22.06.2020	Complying
5	10 MLD by HUDA Jind in 27.12.2014	27.06.2020	Complying
6	7.5 MLD Kaithal by HUDA in 31.8.2016	26.06.2020	Complying
7	15 MLD STP Dabara Tosham Road , Hisar by HUDA in 31.7.2014	29.06.2020	Complying
8	10 MLD STP Majra, Fatehabad by HUDA in 16.12.17	15.07.2020	Complying
9	15 MLD STP Kurukshetra by HSVP		Newly installed
	Garrison Engineer		
1	9 MLD STP Garrison Engineer , Chandimandir Panchkula in April 2012	24.06.2020	Complying
	Total No. of STPs- 59		
	Grand Total Capacity- 514		

Annexure-3

Town-wise status of installation of new STPs in the catchment of river Ghaggar

Sr. No.	Name of the Town	Department.	Capacity (in MLD)	Timelines date	Latest progress	Progress upto July, 2020
In progress						
1	12 Cross Road, Ambala	ULBD	12	31.06.2020	13%	15%
2	Khagesara & Toka	ULBD	0.5	31.03.2020	90%	95%
3	Nangal & Allipur	ULBD	0.5	31.03.2020	95%	95%
4	Khatoli	ULBD	0.75	31.03.2020	60%	60%
5	Kot	ULBD	0.75	31.01.2020	98%	98%
6	Sukhdarshanapur	ULBD	0.75	31.03.2020	75%	75%
7	Billa	ULBD	0.75	31.12.2020	45%	50%
8	Village Dabra	ULBD	8	31.03.2020	81%	82%
9	Ambala	HSVP	5	31.12.2020	85%	85%
10	Khuda Khurd, Ambala	ULBD	12	31.06.2020	13%	15%
11	Bhuna	PHED	8	30.06.2020	76%	76%
12	Babyal	ULBD	10	31.03.2021	13%	16%
13	Shahpur Machhonda	ULBD	7.5	31.03.2021	4%	6%
14	Saketri-STP	ULBD	1.5	30.06.2021	There was a land issue. So work could not start.	Likely to be started within 15 days
Total			68			
Work completed						
1	Barara	PHED	4	30.11.2019	100%	100%
2	Jind	PHED	7	30.11.2019	100%	100%
3	Sec-6, Urban Estate, Thanesar	HSVP	15	31.03.2020	100%	100%
4	Kurukshetra	PHED	25	31.05.2019	100%	100%
5	Sirsa (Kelinia)	PHED	20	30.10.2019	100%	100%
6	Fatehabad(Jakhal Mandi)	PHED	3	31.12.2019	100%	100%
Total			74			

Action plan for Under Proposal STPs

Sr. No.	Name of the district	Name of the town/city	Deptt.	Capacity (MLD)	Timelines
1	Ambala	Sector-32, Ambala City	HSVP	5	31.12.2021
2	Ambala	Naraingarh	HSVP	1	30.09.2022
3	Panchkula	Pinjore	HSVP	8	30.4.2023
4	Jind	Jind	ULBD	5	30.06.2023
5	Hisar	Hansi	HSVP	5	30.06.2025
6	Hisar	Hisar	HSVP	10	31.03.2024
7	Hisar	Hisar	HSVP	5	30.06.2024
8	Sirsa	Sirsa	HSVP	7.5	31.12.2021
9	Kaithal	Kakaut	PHED		
10	Ambala	Sector-32, 33, 34 Ambala	ULB	5	22.04.2019
			Total	51.5	

List of Laying of Sewerage in Catchment Ghaggar

Sr. No.	Name of town	Deptt.	Target date	Length to be laid in meters	Latest progress (Meters)	% age
Work under process						
1	Pinjore	PHED	31.12.2020	18500	11000	59.40%
2	Ambala City	ULBD	31.03.2021	24085	23500	98%
	Ambala Sadar	PHED ULBD	30.06.2021	162000	160000	98.56%
3	Naraingarh	PHED	31.12.2019	4570	4500	98.40%
4	Kaithal	PHED	25.10.2019	42430	21850	51.49%
		ULBD	31.12.2020	50166	47715	95.11%
5	Jakhal Mandi	PHED		46861	0	0
6	Hisar	ULBD	31.12.2020	66860	41717	62.40%
7	Mandi Dabwali	PHED	31.08.2020	15000	8000	53.30%
	Total			430472	318282	
Work Completed						
8	Kalawali	PHED	07.04.2020	2500	2500	Completed
9	Kalka	PHED				Completed
10	Panchkula	PHED				Completed
11	Shahbad	PHED	30.09.2019	6000	6000	Completed
12	Kurukshetra	PHED	31.10.2019	6884	6884	Completed
13	Pehowa	PHED	100%			Completed
14	Cheeka	PHED	31.05.2019	3700	3700	Completed
15	Pundri	PHED	31.05.2019	1700	1700	Completed
16	Kalayat	PHED				Completed
17	Jind	PHED	30.08.2019	9860	9860	Completed
18	Narwana	PHED	31.01.2020	3000	3000	Completed
19	Safidon	PHED	31.07.2019	4611	4611	Completed
20	Uchana	PHED	30.09.2019	2000	2000	Completed
21	Fatehabad	PHED	31.05.2019	1200	1200	Completed
22	Tohana	PHED	31.05.2020	2050	2050	Completed
23	Narnaund	PHED	31.03.2019	600	600	Completed
24	Ellenabad	PHED	31.05.2019	2375	2375	Completed
25	Rania	PHED	31.12.2019	2050	2050	Completed
26	Sirsa	PHED	30.04.2020	10400	10400	Completed
27	Ratia	PHED	31.03.2020	16850	16850	Completed

Annexure-6

List of Existing CETPs in Ghaggar Catchment

Sr.No.	Name of the district	Name of the town/city	Deptt.	Existing CETP and Capacity (MLD)	Compliance Status	Action taken report
1	Panchkula	IE Barwala, Panchkula	HSI IDC	0.5	Complying (2965 dt. 02.07.2020)	NA
2	Ambala	Ambala Cantt.	HSI IDC	0.5	Complying(2813 dt. 08.06.2020)	NA
3	Ambala	Saha	HSI IDC	5	Complying (2812 dt. 08.06.2020)	NA
4	Jind	I. E. Jind	HSI IDC	0.1	Complying (164-165 dt. 08.06.2020)	
	Total			6.1		

Under Proposal of CETPs

Sr. No.	Name of the district	Name of the town/city	Deptt.	Proposed capacity (MLD)
1	Jind	IE Narwana	HSIIDC	1.5
2	Sirsa	IDDC, Sirsa	HSIIDC	1.5
		Total		3

Before the Hon'ble National Green Tribunal, New Delhi

In the matter of O.A. No. 673/ 2018, dated 6.12.2019 monthly progress report by State of Haryana regarding Yamuna Action Plan- July, 2020.

The State of Haryana submits that the following progress report for the month of July, 2020-

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

The Officers of Haryana State Pollution Control Board, Urban Local Bodies Department, Haryana Shahari Vikas Pradhikaran, Public Health Engineering Department and Panchayat Department have been deputed to visit the sites of phyto-remediation in Punjab State so that similar projects can be established/ commissioned in Haryana.

2. Status of Sewage Treatment Plants, Interception & Diversion and Sewerage Networks, Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline.

- i. Details for Sewage Management (in Million Litres per day)

River	Generated	Treatment capacity	Gap
Yamuna	973.4	1052.2	0

However, there is gap in treatment capacity of 174.37 MLD in some towns in catchment of river Yamuna i.e. Faridabad (165 MLD), Beri (0.11 MLD), Indri (0.81) and Palwal (8.45 MLD). The townwise details of sewage management is enclosed as Annexure 1.

- ii. Details of STPs

Existing STPs		Under Construction STPs		Proposed STPs	
No.	Capacity	No.	Capacity	No.	Capacity
58	1052.2	19	187	11	385.5

The list of existing STPs is attached as Annexure-2. The latest status of under construction and proposed STPs are enclosed at Annexure 3 & 4.

- iii. Status of laying of sewer network in approved/notified areas

1360 Km of sewer line was proposed to be laid in total 34 towns in the catchment of river Yamuna, out of which 869 Km length of sewer line have already been laid. Sewerage fully laid in 21 towns. Sewer lines are being laid in balance 13 towns. The details are enclosed at Annexure-5.

- iv. Interception of sewage (excluding Gurugram) in the un-approved areas

91.7 MLD of effluent was proposed to be tapped/ diverted at 128 locations. Out of which 12.51 MLD effluents has been diverted at 38 locations.

v. Diversion of sewage at Leg-I, Leg-II, Leg-III drains in Gurugram

Sr. No.	Name of drains	Discharge as in 2018 (MLD)	Present Discharge	Total progress achieved till date (In MLD)	Pending issues	Road map for future course of action with timelines
1	Leg-I	22.80	8.60	14.20	Balance 6 points of 8.6 MLD is yet to be diverted out of 22.8 MLD. Which is delayed due to ban on construction activity by Hon'ble Supreme Court in NCR region due air pollution and lockdown due to Covid- 19	Likely to be completed by 31-12-2021 however, subject to availability of labour due to various phases of lockdown in future in view of epidemic of COVID-19
2	Leg-II	35.64	20.10	15.54	Balance 5 points of 7.8 MLD is yet to be diverted out of 35.64 MLD. Which is delayed due to ban on construction activity by Hon'ble Supreme Court in NCR region due air pollution and lockdown due to Covid- 19	Likely to be completed by 31-12-2021 however, subject to availability of labour due to various phases of lockdown in future in view of epidemic of COVID-19
3	Leg-III	80.25	34.90	45.35	Balance 38 points of 34.90 MLD is yet to be diverted out of 80.25 MLD. Which is delayed due to ban on construction activity by Hon'ble Supreme Court in NCR region due air pollution and lockdown due to Covid-19	Likely to be completed by 31-09-2021 however, subject to availability of labour due to various phases of lockdown in future in view of epidemic of COVID-19
Total		138.69	63.6	75.09	Balance 49 points Of 51.3 MLD is yet to be diverted	

3. 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
14	161.5	0	0	9	134.25

- Quantum of Industrial effluent generation -129.7 MLD
- Existing treatment capacity of CETPs -158.750 MLD
- Treatment capacity under proposal - 120.25 MLD
- Gap in treatment -0

The list of existing and proposed CETPs are enclosed at Annexure-6 and 7.

4. **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.

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	98526.926 (MT/A)
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, Sonapat, 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.

5. 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 and flow of major drains of river Yamuna

Pollution Load in the River Yamuna (before and after)					
Sr. No.	Name of drain	latitude/ Longitude	Flow (in Cs.)	BOD (mg/l)	F.Coli
1	Yamuna before Dhanura Escape	29.726992/ 77.13079	352	3.8	320000
	Yamuna after Dhanura Escape		400	4.2	26000
2	Yamuna before Drain No.2	29.279022/ 77.123801	720	BDL	2000
	Yamuna after Drain No.2		735	7.1	23000
3	Drain No. 6	Falls in Delhi Territory		28	460000
4	Yamuna before Diversion Drain No.8	28.86158/ 77.206427	95	1.9	22000
	Yamuna after Diversion Drain No.8		280	1.6	39000
5	Yamuna before Budhiya Nalah	28.379079/ 77.486982	9850	36	11000
	Yamuna after Budhiya Nalah		9878	45	9000
6	Yamuna before Guanchi	27.912886/ 77.519735	9820	11	17000
	Yamuna after Guanchi		9847.65	9	21000

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

Ground water quality is being monitored at 74 locations in the catchment of river Yamuna by HSPCB. Out of total 74 locations, ground water is found fit for drinking at 55 locations and non complying at 19 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	Panipat	9	7	2
2	Faridabad	7	7	0
3	Sonepat	13	12	1
4	Ballabgarh	5	1	4
5	Palwal	7	3	4
6	Bahadurgarh	7	1	6
7	Gurgaon South	9	7	2
8	Gurgaon North	8	8	0
9	Yamuna Nagar	3	3	0
10	Karnal	5	5	0
11	Nuh	1	1	0
	Total	74	55	19

6. 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.

7. **Ground water regulation**

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

8. **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) **Project of Recycle and Ruse of Treated Wastewater for Irrigation Purpose**

Project was prepared under the guidelines of the scheme for "Incentivization Scheme for Bridging Irrigation Gap (ISBIG) of Ministry of water Resources, River Development and Ganga Rejuvenation, govt. of India" under components infrastructure for conveyance and additional treatment of municipal and industrial wastewater for augmenting water for the farm use "Project Under newly created Irrigation Efficiency in phasing during the financial year 2018-19 to 2020-2021 for amounting in Rs. 235.94 Crore only. 13 STPs with 157.60 MLD capacity in the catchment of river Yamuna are selected for the project.

(b) Installation of community based solar/grid powered micro-irrigation infrastructure in existing canal commands

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

9. 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.

10. 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-Conservation & 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).

Sr. No.	Name of Urban Estate	Nos. of Harvesting Well
1	Kurukshetra	4879
2	Shahbad	638
3	Karnal	4395
4	Panipat	3032
5	Sonipat	3217
6	Gohana	338
7	Faridabad	10162
8	Yamunanagar / Jagadhari	139
9	Gurugram	21834
	Total	48634

425 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.

11. Maintaining minimum environmental flow of river

It has been reported by the Irrigation and Water Resources Department, Haryana that as per MoU dated 12.05.1994 signed among the States of UP, Haryana, Rajasthan, Himachal Pradesh & NCT of Delhi, a minimum discharge of 352 cusec water is released in Yamuna river from Hathnikund barrage at lean period also to maintain the E-flow of river which was in accordance with the guidelines of Ministry of Water Resources, River Development & Ganga Rejuvenation, Govt. of India in compliance of the order of Hon'ble NGT dated 11.06.2015. However, in case excess discharge is received at HKB (in monsoon seasons) in comparison to capacity of channel, then this excess discharge is released into river Yamuna through Somb Nadi and the indented supply is released in the channel.

12. Plantation on both sides of the river

Urban Estate Wise Plantation Done in HSVP Area					
Sr. No.	Name of U/E	Plantation Done in the Year 2016-17	Plantation Done in the Year 2017-18	Plantation Done in the Year 2018-19	Plantation Done in Year 2019-20 (upto 29.02.2020)
1	Jagadhri / Yamunagar	1905	1746	500	1178
2	Shahabad	155	0	0	0
3	Karnal	6819	10038	5000	2810
4	Faridabad	22073	26513	14300	22490
5	Palwal	1125	950	100	300
6	Rojka Meo	0	0	500	100
		32077	39247	20400	26878

Plantation done in catchment of river Yamuna by Forest Department.

Detail of plantation in catchment areas of Yamuna river				
District	Plantation 2018-2019		Plantation Target 2019-2020	
	Ha.	No. of plants	Ha.	No. of plants
Yamuna Nagar	977	10,67,000	898	9,20,000
Karnal	543	4,91,000	844	6,48,000
Panipat	599	5,41,000	540	4,46,000
Sonipat	646	5,06,000	612	4,99,000
Faridabad	527	3,62,000	940	7,44,000
Palwal	264	2,22,000	386	2,98,000
Total	3556	3189000	4220	3555000

Forest Department has selected around 87 villages in the catchment areas of river Yamuna and has proposed to plant around 4.8 lakh plants in the coming season. The sites for development of Parks have also been identified and a plan has also

been prepared. The details are as under:-

District	No of Villages	No. of Plants to be planted
Yamuna Nagar	27	222834
Karnal	13	111850
Panipat	9	65002
Sonepat	17	25700
Faridabad	5	17500
Palwal	16	36750
Total	87	479636

13. Setting-up biodiversity parks on flood plains by removing encroachment.

Herbal Parks for Bio-diversity conservation		
District	Names	Area in Acre
Yamuna Nagar	i) Rudraksh Vatika at village Chuharpur	184
	ii) Adi Badri Herbal Park	10
Karnal	i) Ashok Vatika at Gharaunda	5
	ii) Indri Herbal Park	10
Panipat	i) Bilva Vatika at Pati Kalyana Village	14
Sonipat	ii) Amaltas Vatika Pati Kalyana Village	8
	ii) Khanpur Kalan Herbal Park	12
Faridabad	i) Ratanjot Vatika at Gurugram Canal at Faridabad	10
Palwal		0
Total		253

Annexure-1

Management of sewage generation from towns in the catchment of river Yamuna.

Sr.No.	District	Name of Town	Present Population as in 2020	Water Consumption in 2020 (in MLD)	Name of Department	Estimation of Sewage along Yamuna						Total Capacity	Sewage generated/ Treatment Capacity required upto 2020 (MLD)	Gap in treatment upto 2020 (MLD)	Actual discharge reaching to STPs	Quantity of sewage to be diverted from unauthorized area
						No. & Treatment Capacity (in MLD)										
						Existing		Under construction		Proposed						
No.	Cap.	No.	Cap.	No.	Cap.	No.	Cap.	Capacity	Gap in treatment upto 2020 (MLD)	Actual discharge reaching to STPs	Quantity of sewage to be diverted from unauthorized area					
1	Yamuna nagar	Jagadhri	152995	23.71	PHED	1	24				24	18.97	-5.03	16.2		
		Yamuna nagar	265912	41.22	PHED	3	55	1	10	Replace ment	65	32.98	-22.02	38	38.56	
3		Radaur	16770	2.26	PHED	1	3.5				3.5	1.81	-1.69	2.5		
		Chhachhrauli	12903	1.74	PHED	1	3				3	1.39	-1.61	1.6		
5	Karnal	Ladwa	35387	4.78	PHED	1	7				7	3.82	-3.18	5		
		Niokhen	21974	2.97	PHED	1	6				6	2.37	-3.63	4.5	0	
7		Taradi	31781	4.29	PHED	1	5.5				5.5	3.43	-2.07	3.5	0	
		Indri	20994	2.89	PHED	1	1.5	1	4	Replace ment of total STP with increased capacity new STP (4 MLD)	4	2.31	0.81	2		
9		Karnal	338397	46	MC Karnal	4	66	3	78		144	36.5	-29.5	52	4	
		Nissing	21362	2.88	PHED	1	4				4	2.31	-1.69	2	2.89	

Estimation of Sewage along Yamuna

Sr.No.	District	Name of Town	Present Population as in 2020	Water Consumption in 2020 (in MLD)	Name of Department	No. & Treatment Capacity (in MLD)				Total Capacity	Sewage generated/ Treatment Capacity required upto 2020 (MLD)	Gap in treatment upto 2020 (MLD)	Actual discharge reaching to STPs	Quantity of sewage to be diverted from unauthorized area		
						Existing		Under construction							Proposed	
						No.	Cap.	No.	Cap.	No.	Cap.					
11		Gharanda	43970	6	PHED	1	7					7	4.7	-2.3	5	4.8
12	Panipat	Panipat	674300	90.62	PHED HSAVP	6	120.8					120.8	67.5	-53.3	90	19.82
13		Samalkha	48645	6.57	PHED	1	5					5	4	-1	3.2	-
14	Sonpat	Gohana	80492	10.87	PHED	2	11.3					11.3	8.69	-2.61	8.5	10.87
15		Ganaur	43614	5.89	PHED	1	7					7	4.71	-2.29	6.29	-
16		Sonepat	324053	44	ULBD/Hsvp	3	62.5			2	18	80.5	35	-27.5	8.5	-
17		Kharkhoda	30687	4.14	PHED	1	4.5					4.5	3.31	-1.19	2.5	0
18	Rohatak	Maham	25093	3.39	PHED	1	5					5	2.71	-2.29	3.6	-
19		Rohatak	458508	61.9	PHED/Hsvp AULBD	5	93.5	3	37	1	10	140.5	60.8	-32.7	57.5	-
20		Kalanaur	28566	3.86	PHED	1	3.5					3.5	3.09	-0.41	2	-
21		Sampla	25190	3.4	PHED	1	4					4	2.72	-1.28	3	0(Already tapped to sewer line)
22	Jhajjar	Beri	19178	2.64	PHED	1	2					2	2.11	0.11	0.5	---
23		Bahadurgarh	209190	28.24	PHED HSAVP	3	64					64	22.59	-41.41	26.6	5.48
24		Jhajjar	58371	8.01	PHED	2	10.5					10.5	6.41	-4.09	3.75	0.08
25	Gurugram	Taoru	27684	3.74	PHED	1	4.5	0	0	0	0	4.5	2.99	-1.51		
26		Gurugram	1800000	538	GMDA	5	388	0	0	5	147.5	535.5	390	0	373	51.3
					MCG	0	0	6	7	0	0	7		0		

Estimation of Sewage along Yamuna

Sr.No.	District	Name of Town	Present Population as in 2020	Water Consumption (in MLD)	Name of Department	No. & Treatment Capacity (in MLD)						Total Capacity	Sewage generated/ Treatment Capacity required upto 2020 (MLD)	Gap in treatment upto 2020 (MLD)	Actual discharge reaching to STPs	Quantity of sewage to be diverted from unauthorized areas
						Existing		Under construction		Proposed						
						No.	Cap.	No.	Cap.	No.	Cap.					
27	Mewat	Nuh	19919	2.69	PHED	1	3.6					40	2.15	-1.45	1.6	
28		Ferozepur Jhrika	30319	4.09	PHED	1	5					5	3.27	-1.73	4	
29		Punahana	30299	4.09	PHED	1	4.5					4.5	3.27	-1.23	2.75	
30	Faridabad	Faridabad	1827770	247	MCF/HSP	1	45	2	17.5	3	210	272.5	210	165	158	3
31	Palwal	Palwal	161609	21.82	PHED	1	9	3	27.5	Replacement		36.5	17.45	8.45	8.5	
32		Hathin	17686	2.38	PHED	1	4.5					4.5	1.91	-2.59	2.9	
33		Hassan Pur	14172	1.91	PHED	1	3					3	1.53	-1.47	1.2	
34		Hodal	61425	8.29	PHED	1	9					9	6.63	-2.37	4.6	
		Total	6979185	1246.28		58+2 8=86	1052.2 +40= 1092.2	19	181	11	385. 5	1617.2 +40= 1657.2	973.43	-120.8	904.79	98.24

Existing STPs

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Capacity (MLD)	Latest Compliance Status	Action Taken Report
1	Yamuna Nagar	Yamuna Nagar	PHED	25	Under Stabilization	
2	Yamuna Nagar	Radur Road, Yamuna Nagar	PHED	20	Trial run	
3	Yamuna Nagar	Parwaloo, Jagadhri	PHED	24	Complying	
4	Yamuna Nagar	Chhachhrauli	PHED	3	Complying	
5	Yamuna Nagar	Radaur	PHED	3.5	Complying	
6	Yamuna Nagar	Baddimajra, Yamuna Nagar	PHED	10	Trial run	
7	Karnal	Gharaunda	PHED	7	Complying	
8	Karnal	Indri	PHED	1.5	Under upgradation	
9	Karnal	Nilokheri	PHED	6	Complying	
10	Karnal	Nissing	PHED	4	Complying	
11	Karnal	Tarori	PHED	5.5	Complying	
12	Panipat	Sewah, Panipat	PHED	35	Complying	
13	Panipat	Jattal Road, Panipat	PHED	10	Complying	
14	Panipat	Samalkha	PHED	5	Complying	
15	Panipat	Sewah, Panipat	PHED	25	Complying	
16	Panipat	Jattal Road, Panipat	PHED	20	Complying	
17	Sonepat	Kharkhoda	PHED	4.5	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs.
18	Sonepat	Ganaur	PHED	7	Complying	
19	Sonepat	Gohana	PHED	3	Complying	
20	Sonepat	Gohana	PHED	8.3	Complying	
21	Jhajjar	Jhajjar	PHED	5.5	Complying	
22	Jhajjar	Jhajjar	PHED	5	Complying	
23	Jhajjar	Beri	PHED	2	No effluent received in the oxidation pond	Sewer lines are being laid
24	Jhajjar	Bahadurgarh	PHED	18	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs.
25	Jhajjar	Bahadurgarh	PHED	36	Complying	
26	Rohtak	PGI Rohtak	PHED	19.5	Complying	
27	Rohtak	Sonaria, Rohtak	PHED	40	Complying	
28	Rohtak	Kalanaur	PHED	3.5	Complying	
29	Rohtak	Meham	PHED	5	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs.

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Capacity (MLD)	Latest Compliance Status	Action Taken Report
30	Rohtak	Singhpura, Rohtak	PHED	10	Under maintenance	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs
31	Rohtak	Singhpura, Rohtak	PHED	14	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs
32	Rohtak	Sampla	PHED	4	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs
33	Gurgaon	Tarou	PHED	4.5	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs
34	Mewat	Punhana	PHED	4.5	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs
35	Mewat	Nuh	PHED	3.6	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs
36	Mewat	Ferozpur Jhirka	PHED	5	Complying	
37	Palwal	Hassanpur	PHED	3	Complying	
38	Palwal	Hathin	PHED	4.5	Complying	PHED has engaged Jamia Milia Islamia University to conduct efficacy study of STPs.
39	Palwal	Hodal	PHED	9	Complying	
40	Palwal	Palwal	PHED	9	Complying	
41	Kurukshetra	Indri Road, Ladwa	PHED	7	Complying	
42	Panipat	Sec-19, Panipat	HSVP	30	Complying	
43	Panipat	Sec-6, Panipat	HSVP	0.8	Complying	
44	Sonepat	Rajiv Gandhi Edu. City, Phase-I, Sonepat	HSVP	7.5	Complying	
45	Jhajjar	Sec-36, Bahadurgarh	HSVP	10	Complying	
46	Rohtak	Sec-25, Rohtak	HSVP	10	Non Complying	
47	Gurgaon	Dhanwapur, Gurgaon	GMDA	68	Complying	
48	Gurgaon	Dhanwapur, Gurgaon	GMDA	100	Complying	
49	Gurgaon	Behrampur	GMDA	50	Complying	
50	Gurgaon	Behrampur, Gurgaon	GMDA	120	Complying	
51	Gurgaon	Dhanwapur, Gurgaon	GMDA	50	Complying	
52	Faridabad	Badshahpur, Faridabad	ULB	45	Complying	

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Capacity (MLD)	Latest Compliance Status	Action Taken Report
53	Karnal	Near Sector-4, Karnal	ULBD	40	Non Complying	(Under upgradation)
54	Karnal	Gogharipur Road, Karnal	ULBD	10	Complying	
55	Karnal	Kaithal Road, Karnal	ULBD	8	Non Complying	(Under upgradation)
56	Karnal	RK Puram, Karnal	PHED	8	Complying	Completed on 31.10.2019 and is under trial run. The STP is being handed over to MC, Karnal.
57	Sonepat	Rathdana Road, Sonepat	ULBD	30	Complying	Work of replacement of main trunk sewer line is in progress which leads to 30 MLD STP. The work is likely to be completed by 31.03.2021.
58	Sonepat	Kakroi Road, Sonepat	ULBD	25	Complying	The work of desilting of CIPP lining of main trunk sewer line is in progress which leads to 25 MLD STP. The work is likely to be completed by 31.12.2020.
		Total		1052.2		

Annexure-3

Month wise action plan for Construction of new STPs in the catchment of river Yamuna

Sr. No.	Name of town/city	Deptt.	Capacity (MLD)	Target date	Progress upto June, 2020	Progress upto July, 2020
In Progress						
1	Baddi Majra, Yamuna Nagar	PHED	10	30.09.2020	80%	80%
2	Shiv Colony, Karnal	ULBD	8	31.12.2020	56%	58%
3	Phooshgarh, Karnal	ULBD	20	31.12.2020	58%	60%
4	Transport Nagar, Karnal	ULBD	50	30.09.2020	95%	98%
5	Garhi Bohar, Rohtak	ULBD	12	15.03.2021	15%	17%
6	Singhpura, Rohtak	ULBD	10	31.12.2020	75%	80%
7	Peer Bodhi, Rohtak	ULBD	15	31.03.2022	0	0
8	Sarai Alawardi	ULBD	1	29.02.2020	95%	95%
9	Gadoli Kalan	ULBD	1	31.08.2020	90%	90%
10	Baliawas (against Gwalpahadi)	ULBD	1	31.12.2020	60%	60%
11	Jajzgarh (against Khiwari, Gurugram)	ULBD	10	31.12.2021	Being converted from 10 MLD to 20 MLD STP with GMDA authorities.	Being converted from 10 MLD to 20 MLD STP with GMDA authorities.
12	Mohmadpur Jharsa	ULBD	2	30.12.2020	50%	50%
13	Darbaripur	ULBD	1	31.12.2020	65%	70%
14	Bandwari (Shifted from Sihi/Khedki Daula)	ULBD	1	31.03.2021	2%	5%
15	Faridabad	HSVP	7.5	30.09.2020	85%	85%
16	Sec 21, Faridabad	ULBD	10	31.07.2021	2%	2%
17	Kithwari (against Ferozpur, Palwal)	ULBD	10	30.06.2021	18%	29%
18	Jodhpur Road, Palwal	ULBD	15	30.06.2021	33%	40%
19	Ferozpur, Palwal	ULBD	2.5	30.06.2021	36%	39%
Total			187			

Sr. No.	Name of town/city	Deptt.	Capacity (MLD)	Target date	Progress upto June, 2020	Progress upto July, 2020
Work Completed						
1	Radaur Road Yamuna Nagar	PHED	20	30.09.2019	Completed	Completed
2	Baddi Majra, Yamuna Nagar	PHED	10	26.07.2019	Completed	Completed
3	Gharaunda	PHED	7	31.05.2019	Completed	Completed
4	RK Puram, Karnal	PHED	8	31.10.2019	Completed	Completed
5	Firozpur Jhirka	PHED	5	20.11.2019	Completed	Completed
	Total		50			

Action plan for Under Proposal STPs

Annexure-4

Sr.No.	Name of the district	Name of the town/city	Capacity (MLD)	Date of completion	Remarks
GMDA					
1	Gurugram	Jhazgarh	20	31.12.2021	DNIT under finalization
2	Gurugram	Dhanwapur	100	31.12.2022	DNIT under finalization
3	Gurugram	Manesar and Naharpur Kasan, Gurugram	25	31.12.2022	DNIT under finalization
HSVP					
1	Sonepat	Sonepat(Aterna)	15	30.06.2021	Tender approved; work allotted
2	Murthal	ULBD	3	30.06.2021	The work has been allotted to the agency
3	Rohtak	Rohtak	10	31.07.2021	Tender approved; work allotted
4	Faridabad	Faridabad	30	31.12.2021	Estimate and DNIT approved
Gram Panchayat Department					
1	Gurugram	Dhankot, Gurugram	0.5	30.09.2021	
2	Gurugram	Bajghera	2	30.09.2021	DNIT under finalization
ULBD					
1	Faridabad	Mirjapur, Faridabad	80	31.12.2021	Tender has been invited which is scheduled to be opened on 25.06.2020.
2	Faridabad	Partapgarh, Faridabad	100	31.12.2021	Tender has been invited which is scheduled to be opened on 25.06.2020.
Total			385.5		

Annexure-5

Month wise execution plan for Laying of sewerage in approved area

Month wise execution plan for Laying of sewerage in approved area							
Sr. No.	Name of town	Deptt.	Target date	Length to be laid	Progress upto 30.06.2020	Progress upto 30.07.2020	Percentage
1	Beri	PHED	31.12.2021.	8720	600	1000	11.50%
2	Jagadhri	ULB	31.12.2020	109320	52550	62600	57%
3	Palwal	ULB	31.12.2020	148700	76310	86246	58%
4	Panipat	ULB	31.03.2021	211548	82000	90000	42.5%
5	Rohtak	ULB	15.03.2021	174690	75173	86210	49%
6	Ferozepur Jhirka	PHED	31.12.2020	4000	2500	2500	62.50%
7	Sonepat	ULB	31.03.2021	63500	39350	42950	68%
8	Punhana	PHED	31.12.2020	25839	21400	21400	82.80%
9	Samalkha	PHED	31.12.2020	3700	1806	1806	48.80%
10	Nissing	PHED	31.12.2020	3850	3378	3378	87.70%
11	Taraori	PHED	30.09.2020	4700	3710	3710	79%
12	Faridabad	ULBD	31.12.2020	450000	318000	342000	76%
13	Karnal	ULBD	31.12.2020	152000	125503	125503	82.5%
	Total			1360567	821880	869303	

Annexure-6

Existing CETPs in the catchment of river Yamuna

Sr. No.	Name of CETP	Capacity in MLD	Deptt.	Existing/ Under construction/proposed	Present status
1	IE Rai, Sonapat	5	HSI IDC	Existing	Plant functional and Complying.
2	IE Barhi, Sonapat	16	HSI IDC	Existing	Plant functional and Complying.
3	IE Kundli, Sonapat	4	HSI IDC	Existing	Plant functional but and Complying.
4	IE Murthal, Sonapat	0.2	HSI IDC	Existing	Plant functional and Complying.
5	IMT Rohtak	10	HSI IDC	Existing	Plant functional and Complying.
6	IE Kutana, Rohtak	3	HSI IDC	Existing	Plant under trial run.
7	IE Panipat Refinery Complex, Panipat	2.5	HSI IDC	Existing	Could not be functional, due to Non availability of sufficient effluent
8	HSI IDC Sector 16-17, Bahadurgarh	12.5	HSI IDC	Existing	Plant functional and Complying.
9	IMT Faridabad	10.5	HSI IDC	Existing	Running satisfactory and Complying
10	IMT Manesar, Gurugram	55	HSI IDC	Existing	Plant functional and Complying.
11	Sector-29, Panipat	21	HSVP	Existing	Plant functional but non complying.
12	Sector-29, Panipat	21	HSVP	Existing	Plant functional but non complying.
13	Faridabad Electroplaters Association	0.6	Private	Existing	Plant functional and Complying.
14	Industrial Area, Sector-37, Gurugram	0.2	Private	Existing	
	Total	161.5			

Under proposal CETPs in the catchment of river Yamuna

Sr.No.	Name of the town/city	Deptt.	Proposed capacity (MLD)
Yamuna			
1	IE Manakpura, Yamuna Nagar	HSI IDC	3
2	IE Bahadurgarh	HSI IDC	10
3	Partapgarh, Faridabad	HSI IDC	50
4	Mirzapur, Faridabad	HSI IDC	25
5	Badshahpur, Faridabad	HSI IDC	15
6	Sector-34, Gurugram	HSI IDC	20
7	Sector- 18, Gurugram	HSI IDC	1.5
8	IDC, Gurugram	HSI IDC	0.75
9	Industrial Area, Sector-37, Gurugram	HSI IDC	9
Total			134.25