



CENTRAL POLLUTION CONTROL BOARD
(Water Quality Management Division-I)
"Parivesh Bhawan", East Arjun Nagar,
Delhi-110032

Minutes of 2nd meeting of the Executing Committee held on 11/9/2018 at 'Conference Hall, Punjab State Council for Science and Technology, Mahatma Gandhi State Institute of Public Administration (MGSIPA) Complex, Sector-26, Chandigarh' under the Chairmanship of Justice Pritam Pal, Former Judge, Punjab & Haryana Court, for ensuring compliance to the Hon'ble NGT order dated 7/8/2018 in matter of OA No. 139 of 2016 titled Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case) And Yogender Kumar

2nd Meeting of the Executing Committee was held on 11/9/2018 at 'Conference Hall, Punjab State Council for Science and Technology, MGSIPA Complex, Sector-26, Chandigarh under the Chairmanship of Justice Pritam Pal, Former Judge, Punjab & Haryana Court. The List of Officials attended the meeting is enclosed as **Annexure-I**.

Shri Krunesh Garg, Member Secretary, Punjab Pollution Control Board (PPCB) welcomed the Chairman and Members of the Executing Committee as well as Officials of State Governments and Pollution Control Boards of Punjab, Haryana, Himachal Pradesh and Union Territory of Chandigarh Administration. Thereafter, agenda-wise issues discussed are given in the subsequent paras:-

1) Presentation made by Punjab Pollution Control Board:-

Shri K. Garg gave a detailed presentation on the course of River Ghaggar starting from Shivalik Hills in Himachal Pradesh to Otto Weir in Haryana and various sources of sewage and industrial effluent contributing to the pollution load in River Ghaggar in the jurisdiction of State of Himachal Pradesh, Chandigarh UT, Punjab and Haryana through 'Googlepro Images'. Further, he

also apprised the committee on the measures taken for restoration of River Ghaggar and its tributaries as detailed below:-

- (a) **Water quality of River Ghaggar :-** PPCB informed that the samples of River Ghaggar are collected from 12 locations (i.e., Mubarkpur, Ghaggar Near Bhankarpur, Dera Bassi, D/S Chattbir, U/S Jharmal Nadi, D/S Jharmal Nadi, U/S Dhakansu Nallah, D/S Dhakansu Nallah, Ghaggar at Rattanheri, D/S of Patiala Nadi after confluence, Ghaggar at 100 mtr. D/S confluence with River at Khanauri, Ghaggar at Moonak, U/S Sardulgarh and D/S Sardulgarh) of River Ghaggar within the jurisdiction of State of Punjab. Based on the analysis results of collected samples (with respect to DO, COD, BOD, T.Coliform) it was apprised to the executing committee that the quality of water in River Ghaggar is of category D as per 'designated best use criteria' prescribed by Central Pollution Control Board, when it enters the jurisdiction of Punjab i.e. at Mubarikpur. When the river Ghaggar leaves the State of Punjab after traversing Districts Mohali, Patiala, Sangrur and Mansa, the river water quality becomes category 'E' at Village Sandulgarh.
- (b) **Status of Control of Industrial Pollution in River Ghaggar:-** As regards to the measures taken for control of river pollution in river Ghaggar and its tributaries, MS, PPCB informed that (i) PPCB has not allowed any industry to discharge its wastewater directly/ indirectly into River Ghaggar and its tributaries; (ii) In Dera Bassi and adjoining areas, 10 pharmaceutical units and one distillery unit which are having 'zero liquid discharge based treatment systems'. (iii) In catchment area of Patiala Nadi, main water polluting industries are 04 paper mills which are having captive effluent treatment plants and discharging their effluent onto land for irrigation/plantation. One distillery is having captive effluent treatment plant and is presently discharging treated effluent onto land for irrigation/ plantation and the unit is in the process of installing ZLD based treatment system which is likely to be commissioned by 31/12/2018.
- (c) **Status of towns where STP have been installed:-** 22 towns are located in the catchment of River Ghaggar, which are impacting water quality of River Ghaggar. In these town, 32 STPs are required to be installed. Out of which, as of now 17 STPs

have already been commissioned in 12 towns under the Ghaggar Action Plan (with capacity 273 MLD) and presently 208 MLD of sewage is treated. In 3 towns namely Lalru, Rajpura and Mandi Govind Garh, 2 STPs at each town is required to be installed and presently 33.5 MLD capacity of STPs installed. However, 14.5 MLD of additional capacity of STPs is required to be installed in the afore-said three towns. In the remaining 7 towns i.e., Dera Bassi- 2 STPs of total capacity 6 MLD (one STP of capacity 4 MLD construction work completed), Lalru- 1 STP of Capacity 1.5 MLD, Rajpura-1 STP of 10 MLD capacity (civil work completed), Sirhind-3 STPs of 11 MLD Capacity, Mandi Govind Garh-1 STP of 3 MLD capacity, Bassi Pathana- 2 STPs of capacity 3,2 MLD, Longowol-1 STP of 3 MLD yet to be installed and proposals are under different stages. PPCB informed that at present, infrastructure for treatment of approx. 76% of total sewage generated from these towns located in the catchment of river Ghaggar is in place.

(d) **Action plan proposed:-** In order to improve the water quality of River Ghaggar, PPCB proposed that

- Punjab Water Supply and Sanitation Board (PWSSB) / Local Govt. of Punjab State are required to install the remaining STPs or upgrade the existing STPs, wherever required, in a time bound manner.
- Department of Rural Development and Panchayats are required to install suitable treatment technology to treat the wastewater of all the villages which are discharging their wastewater directly / indirectly into River Ghaggar.
- Department of Soil and Water Conservation is required to laid down distribution network of pipelines for utilization of treated wastewater for irrigation of agricultural land area instead of discharging the treated wastewater into drains which will also help to reduce the thrust on groundwater due to usage of fresh water for agricultural purposes.
- State of Haryana is required to restrain the discharge of wastewater into Sukhna Choe, natural drain passing near K-Area of Zirakpur, Singh Nallah, Ghail Drain through which the wastewater of Ambala city is discharged and Sagarpara Drain etc.

- State of Himachal Pradesh is required to restrain the discharge of various sources entering into river Ghaggar directly or indirectly.

2) **Presentation made by Himachal Pradesh State Pollution Control Board:-**

Dr. Sharawan Kumar, Sr. Environmental Engineer, HPSPCB, Paonta Sahib representing Himachal Pradesh State Pollution Control Board (H.P.SPCB) made a presentation covering status of water polluting Industries / civic bodies in the catchment of Sukhna Nallah and catchment of Markanda River. Main highlight of his presentation are detailed below :-

- (a) **Status of Water Polluting Industries / Civic Bodies in the Catchment of Sukhna Nallah:-** Parwanoo Town in Himachal Pradesh is having 9 Sq.KM, which is a residential, small industrial as well as commercial area. Main river/drain in Parwanoo area are River Kaushalya and Sukhana Nallah. In Parwanoo area, there are total 324 industries i.e., 14 Red, 27 Orange and 283 Green category. 41 out of 324 industries are water polluting in nature. The total effluent generation in Parwanoo area is 0.76 MLD and all the water polluting industries have installed captive ETPs for treatment of waste water.

In the River Kaushalya catchment area, total industrial effluent treatment capacity is about 52.5 KLD and STP capacity is about 15 KLD whereas total effluent generation in Sukhana Nallah catchment is about 693.3 KLD. There are 32 water polluting industries in Sukhana Nallah catchment. As per analysis results of the samples collected from Sukhana Nallah during the years 2015 to 2018 w.r.to pH, DO, BOD and Total Coliform reveals that the Water Quality of Sukhana Nallah is bad primarily due to Sewage Load. Water Quality of Kaushalya River is meeting the Class A of CPCB "Best Designated Use".

As regards to the sewage generation and treatment of sewage in Parwanoo, he stated that Parwanoo town has 2286 households and the town is divided into 9 wards and as per the Census India 2011, the population of Parwanoo city is about 8,758. At present, there is no CETP or STP is available in Parwanoo area and sewage generated from Parwanoo city is treated in individual septic tanks

and trade effluent generated is treated in captive ETPs. *Proposed action plan by H.P. SPCB for Parwanoo area are as follows:-*

- HP Govt. has already taken initiative for the installation of CETP and Common STP for Parwanoo Area.
- Common STP of 1 MLD proposed.
- CETP of 1 MLD Proposed.
- Land identification work is under process.

(b) **Status of Water Polluting Industries / Civic Bodies in the Catchment of Markanda River:-** Dr. Sharawan Kumar, Sr. Environmental Engineer, HPSPCB representative of H.P. SPCB informed that Kala Amb is a small industrial cluster falling under the catchment of River Markanda. There are total 419 industries i.e., 54 Red, 215 Orange and 133 Green and 17 industries are White category. He also informed that 93 Out of 419 industries are water polluting and total flow of Kala Amb industrial cluster is approx. 5.975 MLD and existing treatment capacity of ETPs is 7.28 MLD. All the water polluting industries have installed their respective ETP's/STP's for treatment of waste water. He also stated that River Markanda enters Kala Amb at Bikram Bag and leaves at Sadhora Bridge. It covers a distance of almost 130 km in Haryana before mixing with River Ghaggar in rainy season. Main drains at Kala Amb are (i) Jattan Wala Nallah; (ii) Roon Nallah; (iii) Sukdo Nallah and (iv) Salani Nallah which ultimately mixing in the River Markanda at Kala Amb. As per joint sampling of CPCB and HPSPCB, 14 km downstream Kala Amb, River Markanda has been found dry most of the times.

In the catchment of River Markanda, sub-catchment of Jattan Wala Nallah is the area of concern whose water quality has been found most of the times below the standard due to the discharge of un-treated sewage from various drains into it and Coliform is found more than 1600 MPN/100 ml. 03 sub streams i.e. (1) Near M/s Ruchira Paper Mill, where total 4 no. of industries i.e., 2 Paper Mills, Katha Unit and 2 Metal Finishing Units) (2) Near M/s Saboo Tor, where total 13 no. of industries i.e., Pharma-4, Glass toughening-3, manufacturing-3, metal finishing-3 and Cosmetic-1) and (3) Near M/s Jay Aay Alloys, where total 12 no. of units (Pharma-6, scrap melting-3, Food processing-1, AC Assembly-1 and

manufacturing-1) are contributing industrial effluent. He also stated that in addition to above, the sewage / sullage of Kala Amb which is partially in Himachal and partially in Haryana discharged into Jattan Wala Nallah.

In Jattan Wala Sub-Catchment, there are total 60 industries. 29 Out of 60 industries are water polluting and having total maximum pollution load of 6473.5 KLD. All the 29 industries have provided ETPs for treatment of industrial effluent generated from the respective unit. As per the estimation, the population of Jattan wala sub catchment is around 1000 and floating population is approx. 5000 and total sewage generation is about 236 KLD. Apart from this residential and industrial units situated in Himachal and Haryana are also contributing BOD load in Jattan Wala Nallah. He also stated that at present, there is no Common STP in Kala Amb Area. Untreated domestic sewage and sullage of civic population of Himachal and Haryana is carried by Jattan Wala Nallah which in turn is degrading the water quality of River Markanda.

Proposed action plan of H.P. State Government for Kala Amb area are as follows:-

- HP Govt. has already taken initiative for installation of CETP-cum-STP of appx.10 MLD capacity at Kala Amb for ensuring treatment of waste water generated from industries and domestic sewage.
- M/s Kala Amb Infrastructure Company has already been registered under Company Act as SPV for setting up CETP in Kala Amb.
- M/s Kala Amb Infrastructure Company has undertaken the work of preparing DPR through M/s Shivalik Solid Waste Management Ltd. The land for the project has been identified by the committee comprising 'DC, Sirmaur; EE, HPSPCB, Paonta Sahib and GM, DIC Nahan'. The proposal has been sent to the H.P. State Govt. for final approval.
- The survey of the area will be conducted to identify the remaining point sources.

3) Presentation made by Chandigarh Pollution Control Committee:-

Shri T.C. Nautiyal, MS, Chandigarh Pollution Control Committee (CPCC) made a presentation on the initiatives taken by CPCC for ensuring compliance to the Hon'ble NGT Order dated 07.08.2018 as detailed below:-

Shri Nautiyal in his presentation informed that as per the census 2011, total population of Chandigarh is 10.54 Lacs and 67 MGD of water is supplied from surface water (Bhakhra Main Line) and 20 MGD of ground water and total domestic and industrial effluent generated from Chandigarh UT is about 57 MGD. At present 06 STPs of each capacity 5 MGD at 3 BRD, 11 MGD at 3 BRD, 5 MGD at Raipur Kalan, 30 MGD at Diggian, 1.25 MGD at Raipur Khurd and 1.6 MGD at Dhanas have already been installed, which are treating total quantity of sewage about 53.85 MGD. He also informed that final mode of treated sewage is disposed in Natural Choe except Diggian. Diggian STP treated effluent only goes to Irrigation Channel for irrigation purposes. STPs of capacity 0.4 MGD to be installed at Village Kishangarh, 5 MGD at Maloya and 1.25 MGD at Raipur Kalan have already been proposed which shall treat 6.65 MGD of domestic wastewater. The upgradation of existing STPs by Municipal Corporation, Chandigarh shall accomplish by 31/3/2020. He further informed that untreated effluent of 03 MLD from Hallomajra is discharged into Sukhna Choe which is yet to be tapped and Municipal Corporation and Engineering Department, Chandigarh Administration has been asked to prepare action plans with time lines for upgradation of existing Sewage Treatment Plants and for stopping of discharge of untreated waste water into drains.

Thereafter, the main points of the Hon'ble NGT dated 7/8/2018 of Hon'ble NGT were discussed as under:

- 4) Constitution of Special Task Forces (STFs) at State and District Level in each State**
- (a) Principal Secretary to Govt. of Punjab, Deptt. of Science, Technology and Environment informed that action regarding constitution of STFs at State Level as well as at District Levels are under process and the same will be constituted shortly.
- (b) MS, HSPCB informed that the STFs at State Level as well as at District Levels has already been constituted.

- (c) SEE, HPSPCB informed that STFs at State Level as well as at District Levels has already been constituted.
- (d) MS, CPCC informed that STFs at State Level as well as at District Levels has been constituted.
- 5) Actions taken by the Punjab, Haryana and Himachal Pradesh States and Chandigarh UT on the decisions taken in the first meeting of the Executing Committee held on 31.08.2018:-**

Thereafter, executing committee requested all the states to apprise about the status of actions taken on the decisions taken in first meeting of the executing committee held on 31.08.2018 at Chandigarh. The Status actions taken as informed by the States of Punjab, Haryana, Himachal Pradesh and Chandigarh UT are tabulated as detailed below:-

Sr. No.	Decisions of the First Executing Committee held on 31/8/2018	Compliance status as informed by the Officials of Punjab, Haryana, Himachal Pradesh and Chandigarh UT.
1)	Punjab Govt. has to provide all the necessary logistics and an adequate office space in Chandigarh so that smooth functioning of the Executing Committee is started at the earliest.	PSSTE, Government of Punjab informed that the action is under process at Govt. level and the same has already been informed vide memo no. 10/375/2018-STE(5)/94 dated 4/9/2018 to the Hon'ble Chairman of the Executing Committee.
2)	A dedicated web portal also be provided by the Punjab State Government for uploading information regarding action taken and also for receiving feedback from the public or stakeholders.	MS, PPCB informed that temporarily a link has been provided on Board's website i.e. www.ppcb.gov.in at home page under the sub-head 'Executing Committee for River Ghaggar' of

		<p>the head 'Focus Area' for uploading the details/ data of the Executing Committee. (OR) www.ppcb.gov.in/ExeCommitteeGhaggar. The Member Secretaries of HPSPCB, HSPCB and CPCC informed that they will create the web portal shortly.</p>
3)	<p>All the concerned departments are required to identify the nodal officer to co-ordinate with the executing committee as and when required.</p>	<p>MS, PPCB informed that SEE (HQ-1), Punjab PPCB, Patiala has been appointed as Nodal Officer to coordinate with Executing Committee on behalf of the Board. An information in this regard has been given to the OSD (Litigation), O/o Chief Secretary to Govt. of Punjab and Principal Secretary, Deptt. of Science, Technology and Environment vide no. 26032-33 dated 31/8/2018. The Member Secretaries of HPSPCB, HSPCB and CPCC informed that they will identify the Nodal Officer to coordinate with the Executing Committee and will intimate his name shortly to the Committee.</p>
4)	<p>Punjab, Haryana and H.P. SPCBs and Chandigarh PCC are required to identify all the industries indulged in direct/ indirect discharge of industrial effluent and other pollution into river Ghaggar, be identified and such information be provided to the Committee to</p>	<p>The Member Secretaries of PPCB, HPSPCB, HSPCB and CPCC informed that the details of industries located in the catchment area of River Ghaggar as well as the drains leading to River Ghaggar and its tributaries has already been identified The detail of the same will</p>

	verify further by it.	also be incorporated in the Action Plan to be prepared and submitted to the executing committee.
5)	Information relating to the area-wise quantum of sewage and industrial effluent generation, existing treatment capacities and the proposed treatment capacities to control pollution of River Ghaggar, as per the formats circulated during the first meeting (annexed as Annexure-II) also be provided to the Executing Committee and CPCB.	MS, PPCB provided information relating to quantum of sewage as received from Punjab Water Supply and Sewerage Board (PWSSB) as per the prescribed format, to the Hon'ble Members of the Committee. Also, the Member Secretaries of HPSPCB, HSPCB and CPCC gave an assurance to submit the required information shortly.
6)	The Chief Secretaries of the State Governments (Punjab, Haryana, H.P and Chandigarh UT) have to review the proposed draft Action Plan with all the concerned departments and the Chief Secretary or his representative has to be present to apprise the Executing Committee in the next meeting about the draft proposed actions with time targets in compliance to the Hon'ble NGT order dated 07.08.2018.	<p>MS, PPCB informed that the draft Action Plan has been prepared and will be circulated to the concerned department for their input. After receiving their comments/ input, the same will be submitted to the Committee upon approval of Chief Secretary, Government of Punjab State.</p> <p>MS, HSPCB informed that the draft Action Plan has already been prepared and same has been circulated to all the concerned departments for comments and inputs. After receipt of inputs from the concerned departments, same will be submitted to the Committee.</p> <p>The Representative of HPPCB and</p>

		MS, CPCC informed that the draft action plan is under preparation and will be sent to the Govt. for its approval shortly.
7)	Meeting with District Attorney of the State Boards and also the presiding officers of the Environment Courts will be held at the earliest under the Chairmanship of the Chairman, Executing Committee so that lacunas if any in the prosecutions be removed.	<p>MS, HSPCB informed that there are 02 Environment Courts in the Haryana State. Member Secretary, PPCB and CPCC as well as representative of HPSPCB informed that there is no Environment Court in the State of Punjab, Himachal Pradesh and UT, Chandigarh.</p> <p>It was informed that the complaints under the Pollution Control Acts are filed in the Courts after getting vetted from the Legal Cell in the department. It was also informed that the detail of cases pending in various courts will be prepared shortly and will be submitted to the Executing Committee for discussion during interaction with the Law Officers of SPCBs by the Chairperson of Executing Committee.</p>
8)	All the Chief Secretaries of State Governments (Punjab, Haryana and H.,P) and Chandigarh UT Administration are required to ensure submission of Action Taken Reports (ATRs) in compliance to the Hon'ble NGT order dated	The Officers from SPCBs and State Govts. Ensured to submit fortnightly action taken reports to the Executing Committee and CPCB.

	07.08.2018 to the Executing Committee and CPCB, voluntarily on fortnightly basis.	
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Justice Pritam Pal, Chairman, Executing Committee requested all the officials to take necessary action for preparation and submission of the action plans with time lines keeping in view the restoration of polluted river Ghaggar and its tributaries, within the jurisdiction of the respective State/UT, before next date of executing committee meeting to the Executing Committee as well as CPCB. Shri J.Chandra Babu, Sc'D', CPCB and Member of Executing Committee also informed that to have uniformity in preparation and submission of the action plans by all the 3 States and 01 UT concerned, a 'structure or content' of the action plan to be submitted will be prepared and circulated to all the concerned as a part of the minutes of this executing committee (**As Annexure-II**) for taking further action accordingly. Upon deliberations with the officials of 3 States and Chandigarh UT, following decisions were taken:-

- The Govts. of Punjab shall constitute the Special Task Forces (STFs) at State Level as well as District Level immediately and shall submit the information to the Executing Committee.
- A dedicated web portal must be installed by all the SPCBs wherein, the details of action taken to curb the menace of the pollution in River Ghaggar and its tributaries by the concerned SPCBs/PCC also be uploaded. A separate link provision should also be provided in the web portal for receiving feedback/complaints from the public or stakeholders.
- All the concerned departments in the 03 States (i.e., Punjab, Haryana and H.P) and 01 UT (Chandigarh) will identify the Nodal Officer to co-ordinate with the Executing Committee immediately and shall send the information to the Executing Committee and CPCB.
- All the 03 SPCBs and 01 UT shall submit the information regarding area-wise quantum of sewage and industrial effluent generation, existing and proposed treatment capacity etc., as per formats circulated by the Executing Committee, within a week, to the Executing Committee and CPCB.

- The Chief Secretaries of the State Governments (Punjab, Haryana, H.P and Chandigarh UT) will expedite the process to review the proposed draft Action Plan with all the concerned departments and to submit the same after its final approval to the Executing Committee before the next meeting.
- The activities regarding organizing of awareness / health camps by the 3 SPCBs and Chandigarh PCC also must be incorporated in the final Action Plan.
- The copy of all the information sent to the Executing Committee by the concerned departments, also be endorsed to CPCB.
- An interaction meet with the officers of Legal Cell of SPCBs will be taken by the Hon'ble Chairperson of Executing Committee in which the officers should bring the details of all the court cases pending in various Courts alongwith the date of filing of case, Environmental Acts under which the case filed, present status of the case, difficulties being faced by Law Officers.

The Chairman of the Executing Committee thanked 'Member Secretary, Punjab Pollution Control Board' for excellent arrangements and for organizing 2nd meeting of the Executing Committee.

2nd meeting of the Executing Committee ended with vote of thanks to the Chair.

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Annexure-I

List of Participants of the 2nd meeting of the Executing Committee held on 11/8/2018 at 'Conference Hall, Punjab State Council for Science and Technology, MGSIPA Complex, Sector-26, Chandigarh' under the Chairmanship of Justice Pritam Pal, Former Judge, Punjab & Haryana Court for ensuring compliance to Hon'ble NGT Order dated 07.08.2018 in the matte of OA No. 138/2016 (T_{NHRC}) and OA No. 139 of 2016 (T_{NHRC}).

S. No.	Name of the Official, Designation and Organization/Department
1.	Justice Pritam Pal, Chairman, Executing Committee
2.	Sh. J. Chandra Babu, Sc. 'D', CPCB and Member, Executing Committee
3.	Dr. Vimal K. Hatwal, Joint Director, Regional Office, MoEF&CC, Chandigarh- Representing Member of MoEF & CC
4.	Sh. R.K. Verma, Principal Secretary to Govt. of Punjab, Deptt. of Science & Technology, Chandigarh
5.	Sh. Krunesh Garg, MS, PPCB
6.	Sh. S. Narayanan, MS, HSPCB
7.	Sh. T.C. Nautiyal, MS, CPCC
8.	Sh. Anil Garg, Additional Commissioner, MC, Chandigarh
9.	Sh. K.P. Goyal, CE, PWSSB, Patiala
10.	Sh. D.S. Bajwa, CE, PHED, Haryana
11.	Sh. Manoj Bansal, CE, MC, Chandigarh
12.	Sh. O.P. Goyal, CE, ULB, Haryana
13.	Sh. Phool Singh Nain, CE, Haryana Irrigation Department
14.	Dr. Vandana Gupta, Director Health, Chandigarh UT Administration, Sirmor
15.	Sh. Tejinder Kumar, SEE, PPCB
16.	Sh. Sanjeev Kaul, S.E. HP, Irrigation of Public Health Deptt. Circle, Solan
17.	Sh. Sanjiv Gupta, SEE, HSVP, Panchkula
18.	Sh. Rajinder Singh, SEE (PH), UT, Engg, Deptt. UT Sectt. Chandigarh
19.	Dr. Sharewah Kumar, SEE, HPSPCB, Paonta Sahib
20.	Sh. Shailender Singh, EE, PHED, Haryana
21.	Kuldeep Singh, EE, PPCB, R.O, Mohali
22.	Sh.J.P. Singh, EE, HSPCB, Haryana
23.	Sh. V.S. Kochhar, AE Water Supply and Sanitation, Punjab.
24.	Sh. Nishant Garg, AE, Drainage, Patiala

25.	Sh. Parveen Kumar, SDE, Water Supply and Sanitation, Punjab
26.	Sh. Atul Parmar, AEE, HPSPCB, RO, Parwanoo
27.	Sh. Amit Sharma, SDE, MC, Chandigarh
28.	Sh. Lalit Thakur, AEE, HPSPCB, Kala Amb
29.	Sh. Ranbir Singh, SDE, Urban Local Bodies, Haryana
30.	Dr. Radhe Shyam, Scientist, Gr-I, Environment Department, Haryana
31.	Sh. Vivek Pandey, Scientist B, CPCC, Chandigarh
32.	Sh. Tarun Mishra, Scientist-B, CGWA, Chandigarh
33.	Sh. K.S. Rawat, Scientist-B, CRWM, Chandigarh
34.	Dr. Raj Kumar, Sc.'B', HSPCB, Panchkula, Haryana

CONTENT

(For Preparation and Submission of the Proposed Action Plan (Short, Medium and Long Term Plans) for Restoration of River Ghaggar and Its Tributaries - By the States of Punjab, Haryana & Himachal Pradesh and Chandigarh UT)

- 1) Back Ground
- 2) About River Ghaggar and Its Tributaries, activity in the catchment area of river Ghaggar and its tributaries.
- 3) Water quality goals as per the existing provisions or guidelines/specifications of CPCB.
- 4) Sources of Pollution of River Ghaggar and Its tributaries within the jurisdiction of the respective State/UT.
- 5) Actions initiated for ensuring compliance to the Hon'ble National Green Tribunal (NGT), Principal Bench, Delhi Order dated 07.08.2018 in the matter of OA No. 138/2016 (T_{NHRC}) and OA No. 139 of 2016 (T_{NHRC})
- 6) Existing Status in the catchment of river Ghaggar and Its Tributaries: - Sewage & Industrial effluent management in rural and urban areas, ground water quality, health status of the Public, water quality of River Ghaggar and Its Tributaries as well as drains contributing to the pollution load in River Ghaggar and Its Tributaries.
- 7) A map (preferably digital map) showing the sources of pollution (area-wise information relating to– population, water consumption in MLD, sewage generation in MLD, existing STPs with numbers and exiting sewage treatment capacity in MLD, proposed STPs- Nos with treatment capacity in MLD, drains contributing to pollution load in river Ghaggar and Its tributaries within the jurisdiction of the State/UT)
- 8) A map (preferably Digital map) showing the sources of industrial pollution (area-wise information relating to– sector-wise no. of industries, sector-wise total water consumption in MLD, sector-wise industrial effluent generation in MLD, existing capacity of captive ETPs and CETPs in MLD, proposed no. of captive ETPs/CETPs in MLD), sludge generated from STPs as well as municipal solid waste management.

- 9) Observations on Gap Analysis w.r.to (i) Sewage management; (ii) industrial effluent management; (iii) operation and maintenance of existing STPs; (iv) operation and maintenance of existing captive ETPs; (v) operation and maintenance of existing CETPs; (vi) Compliance status w.r.to the industries located in the catchment area of river Ghaggar and its tributaries within the jurisdiction of the respective SPCB/PCC) – (a) List of industries not having valid consents under Water (Prevention and Control of Pollution) Act, 1974 and authorisation under the HW & OW (M & TM) Rules, 2016 as amended; (b) List of Industries complying and non-complying to the effluent discharge norms prescribed by the respective SPCB/PCC; (c) List of industries indulged in illegal disposal of industrial effluent; (d) industrial hazardous waste (generated from industries, captive ETPs and CETPs) management, requirement of restoration of river Ghaggar and its tributaries.
- 10) Proposed action plans (short term, medium and long term plans) with time lines including the organisation/agency responsible for its implementation- action plan should cover aspects as detailed below:-
- (i) Domestic sewage management (including source reduction and control measures by bulk sewage generators, measures for conveyance of sewage through dedicated sewer lines connectivity to STPs, measurement of flows of drains connected to the river/tributaries under reference, on-site or in-situ treatment measures, end use of treated sewage for beneficial use complying to the prescribed standards, preparation and execution of the project proposals for sewage management through state-of-the-art STP, strict vigilance, effective enforcement of standards prescribed under the Environment (Protection) Act, 1986, actions initiated against violators, sewage management in rural areas with low cost treatment technologies like constructed wet lands),
- (ii) Industrial effluent management (measures which include source control like adoption of state-of-the-art technologies, reuse of treated industrial effluent to reduce fresh water consumption, adoption of zero liquid discharge, sludge management, recovery and reuse of recovered chemicals in the process, measures for conveyance of industrial effluent through dedicated lines and its connectivity to ETPs/CETPs, preparation and execution of the project proposals for industrial effluent management (ETPs/CETPs), strict vigilance, effective enforcement of standards prescribed under the Environment (Protection) Act, 1986, action against violators)
- (iii) Ground water management (obtaining of NOC from CGWB for use of ground water resources, ground water survey for quality assessment, identification of problem

sources, sealing of contaminated hand pumps/tube wells used by the general public for drinking water purposes, supply of ground water to the public living in areas where ground water is contaminated, measures to control depletion of groundwater table as well as for increasing ground water levels (ground water recharge measures), remedial measures for decontamination of highly polluted groundwater resources within the jurisdiction of the respective State/UT)

- (iv) Restoration of river Ghaggar and Its tributaries water quality
- (v) Maintaining of E= Flows for having ecological balance in the river system
- (vi) Awareness on
 - Effective use of groundwater resources for agriculture purpose; and
 - Health status and organising health camps
- (vii) Monitoring of executing the actions plans
- (viii) Any other issues relevant to the subject.

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