Agenda

for

2<sup>nd</sup>meeting of the Expanded Monitoring Committee set up by NGT

under

Chairmanship of Hon'ble Justice Pritam Pal, Former Judge, Punjab & Haryana High Court

to

review progress of Implementation of Action Plans for River Sutlej, Beas & Ghaggar



Date: 24<sup>th</sup>April 2019

Venue: Committee Room of Punjab State Council for Science and Technology

Directorate of Environment and Climate Change
Department of Environment
Government of Punjab

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#### Item No. 1 Leave of Absence

1. Following members of the Committee and Departments have been invited for the meeting:

#### Members of the Committee

- (i). Justice Pritam Pal, Chairperson
- (ii). Sh. Subodh Agrawal, Member
- (iii). Sh. Babu Ram, Member
- (iv). Sant Baba Seechewal, Member
- (v). Sh. J. C. Babu, Member
- (vi). Sh. Niraj Mathur, Member

## Departments of the State Government invited for the meeting

- (i). Administrative Secretary, Department of Local Government
- (ii). Administrative Secretary, Department of Rural Development
- (iii). Administrative Secretary, Department of Industries and Commerce
- (iv). Administrative Secretary, Department of Housing and Urban Development
- (v). Administrative Secretary, Department of Soil and Water Conservation
- (vi). Administrative Secretary, Department of Water Supply & Sanitation
- (vii). Administrative Secretary, Department of Health
- (viii). Administrative Secretary, Department of Water Resources
- (ix). Administrative Secretary, Department of Public Relations
- (x). Chairman, Punjab Pollution Control Board
- (xi). Commissioner, Municipal Corporation, Ludhiana
- (xii). Commissioner, Municipal Corporation, Jalandhar
- 2. Leave of absence may be granted to those, who are unable to attend the meeting.

#### Item No. 2 Review of monitoring of Water Quality of Rivers

- 1. Punjab Pollution Control Board monitors the quality of Water in rivers. A copy of the status of quality of water for the month of February & March 2019 is attached at **Annexure-1**.
- 2. The Board has however not given any comparison of the quality with respect to historic values and whether the quality has improved or deteriorated over previous year/ previous month and the reasons for the same whether domestic sewage or industrial effluents or any other reason. The Board shall work out the same and present in the meeting detailed analysis.
- 3. PPCB is in the process of installing continuous monitoring stations at various critical locations for monitoring water quality of river Sutlej, Beas and Ghaggar. Reliable, continuous and online data of quality of water will go a long way to spread awareness about water quality, devise strategies for checking the pollution and effective monitoring.
- 4. The Board has given timelines as per **Annexure-2**. The Board shall present the critical locations and optimized timelines for installing and operationalizing these stations. Keeping in view the criticality of the activity, Chairman, PPCB shall personally monitor the progress and report.
- 5. Since the matter pertains to measures being taken for restoring water quality of the rivers to the prescribed standards as per the judicial directions issued by NGT for compliance in a time bound manner, the Board may submit the case for ECI clearance, if required without any further delay.
- 6. The Committee may kindly take note of the Status of quality of water and progress w.r.t. installation of continuous monitoring stations.

# Item No. 3 Review of monitoring of functioning of existing STPs in the catchment area

1. The results of monitoring for the month of February & March 2019 are enclosed at **Annexure-3**. The abstract of the results is as under:

	No of STPs monitored	No of STPs found non compliant	Remarks
Sutlej			
February	36	11	Out of 11 STPs, 7 failed only due to F.Coli
March	41	16	Out of 16 STPs, 9 failed only due to F.Coli
Beas			
February	10	6	STP at Pathankot found 100%
March	16	12	bypass
			STP at Dasuya & Sham Chauras
			also found partially bypassing
			sewage
			STP at Hargobindpur, Dasuya,
			Sultanpur Lodhi found without chlorination
			Out of 5 STPs installed by MES, 4
			STPs found non operational.
Ghaggar			
February	20	7	2 failed only due to F.Coli
			STP at Mandi Gobindgarh found
			bypassing untreated sewage
March	20	7	3 failed due to F.Coli

2. In addition, the Board has carried out surveillance of STPs operating in the State by the officers of the Board on 3<sup>rd</sup>-4<sup>th</sup> April, 2019 before 8.30 AM and after 6.00 PM. The details are given in **Annexure-4** and the abstract of the same is given below:

1	Total No. of STPs in State of Punjab	-	97
2	STPs found to be having Bypass System	-	58
3	Out of 58 STPs where Bypass arrangement exist and it was found in operation	-	15
4	No. of STPs where no sludge generation was there at site	-	6
5	No. of STPs where no chemical was available at site	-	24
6	No. of STPs where no technical staff was available	-	17
7	No. of STPs where no non-technical staff was available	-	12
8	No. of STPs where technical as well as non-technical staff was available	-	68

- 3. The details of pending payments in respect of O&M are given in **Annexure-5**.
- 4. The Department of Local Government to present the detailed status of non-compliant STPs along with penalties levied on the contractors, if any as per **Annexure-6**.
- 5. The status w.r.t. requirement of holding tank in the design of STPs be presented by the Department of Local Government to the Committee as decided in the last meeting of Committee held on 20.03.2019.
- 6. Department of Local Government to present the status regarding transfer of O&M of STPs from multiple agencies such as GLADA, DWSS to one nodal agency.
- 7. PPCB shall carry out the monitoring of STPs at inlet as well as at outlet.
- 8. PPCB to present the status for monitoring of sludge of STPs on quarterly basis to ascertain quantity as well as quality as decided in the last meeting of Committee held on 20.03.2019.
- 9. The Committee may kindly review the current status.

## Item No. 4 Review of monitoring of functioning of CETPs in the catchment area

- Punjab Pollution Control Board monitors the functioning of CETPs in the State. The
  current status of functioning of existing CETPs in the State for the month of March
  2019 is given in Annexure-7. The Chairman is personally monitoring CETP, Leather
  Complex and he should ensure that the CETP is brought within the prescribed
  norms.
- 2. The Monitoring Committee during field visit on 27.03.2019 directed the PPCB Officers to make surprise inspection of the industries of Jalandhar to ensure that no untreated wastewater is discharged into Sewerage System & these industries must achieve standards prescribed by the Board. The list of such inspections, observations of the visiting officers & action taken/ recommendations made against the defaulting industries must be placed before the Monitoring Committee in the meeting to be held on 24.04.2019.
- 3. The Committee may kindly review the current status.

#### Item No. 5 Review of monitoring of functioning of ETPs installed by industries

 Punjab Pollution Control Board monitors the functioning of ETPs installed by Industries by way of regular inspections. The results for the month of February & March 2019 are enclosed at Annexure-8. The abstract of the results is as under:

	No of ETPs monitored	No of ETPs found non compliant	Action Taken
Sutlej	momtored	non compliant	
February	69	24	Units sealed & electric disconnection- 3 No.  Electric disconnection – 1 No.  Permanently closed- 3 No.  Action Under Process- 17 No.
March	59	16	Action Under Process- 16 No. Effluent results awaited -09 units
Beas			
March	06	01	Notice u/s 33-A issued with hearing before Chairman
Ghaggar			
February	08	02	<ul> <li>Bank guarantee of Rs.5 lacs encashed &amp; fresh BG of Rs. 5 lacs imposed on M/s. Patiala Distilleries</li> <li>Water consent revoked of M/s. SSG Paper Mills</li> </ul>
March	08	0	

- 2. The Board has not provided the details regarding the risks in terms of toxicity and volume of the inspected units or non-compliant units. The number of units inspected by SEE, CE and Chairman has not been provided.
- 3. The Monitoring Committee during field visit on 27.03.2019 informed the PPCB Officers that the Committee itself shall also visit industrial units surprisingly & in case industries are found violating the norms, disciplinary action against the concerned officers shall be recommended to the competent authority. No laxity shall be tolerated by the Committee.
- 4. The Committee may kindly review the current status.

# Item No. 6 Review of progress of Setting up of New / Up-gradation/ Rehabilitation of STPs

- 1. There are still many towns in the catchment area of River Beas and Sutlej discharging untreated water in river Sutlej due to lack of STPs in these towns. Some of the STPs require up-gradation and rehabilitation. The current status of setting up of new/ up-gradation/ rehabilitation of STPs is given in **Annexure-9**.
- 2. The Committee may kindly review the same.

# Item No. 7 Review of Progress of Setting up of new/ upgrading of CETPs in catchment area

- Punjab Pollution Control Board is currently facilitating and coordinating setting up/ upgrading of various CETPs in the State. The current status of setting up of various CETPs is given in **Annexure-10**.
- 2. Punjab Pollution Control Board to present the status regarding up-gradation ETPs of 14 large scale dyeing units to achieve the standards at par with CETPs.
- 3. The Committee may kindly review the current status.

# Item No. 8 Review of Progress of Setting up of ETPs for dairy and other misc. waste

- 1. Municipal Corporations in the State are setting up following ETPs:
  - (i). 2 ETPs of 5 MLD & 10 MLD capacity for dairy effluents by MC, Ludhiana
  - (ii). ETP for waste water of slaughter house by MC, Ludhiana
  - (iii). Biogas plant & Carcass handling plant by MC, Ludhiana
  - (iv). ETP of 5 MLD capacity for dairy effluents by MC, Jalandhar
  - (v). Biogas plant by MC, Jalandhar
- 2. The current status is given at **Annexure-11**. MC, Ludhiana and MC Jalandhar will present the current status.
- 3. The Committee may kindly review the current status.

#### Item No. 9 Reconciliation of Waste Water & Industrial Effluents for city of Ludhiana

- Municipal Corporation, Ludhiana has been raising the issue of quantity of waste water discharged into Budha Nalla being far excess of domestic supply of waste water. PPCB has also made some projections in this regard. However, there is substantial difference between the waste water discharged estimated by MC, Ludhian and PPCB.
- 2. MC, Ludhiana & PPCB jointly monitored the discharge in Budha Nallah as 597 MLD with total discharge of Ludhiana city as 766 MLD. Out of 597 MLD, 337 MLD routed through MC, STPs (excluding Bhattian directly discharging into Sutlej) & 90 MLD is being tapped by CETPs under installation (excluding 15 MLD CETPs at Bahadur Ke). 50 MLD additional STP capacity at Jamalpur and 15 MLD ETPs for dairy waste being set up by MCL. Considering these quantities, there is still an excess of about 106 MLD which is unaccounted and directly flowing in Budha Nallah.
- 3. The MC, Ludhiana during meeting taken by ASSTE on 04.04.19 informed that there is an excess discharge of 124 MLD in the catchment area of STP Bhattian which needs to be tapped.
- 4. MC Ludhiana has sent a request dated 9.4.2019 for joint monitoring with PPCB and the reasons thereof as per **Annexure-12**.
- 5. MC, Ludhiana & PPCB to present the latest status w.r.t. quantity & quality of Budha Nallah.
- 6. The Committee may kindly review the status.

#### Item No. 10 Review of progress of release of Fresh Water in Budha Nallah & Holy Bein

- 1. Department of Environment hold meeting with Department of Water Resources on 04.04.19.
- 2. Department of Water Resources (Drainage Division) to prepare the detailed project proposal for release of 200 cusec of water from Sirhind Canal to Budha Nallah.
- 3. Department of Water Resources informed that 200 cusec of water is presently being released to Holy Bein &strengthening of berms of Holy Bein in a stretch of 5-6 km downstream of Mukerian Hydel Channel is required to release another 150 cusec of water. The Department will prepare the DPR in this regard.
- 4. The Department of Water Resources will submit the current status of progress as per **Annexure-13**.
- 5. The Committee may kindly review the current Status.

#### Item No. 11 Review of Re-use of Treated Waste Water for Irrigation and other purposes

- The current status as intimated by Department of Soil & Water Conservation (DSWC) is at Annexure-14
- 2. DSWCprepared action plan for re-use of treated wastewater of existing & proposed STPs with total outlay of Rs. 340.80 crores.
- 3. Department of Water Resources (Canal Division) during meeting taken by ASSTE on 04.04.19 informed that the reuse of treated wastewater of STPs at Ludhiana & Jalandhar of 50 MLD & more capacity is not feasible as these are located in thickly populated areas.
- 4. ASSTE asked Department of Water Resources (Canal Division) to submit the detailed proposal for channelization of Lower Budha Nallah to reuse the treated waste water of Ludhiana city for irrigation.
- 5. Department of Water Resources to present the latest progress.
- 6. Monitoring Committee during field visit to STP Sultanpur Lodhi on 27.03.2019 observed that the treated wastewater of the STP was being utilized for irrigation of agriculture fields. It was observed that there is need to get the study conducted from Punjab Agriculture University to assess the effect of F.Coli on the quality of the crops and vegetables grown in the agricultural field in the command area of STP. The disposal/ utilization of treated waste water during no demand period may also be informed in the next meeting of Monitoring Committee.
- 7. The Committee may kindly review the current status.

#### Item No.12 Review of action taken to prevent dumping of Solid Waste into Budha Nallah

- 1. NGT has ordered that suitable measures need to be taken to prevent dumping of solid waste in various water channels including fixing of wire mesh etc.
- 2. The Monitoring Committee during last meeting held on 20.03.2019 directed Municipal Corporation, Ludhiana to take adequate measures including installation of CCTV Cameras, fencing, awareness & challaning of the offenders to keep a check on the dumping of solid waste into Budha Nallah.
- 3. Municipal Corporation, Ludhiana to present the progress.
- 4. The Committee may review the current status.

#### Item No.13 Review of Progress for Setting up of Treatment Facilities in Village

- 1. There are number of villages in the catchment area of these rivers discharging their waste water directly and indirectly into rivers:
  - (i). 336 villages falling in catchment area of river Sutlej
  - (ii). 75 villages falling in the catchment area of river Beas
- 2. The timelines for setting up of treatment facilities in villages is given at **Annexure-15.**
- 3. Department of Finance has allocated budget of Rs.50 Crores to Department of Rural Development and Panchayat(DRDP) for setting up of treatment facilities. Accordingly, the Department has prioritized the villages to be covered in Phase-I.
- 4. The monitoring committee during last meeting directed DRDP to expedite implementation of Phase-I.
- 5. Administrative Secretary, DRDP to present the progress.
- 6. The Committee may kindly review the current Status.

## Item No.14 Review of Shifting of Small / Medium scale scattered dyeing units

- 1. PPCB reported that 45 small & medium scale scattered dyeing units with total discharge about 10 MLD located in non-designated areas and designated area (not feasible to connect with proposed CETPs) to be shifted to one designated area for their connection to the up-coming CETPs.
- 2. Department of Industries and Commerce (DIC) to submit the timeline for shifting of these scattered industries.
- 3. DIC to present the current status.
- 4. The committee may kindly review the current status.

## Item No.15 Review of Progress of installation of OCMS & CCTVs for STPs & Industries

- 1. The Action plan has stipulated installation of Online Continuous Monitoring System and CCTVs for STPs. The same are to be installed by PWSSB / MCL/MCJ/DWSS and other agencies responsible for operation and maintenance of these STPs.PPCB is responsible for OCMS and CCTVs for industries.
- The Current status is given in Annexure-16 and Annexure-17 and the same will be presented by Department of Local Government and Punjab Pollution Control Board in the meeting.
- 3. The Committee may kindly review the current status.

## Item No.16 Review of the progress regarding organization of Health Check-up Camps

- 1. The Department of Health & Family Welfare has been tasked with organization of health check up camps in the catchment areas of rivers. The current status of organization of health check-ups is given in **Annexure-18**.
- 2. The Department will present the status report in the meeting.
- 3. The Committee may kindly review the current status.

#### Item No.17 Review of Public Awareness Programs regarding cleaning of the rivers

- 1. There is need to launch a public awareness campaign regarding cleaning of the rivers in the State.
- 2. The Monitoring Committee during last meeting requested all the concerned stakeholder departments to organize awareness campaigns to sensitize public at large regarding the importance of clean water and the health effects of contaminated water.
- 3. The concerned stakeholder departments to present the progress as **Annexure-19**
- 4. The Committee may kindly take note of the same.

#### Item No.18 Direct discharge from Various Outlets into Drains

- 1. There are 16 MC, Ludhiana disposal points directly discharging into Budha Nallah.
- MC, Ludhiana during meeting taken by ASSTE on 04.04.19 informed that MC disposal near Chhauni Mohalla & Manna Singh Nagar closed which has also been verified by PPCB. The disposal of EWS colony near Geeta Nagar Bridge along Tajpur road to be plugged by MCL. The remaining disposals being taken care of after installation of proposed STPs / CETPs/ ETPs.
- 3. The MC, Ludhiana to present the latest status in this regard.
- 4. The Monitoring Committee during field visit to Kala Sanghian Drain on 27.03.2019 directed PPCB Officers to collect at least 10 samples of ground water in the catchment area of Kala Sanghian Drain by following the due sample collection protocols. These samples must be analysed for all the parameters concerning to drinking water.
- 5. The Monitoring Committee during visit to Kala Sanghian Drain observed that the outlets at 3 locations along railway line are discharging untreated wastewater about 10 MLD into Kala Sanghian Drain which are being connected to the main sewerage network leading to existing 50 MLD STP at Basti Peer Dad, Jalandhar. The Committee directed the officers of PWSSB to connect all the outlets to main sewerage network by 15.04.19 and thereafter no untreated sewage shall be discharged into the drain, failing which the responsibility of concerned officers shall be fixed for further action. New STP of 25 MLD shall be commissioned as per time schedule.
- 6. The Monitoring Committee directed PPCB to carry out monthly monitoring of wastewater flowing into Kala Sanghian Drain and detailed analysis be carried out for organic, inorganic parameters and heavy metals and analysis report to be provided to the Monitoring Committee before 10<sup>th</sup> of every month.
- 7. The Monitoring Committee directed Department of Soil & Water Conservation for laying irrigation network to utilize the treated sewage for irrigation for which the funds shall be arranged by the Department.
- 8. MC, Jalandhar to present the progress.

Annexure 1

# Status of Water Quality of River Sutlej (Feb., 2019)

S.N.	Point of Sample Collection	рН	DO mg/l	BOD mg/l	Cond μs/Cm	T.Coli MPN/ 100ml	B mg/l	Quality of water as per DBU
1	River Satluj, U/S Nangal	7.08	9.8	<1	213	120	0.15	В
2	River Satluj D/S NFL	7.13	9.0	<1	258	200	0.12	В
3	River Satluj at 100m D/s PACL Nangal	7.14	8.9	<1	262	200	BDL	В
4	River Satluj D/s Nangal	7.09	9.2	<1	239	170	0.12	В
5	River Satluj at Kiratpur Sahib	7.27	8.3	<1	293	1400	0.13	С
6	Ropar Head-Works	7.66	8.6	<1	269	1500	0.14	С
7	River Satluj D/S of Rishab- Paper Mills	7.48	8.2	<1	381	1500	0.14	С
8	River Satluj U/S Buddha Nallah	7.24	7.8	1.1	394	4700	0.12	С
9	Satluj at 100 mts D/s Budha Nallah confluence Ludhiana	7.09	2.4	38	796	11,000,00	0.25	E
10	Satluj at Boat Bridge, Dharamkot Nakodar Road	7.16	4.6	9.0	584	1,60,000	0.19	D
11	River Satluj at D/S East Bein	8.0	2.4	12	510	11000	0.12	E
12	River Satluj at Harike	7.9	6.0	2.8	380	8400	0.15	D
13	Harike Lake D/s from canal	8.2	8.0	1.9	290	2600	0.23	С
14	D/s Harike lake	7.9	8.4	1.6	286	6300	0.16	D
15	U/S Hussainiwala H/W Ferozepur	7.37	8.8	<1	227	2100	BDL	С
16	D/S Hussainiwala H/W Ferozepur	7.32	8.7	<1	232	2100	BDL	С

# Status of Water Quality of River Sutlej (March., 2019)

S.N.	Point of Sample Collection	рН	DO (mg/l)	BOD (mg/l)	Cond (μs/Cm)	T.Coli (MPN/ 100ml)	B (mg/l)	Class of water as per DBU
1.	River Satluj, U/S Nangal	7.12	9.6	<1	226	120	BDL	В
2.	River Satluj D/S NFL	7.17	8.8	<1	254	210	0.06	В
3.	100m D/s PACL Nangal	7.28	8.9	<1	242	220	0.07	В
4.	River Satluj D/s Nangal	7.53	9.0	<1	252	140	BDL	В
5.	River Satluj at Kiratpur Sahib	7.18	8.0	<1	344	790	BDL	С
6.	Ropar Head-Works	7.31	7.8	<1	330	930	BDL	С
7.	River Satluj D/S of Rishab- Paper Mills	7.48	7.4	<1	389	1100	BDL	С
8.	River Satluj U/S Buddha Nallah	7.57	6.8	2.0	432	1700	0.07	С
9.	Satluj at 100 mts D/s Budha Nallah confluence Ludhiana	7.12	1.4	105	1245	460000	0.29	E
10.	Satluj at Boat Bridge, Dharamkot Nakodar Road	7.01	4.2	10	640	150000	0.08	D
11.	River Satluj at D/S East Bein	7.3	1.5	15	592	17000	0.08	E
12.	River Satluj at Harike	7.2	5.4	3.2	337	9400	BDL	D
13.	Harike Lake D/s from canal	7.7	8.8	1.8	244	3500	BDL	С
14.	D/s Harike lake	7.8	8.6	1.6	232	4300	BDL	С
15.	U/S Hussainiwala H/W Ferozepur	7.31	8.2	<1	252	2100	BDL	С
16.	D/S Hussainiwala H/W Ferozepur	7.13	8.0	<1	260	1700	BDL	С

# Status of Water Quality of River Beas (Feb., 2019)

S.No.	Point of Sample Collection	рН	DO mg/l	COD mg/l	BOD mg/l	T.Coli MPN/100 ml	F.Coli MPN/100 ml	DBU Classification
1.	Beas at Talwara H/W	7.6	9.0	8	1.0	70	33	В
2.	Beas at Mirthal Bridge Gurdaspur	7.8	8.9	10	1.2	120	49	В
3.	U/S Pathankot	7.9	8.7	12	1.3	220	110	В
4.	D/S Pathankot	8.0	8.4	18	1.7	350	170	В
5.	Beas 1km D/S effluent discharge point at Mukerian	7.9	8.1	18	1.8	790	490	С
6.	Beas Bridge at village Bheate Patan Tehsil Batala Distt. Gurdaspur	7.8	8.5	16	1.6	630	460	С
7.	Beas at G.T. Road, under Bridge Near Kapurthala	7.7	8.6	18	1.5	840	460	С
8.	U/s Goindwal	7.8	8.8	14	1.4	490	230	В
9.	D/s Goindwal	7.9	8.1	14	1.6	580	250	С
10.	Beas at Harike	8.2	8.2	12	1.4	540	350	С

# Status of Water Quality of River Beas (March., 2019)

S.No.	Point of Sample	рН	DO	COD	BOD	T.Coli	F.Coli	DBU
	Collection		mg/l	mg/l	mg/l	MPN/100	MPN/100	Classification
						ml	ml	
1.	Beas at Talwara H/W	7.9	8.7	6	BDL	79	33	В
2.	Beas at Mirthal Bridge Gurdaspur	8.0	8.9	8	1.0	94	43	В
3.	U/S Pathankot	8.1	8.7	8	1.0	170	110	В
4.	D/S Pathankot	7.9	8.2	12	1.3	580	250	С
5.	Beas 1km D/S effluent discharge point at Mukerian	7.8	7.9	14	1.8	630	460	С
6.	Beas Bridge at village Bheate Patan Tehsil Batala Distt. Gurdaspur	7.9	7.8	13	1.7	330	170	В
7.	Beas at G.T. Road, under Bridge Near Kapurthala	8.0	8.1	15	1.6	350	220	В
8.	U/s Goindwal	7.8	8.4	14	1.4	280	170	В
9.	D/s Goindwal	7.9	8.2	15	1.4	310	170	В
10.	Beas at Harike	7.8	8.3	14	1.4	280	130	В

# Status of Water Quality of River Ghaggar (Feb., 2019)

S.No.	Point of Sample Collection	рН	DO mg/l	COD mg/l	BOD mg/l	T.Coli MPN/100 ml	F.Coli MPN/100 ml	DBU Classification
1.	Mubarikpur Rest house	8.1	5.6	31	7	21000	3800	D
2.	Bhankarpur	7.6	4.4	308	22	28000	6300	D
3.	Chattbir	7.5	3.4	110	18	24000	4900	E
4.	U/s Jharmal Nadi	7.6	4.3	104	12	21000	3100	D
5.	D/s Jharmal Nadi	7.7	3.0	61	14	24000	3400	E
6.	U/s Dhakanshu Nallah	7.8	4.0	72	12	17000	2600	D
7.	D/s Dhakanshu Nallah	7.6	3.6	80	16	28000	5800	E
8.	Rattanheri	7.5	2.3	94	19	24000	4100	E
9.	U/s Sagar para Drain	7.5	4.1	87	18	24000	3400	D
10.	D/s Sagar para Drain	7.4	2.6	174	34	28000	5800	E
11.	Khanauri	7.4	3.0	134	26	22000	3200	E
12.	Moonak	7.5	2.2	140	28	28000	3800	E
13.	U/s Sardulgarh	7.7	2.9	106	21	22000	3900	E
14.	D/s Sardulgarh	7.6	2.7	112	23	24000	4900	E

# Status of Water Quality of River Ghaggar (March, 2019)

S.No.	Point of Sample Collection	рН	DO mg/l	COD mg/l	BOD mg/l	T.Coli MPN/100	F.Coli MPN/100	DBU Classification
						ml	ml	
1.	Mubarikpur Rest house	7.9	4.9	29	6	22000	3200	D
2.	Bhankarpur	7.6	4.4	87	17	24000	3400	D
3.	Chattbir	7.5	3.8	98	20	22000	3300	E
4.	U/s Jharmal Nadi	7.6	4.0	52	10	17000	2600	D
5.	D/s Jharmal Nadi	7.5	3.2	78	16	21000	3100	E
6.	U/s Dhakanshu Nallah	7.4	4.0	58	11	15000	2200	D
7.	D/s Dhakanshu Nallah	7.5	3.2	72	14	24000	3300	Е
8.	Rattanheri	7.6	2.2	77	15	24000	3400	E
9.	U/s Sagar para Drain	7.5	4.1	79	16	24000	3300	D
10.	D/s Sagar para Drain	7.4	2.8	157	35	28000	7000	Е
11.	Khanauri	7.7	3.0	83	17	21000	2700	Е
12.	Moonak	7.7	2.8	70	15	22000	3900	Е
13.	U/s Sardulgarh	7.6	3.5	69	13	21000	3200	Е
14.	D/s Sardulgarh	7.6	3.1	84	18	24000	3400	E

# Progress w.r.t Installation of Real Time Water Quality Monitoring Stations in River Sutlej

# Phase-I

Sr No.	Activity	Date of Start	Date of completion	Progress
1	Inviting quotations.	01.06.19	30.06.19	Draft tender document prepared
2	Placement of Work Order	01.07.19	30.09.19	and will be floated after the model code of conduct is over
3	Installation of online continuous monitoring system	01.10.19	31.12.19	
4.	Calibration of online continuous monitoring system	01.01.20	29.02.20	
5.	Connecting the online continuous monitoring system with the Server of CPCB and PPCB	01.03.20	31.03.20	

# Phase-II

Sr No.	Activity	Date of Start	Date of completion	Progress
1	Inviting quotations.	01.04.20	30.04.20	Draft tender document prepared
2	Placement of Work Order	01.05.20	31.07.20	and will be floated after the model code
3	Installation of online continuous monitoring system	01.08.20	31.10.20	of conduct is over
4.	Calibration of online continuous monitoring system	01.11.20	31.12.20	
5.	Connecting the online continuous monitoring system with the Server of CPCB and PPCB	01.01.21	31.01.21	

Progress w.r.t Installation of Real Time Water Quality Monitoring Stations in River Beas

Sr No.	Activity	Date of Start	Date of completion	Progress
1	Inviting quotations.	01.02.2019	28.02.2019	Tender document finalized. E-tendering
2	Placement of Work Order	01.03.2019	31.03.2019	process to be initiated after the model code of conduct isover.
3	Installation of online continuous monitoring system	01.04.2019	31.08.2019	<ul> <li>CEE(J) and SSO, Head         Office, Patiala has         gone to Varanasi (U.P)</li> </ul>
4.	Calibration of online continuous monitoring system	01.09.2019	30.09.2019	on 07.04.19 to08.04.19 to study the installation and operation of Real Time
5.	Connecting the online continuous monitoring system with the server of the CPCB and PPCB	01.09.2019	30.09.2019	Water Quality Monitoring Station(RTWQMS) at River Ganga
				• PPCB constituted Committee for the finalization of location and other issues related to Installation of RTWQMS in River Beas. The Committee is meeting on 12.04.19 to finalize the above modulation.

Note: The timelines for first two activities cannot be adhered to due to the reason that the Election Code of Conduct came into effect and Tender could not be invited. Accordingly the timelines for first two starting activities may be extended upto 30.09.19 and accordingly the timeline for the remaining three activities may be extended by another 6 months upto 31.03.2020

Annexure 3 Monitoring of Functioning of STPs in the Catchment Area of River Sutlej (Feb.2019)

Sr.	Name of STP	Month (Fe	Month (Feb. , 2019)			
No.		Whether Complying	Reason for Non	for Non		
		with norms	Compliance	Compliance		
	MC, Ludhiana					
1.	Jamalpur (48 MLD)	Not Complying	TSS, BOD & F.Coli	Under process		
2.	Bhattian (111 MLD)	Not Complying	BOD & F.Coli	Under process		
3.	Balloke (152 MLD)	Not Complying	BOD & F.Coli	Under process		
4.	Balloke (105 MLD)	Complying				
	MC, Jalandhar					
5.	Pholriwal (100 MLD)	Not Complying	F.Coli	Under process		
6.	Pholriwal (25 MLD)	Complying				
7.	Pholriwal (25 MLD)	Complying				
8.	Basti Peer Dad (50 MLD)	Not Complying	F.Coli	Under process		
9.	BambianWaliCantt (10 MLD)	Complying				
	PWSBB					
10.	Phagwara (20 MLD)	Not Complying	F.Coli	Under process		
11.	Phagwara (8 MLD)	Not Complying	F.Coli	Under process		
12.	Phagwara (8 MLD)	Complying		·		
13.	Phillaur (3 MLD)	Complying				
14.	Phillaur (2.6 MLD)	Not Complying	F.Coli	Under process		
15.	Nakodar (6 MLD)	Complying		·		
16.	Nawanshahar (6MLD)	Complying				
17.	Banga (3 MLD)	Complying				
18.	Hoshiarpur(30 MLD)	Complying				
19.	Nangal (8MLD)	Complying				
20.	Bruari Nangal (5 MLD)	Complying				
21.	Machhiwara (4 MLD)	Complying				
22.	Sahnewal (7 MLD)	Not Complying	F.Coli	Under process		
23.	Ropar (10 MLD)	Complying		-		
24.	Ropar (2.5 MLD)	Complying				
25.	Ropar (2 MLD)	Complying				
26.	Jagraon (12 MLD)	Complying				
27.	Jagraon (16 MLD)	Complying				
28.	Moga(27 MLD)	Not Complying	F.Coli	Under process		
29.	Abohar (25 MLD)	Complying		-		
30.	Dharamkot (4 MLD)	Complying				
31.	Makhu (4 MLD)	Complying				
32.	Talwandi Bhai (4MLD)	Complying				
33.	Zira (8MLD)	Complying	Complying			
34.	Jalalabad (8 MLD)	Not Complying	BOD & F.Coli	Under process		
	GMADA			-		
35.	Kurali (5MLD)	Complying				
	DWSS					
36.	Anandpur Sahib (8 MLD)	Complying				

Note: Out of 36 STPs, 11 found Non Compliant

# Monitoring of Functioning of STPs in the Catchment Area of River Sutlej (March.2019)

Sr.	Name of STP	Month (Jan	Action Taken		
No		Whether	Reason for Non	for Non	
		Complying with	Compliance	Compliance	
		norms			
	MC, Ludhiana				
1.	Jamalpur (48 MLD)	Not Complying	TSS, BOD & F.Coli	Under process	
2.	Bhattian (111 MLD)	Not Complying	BOD & F.Coli	Under process	
3.	Bhattian (50 MLD)	Complying			
4.	Balloke (152 MLD)	Not Complying	BOD & F.Coli	Under process	
5.	Balloke (105 MLD)	Complying			
	MC, Jalandhar				
6.	Pholriwal (100 MLD)	Not Complying	F.Coli	Under process	
7.	Pholriwal (25 MLD)	Not Complying	F.Coli	Under process	
8.	Pholriwal (25 MLD)	Complying			
9.	Basti Peer Dad (50 MLD)	Not Complying	F.Coli	Under process	
10.	BambianWaliCantt (10 MLD)	Complying			
11.	Jaitawali, Hsr. Road (25 MLD)	Complying			
	PWSBB				
12.	Phagwara (20 MLD)	Not Complying	F.Coli	Under process	
13.	Phagwara (8 MLD)	Complying			
14.	Phagwara (8 MLD)	Not Complying	BOD, TSS &F.Coli	Under process	
15.	Phillaur (3 MLD)	Not Complying	F.Coli	Under process	
16.	Phillaur (2.6 MLD)	Not Complying	F.Coli	Under process	
17.	Nakodar (6 MLD)	Complying			
18.	Banga (3 MLD)	Complying			
19.	Hoshiarpur(30 MLD)	Complying			
20.	Nangal (8MLD)	Complying			
21.	Bruari Nangal (5 MLD)	Complying			
22.	Machhaiwara (4 MLD)	Complying			
23.	Sahnewal (7 MLD)	Complying			
24.	Ropar (10 MLD)	Complying			
25.	Ropar (2.5 MLD)	Complying			
26.	Ropar (2 MLD)	Complying			
27.	Jagraon (12 MLD)	Complying			
28.	Jagraon (16 MLD)	Not Complying	F.Coli	Under process	
29.	Goniana (3 MLD)	Not Complying	BOD, TSS & F.Coli	Under process	
30.	Malout (3 MLD)	Not Complying	BOD & F.Coli	Under process	
31.	Malout (10 MLD)	Not Complying	F.Coli	Under process	
32.	Moga(27 MLD)	Complying		-	
33.	Abohar (25 MLD)	Not Complying	F.Coli	Under process	
34.	Dharamkot (4 MLD)	Complying		·	
35.	Makhu (4 MLD)	Complying			
36.	Talwandi Bhai (4MLD)	Complying			
37.	Zira (8MLD)	Complying			

38.	Jalalabad (8 MLD)	Not Complying	BOD & F.Coli	Under process
	GMADA			
39.	Kurali (5MLD)	Complying		
	DWSS			
40.	Sh.Muktsar Sahib (8.7 MLD)	Complying		
41.	Anandpur sahib (8 MLD)	Complying		

Note: Out of 41 STPs, 16 found Non Compliant

# Monitoring of Functioning of STPs in the Catchment Area of Beas (Feb. 2019)

S No	Name of STP	рН	TSS (mg/l)	BOD (mg/l)	F.Coli (MPN/100	Whether Complying	Reason for Non- Compliance	Action Taken for Non-Compliance
					ml)	with Norms		-
1.	BBMB Talwara	7.3	10	12	490	Complying	-	-
2.	Mukerian	7.0	28	16	940	Complying	-	-
3.	Sri Hargobindpur	7.6	42	20	13000	Non- Complying	F.Coli beyond limit & WSP without Chlorination	Action u/s 33-     A initiated
4.	Dasuya	7.8	40	24	6300	Non- Complying	<ul><li>Bypass</li><li>WSP without Chlorination.</li><li>F.Coli beyond limit</li></ul>	Action u/s 33-     A initiated
5.	Tanda	7.2	20	10	630	Complying	-	-
6.	Sham Chaurasi	7.2	184	105	28000	Non- Complying	Bypass     BOD and F.Coli     beyond limit	Action u/s 33-A initiated with hearing before Chairman PPCB on 09.04.19
7.	Bholath	7.8	30	21	11000	Non-	F.Coli beyond	Action u/s 33-A
						Complying	limit	initiated
8.	Begowal	8.0	17	5	490	Complying	-	-
9.	SultanpurLodhi	7.8	44	26	9300	Non- Complying	<ul> <li>F.Coli beyond limit</li> <li>WSP without Chlorination</li> </ul>	Action u/s 33-A initiated, 02 months time given for improving STP functioning.  Prosecution launched for earlier violations against MC.
10.	STP Kapurthala	7.4	44	40	7900	Non- Complying	F.Coli     BOD beyond     limit	<ul> <li>Action u/s 33-         A initiated     </li> <li>Prosecution         launched for earlier         violations         against MC     </li> </ul>

Out of 10 STPs, 6 found Non Compliant (4 only due to F.Coli).

# Monitoring of Functioning of STPs in the Catchment Area of Beas (March 2019)

S No	Name of STP	рН	TSS (mg/l)	BOD (mg/l)	F.Coli (MPN/ 100 ml)	Whether Complying with Norms	Reason for Non- Compliance	Action Taken for Non- Compliance
1.	BBMB Talwara	7.9	17	4.0	630	Complying	-	-
2.	Mukerian	8.2	22	30	580	Complying	-	-
3.	Pathankot	7.3	144	76	79000	Non-Complying	STP not yet commissioned due to design fault entire wastewater is bypassed & untreated wastewater is discharged	Prosecution Approved. Sanction sought from PS, Local Govt.
4.	Sri Hargobindpur	7.4	38	26	17000	Non-Complying	F.Coli beyond limit & WSP without Chlorination	• Action u/s 33-A initiated
5.	Dasuya	7.8	36	24	8400	Non-Complying	<ul> <li>Bypass</li> <li>WSP without Chlorination.</li> <li>F.Coli beyond limit</li> </ul>	• Action u/s 33-A initiated
6.	Tanda	7.6	48	13	630	Complying	-	-
7.	Sham Chaurasi	8.6	48	35	14000	Non-Complying	Bypass     BOD and     F.Coli beyond     limit	Action u/s 33-A initiated with hearing before Chairman PPCB on 09.04.19
8.	Bholath	7.6	32	15	4900	Non-Complying	F.Coli beyond limit	Action u/s 33-A initiated
9.	Begowal	7.8	21	8	630	Complying	-	-
10.	Sultanpur Lodhi	7.6	46	28	11000	Non-Complying	<ul> <li>F.Coli beyond limit</li> <li>WSP without Chlorination</li> </ul>	Action u/s 33-A initiated, 02 months time given for improving STP functioning.  Prosecution launched for earlier

								violations against MC.
11.	STP Kapurthala	7.3	52	38	4600	Non-Complying	F.Coli     BOD beyond limit	<ul> <li>Action u/s 33-A initiated</li> <li>Prosecution launched for earlier violations against MC</li> </ul>
12.	GE (Air Force) Pathankot	7.2	20	22	4600	Non-Complying	<ul><li>STP Non- operational</li><li>F.Coli beyond limit</li></ul>	Hearing Before CEE(J) on 11.04.19
13.	GE (South), Pathankot	7.3	104	40	31000	Non-Complying	BOD & F.Coli beyond limit.	Hearing Before CEE(J) on 11.04.19
14.	GE (West), Pathankot	7.3	12	28	3100	Non-Complying	<ul><li>STP Non- operational</li><li>F.Coli beyond limit</li></ul>	Hearing Before CEE(J) on 11.04.19
15.	GE (Mammon), Pathankot	7.6	124	50	23000	Non-Complying	02 no. STPs found Non-operational and 01 no. STP found operational. BOD & F.Coli beyond limit.	Hearing Before CEE(J) on 11.04.19
16.	GE Engineer (North), Pathankot	7.0	68	28	3000	Non-Complying	STP under construction. F.Coli beyond limit	Hearing Before CEE(J) on 11.04.19

Out of 16 STPs, 12 found Non Compliant.

# Monitoring of Functioning of STPs in the Catchment Area of Ghaggar (Feb. 2019)

Sr.	Name of STP	Mont	h (Feb., 2019)	Action Taken for Non Compliance
No.		Whether	Reason for Non	
		Complying	Compliance	
		with norms		
1.	Banur	Yes		
2.	Baretta	No	F.Coli	Report sent to SEE, PPCB for taking action.
3.	Bhikhi	No	BOD & F.Coli	Report sent to SEE, PPCB for taking action.
4.	Budhlada	No	BOD & F.Coli	Report sent to SEE, PPCB for taking action.
5.	Khanauri	Yes		
6.	Lehragaga	Yes		
7.	Mandi Gobindgarh	No	TSS, BOD & F.Coli Bypass of untreated effluent	Report sent to SEE, PPCB for taking action.
8.	Moonak	Yes		
9.	Mohali	No	BOD & F.Coli	Report sent to SEE, PPCB for taking action.
10.	Patiala	Yes		
11.	Patiala	Yes		
12.	Patiala	Yes		
13.	Patran	Yes		
14.	Samana	Yes		
15.	Sardulgarh	No	BOD & F.Coli	Report sent to SEE, PPCB for taking action.
16.	Sunam	Yes		
17.	Zirakpur	No	F.Coli	
18.	Rajpura	Yes		
19.	Rajpura	Yes		
20.	Lalru	Yes		

Out of 20 STPs, 7 found Non-compliant.

# Monitoring of Functioning of STPs in the Catchment Area of Ghaggar (March. 2019)

Sr.	Name of STP	Month	(March, 2019)	Action Taken for Non Compliance
No.		Whether Complying with norms	Reason for Non Compliance	
1.	Banur	Yes		
2.	Baretta	No	BOD & F.Coli	Report sent to SEE, PPCB for taking action.
3.	Bhikhi	No	BOD & F.Coli	Report sent to SEE, PPCB for taking action.
4.	Budhlada	No	BOD & F.Coli	Report sent to SEE, PPCB for taking action.
5.	Khanauri	Yes		
6.	Lehragaga	Yes		
7.	Mandi Gobindgarh	Yes		
8.	Moonak	Yes		
9.	Mohali	No	BOD & F.Coli	Report sent to SEE, PPCB for taking action.
10.	Patiala	Yes		
11.	Patiala	Yes		
12.	Patiala	Yes		
13.	Patran	Yes		
14.	Samana	Yes		
15.	Sardulgarh	No	F.Coli	Report sent to SEE, PPCB for taking action.
16.	Sunam	Yes		
17.	Zirakpur	No	F.Coli	Report sent to SEE, PPCB for taking action.
18.	Rajpura	Yes		
19.	Rajpura	Yes		
20.	Lalru	No	F.Coli	Report sent to SEE, PPCB for taking action.

Out of 20 STPs, 7 found Non-compliant.

# **Surveillance Report of STPs**

	STPs whe	re Bye Pass system exist	rs .
Sr. No.	Name of the STP	Sr. No.	Name of the STP
1	Pathankot	30	Phillaur
2	Baretta	31	Phillaur (Tallan Road)
3	Bhikhi	32	Machhiwara
4	Budhlada	33	Sahnewal
5	Sardulgarh	34	Jagraon
6	Muktsar	35	Ludhiana (Balloke)
7	Muktsar	36	Ludhiana (Jamalpur)
8	Bhucho	37	Banur
9	Mansa	38	Zirakpur
10	Rampura Phul	39	S.A.S. Nagar
11	Talwandi Sabo	40	Lalru
12	Abohar	41	Nangal
13	Makhu	42	Nangal*
14	Moga	43	Badi haveli, Ropar
15	Talwandi Bhai	44	Anandpur Sahib
16	Zira	45	Kharar
17	Jalalabad	46	Sadabarat
18	Fazilka	47	Rasoolpur (Ropar)
19	Mukerian	48	Patiala
20	Sham Churasi	49	Patran
21	Tanda	50	Rajpura
22	Talwara	51	Samana
23	Banga	52	Rajpura
24	Hoshiarpur	53	Patiala
25	Jalandhar (Bambianwali)	54	PUDA Patiala
26	Jalandhar (Pir Dad)	55	Khanauri*
27	Phagwara (North)	56	Lehragagga*
28	Phagwara Hadibad	57	Moonak*
29	Phagwara Palahi Road	58	Sunam

STPs	having Bye Pass system working	List of STPs where no sludge at site					
Sr. No.	Name of the STP	Sr. No.	Name of the STP				
1	Pathankot	1	Pathankot				
2	Muktsar	2	Mansa				
3	Muktsar	3	Rampura Phul				
4	Bhucho	4	Jalalabad				
5	Rampura Phul	5	Talwara				
6	Moga	6	Doraha (Zone-2)				
7	Jalalabad						
8	Sham Churasi						
9	Banga						
10	Hoshiarpur						
11	Jagraon						
12	Ludhiana (Balloke)						
13	Ludhiana (Jamalpur)						
14	Nangal*						
15	Rajpura						

List	of STPs where no chemical at site	List of ST	TPs where no Technical Person available
Sr. No.	Name of the STP	Sr. No.	Name of the STP
1	Pathankot	1	Pathankot
2	Sri Hargobindpur	2	Sri Hargobindpur
3	Dera Baba Nanak	3	Dera Baba Nanak
4	Sardulgarh	4	Sardulgarh
5	Malout*	5	Kotfatta
6	Muktsar	6	Mansa
7	Muktsar	7	Talwandi Sabo
8	Kotfatta	8	Jalalabad
9	Mansa	9	Nawan Shahar
10	Rampura Phul	10	Bhulath
11	Sangat	11	Sultanpur Lodhi
12	Jalalabad	12	Phillaur
13	Mukerian	13	Noormahal
14	Sham Churasi	14	Doraha (Zone-1)
15	Tanda	15	Doraha (Zone-2)
16	Talwara	16	S.A.S. Nagar
17	Banga	17	Kurali
18	Hoshiarpur		
19	Nawan Shahar		
20	Bhulath		
21	Sultanpur Lodhi		
22	Phillaur		
23	Doraha (Zone-2)		
24	S.A.S. Nagar		
	-	•	•

	List of STPs where no Technical as well as Non-Technical Person available										
Sr. No.	Name of the STP	Sr. No.	Name of the STP								
1	Sardulgarh	7	Maloud								
2	Kotfatta	8	Payal								
3	Talwandi Sabo	9	Doraha (Zone-3)								
4	Begowal	10	Kurali								
5	Jalandhar (Bambianwali)	11	Kharar								
6	Jalandhar (Pholriwal-Eco Chem)	12	Sadabarat								

Annexure 5
Status of O&M Funds for STPs falling in Catchment Area of River Sutlej (F.Y 2018-19)

S.No.	Town	Cap. (MLD)	Tech.	Annual Requirem ent of Funds O&M (Rs. in Lacs) 2018-19	Funds received so far (upto Feb, 2019) during 2018-19 (Rs. in Lacs)	Payment Cleared upto Month/Yr	Pending payments (Rs. in Lacs )
	MC, Ludhiana						
1.	Jamalpur	48	UASB	91.94	Funds given	09/18	38.30
2	Bhattian	111	UASB	176.52	from MC	09/18	73.55
3	Bhattian	50	SBR	54.64	General Funds	09/18	22.76
4	Balloke	152	UASB	216.47		09/18	90.91
5	Balloke	105	SBR	109.28		09/18	53.38
	MC, Jalandhar						
6	Pholriwal	100	UASB	126.88	0	Nil	126.88
7	Pholriwal	25	SBR	51.72	0	Nil	51.72
8	Pholriwal	25	SBR	48.48	0	Nil	48.48
9	Basti Peer Dad	50	SBR	106.08	0	Nil	106.08
10	BambianWaliCantt	10	SBR	42.00	31.50	12/18	7.80
11	Jaitawali, Hsr. Road	25	SBR	58.32	43.74	12/18	10.90
	PWSBB						
12	Phagwara	20	UASB	28.00	18.67	11/18	9.33
13	Phagwara	8	MBBR	27.00	15.75	10/18	11.25
14	Phagwara	8	MBBR	12.00	5.00	08/18	7.00
15	Phillaur	3	MBBR	36.00	24.00	11/18	12.00
16	Phillaur	2.6	WSP	6.00	4.00	11/18	2.00
17	Nakodar	6	SBR	48.00	-	-	-
18	Nawanshahar	6	SBR	17.95	5.00	02/19	45.00
19	Banga	3	SBR	13.00			13.00
20	Hoshiarpur	30	MBBR	40.80			40.80
21	Nangal	8	ASP	38.99		02/19	23.34
22	Nangal	5	ASP	26.03			-
23	Machhiwara	4	SBR	27.00		05/18	25.55
24	Sahnewal	7	SBR	39.53		10/18	7.80
25	Ropar	10	SBR	29.80			
26	Ropar	2.5	SBR	14.80			
27	Ropar	2	SBR	14.40			
28	Jagraon	12	SBR	73.80			
29	Jagraon	16	SBR	94.44		12/18	60.86
30	Goniana	3	WSP	2.74	2.74	02/19	
31	Moga	27	SBR	93.52	42.37	09/18	29.30
32	Abohar	25	SBR	130.80		08/18	32.50

33	Malout	3	WSP	4.30	3.00	01/19	1.30
34	Malout	10	MBBR	9.60			9.60
35	Dharamkot	4	SBR	40.70			
36	Makhu	4	SBR	40.70			
37	Talwandi Bhai	4	SBR	40.70			
38	Zira	8	MBBR	38.16	11.50	01/19	2.18
	MC Jalalabad						
39	Jalalabad	8	MBBR	73.00			11.23
	DWSS						
40	Sh.Muktsar Sahib	8.7	MBBR	682.78	199.04	150.04	461.22
41	Sh.Muktsar Sahib	5.7	MBBR				
42	Sh.Muktsar Sahib	3.5	MBBR				
43	Anandpur sahib	8	3 MBBR 130.3		Funds given by DWSS	02/19	73.64
	GMADA						
44	Kurali	5	SBR	45.00	33.00	02/19	12.00
	ВВМВ						
45	Nangal	6.75	ASP	62.03	62.03	02/19	Nil
	MES						
46	East Jalandhar	3	MBBR				
	Cantt.						
47	East Jalandhar	3	MBBR				
	Cantt.						
48	East Jalandhar	0.4	MBBR				
	Cantt.						
49	West Jalandhar	1.5	MBBR				
	Cantt.						
50	West	1.5	MBBR				
	JalandharCantt.						
	Total	997.15					

Out of 50 STPs, 3 STPs (Phillaur, Guniana & Pholriwal) requires technology up-gradation, 1 STP of Malout (3MLD WSP) require capacity enhancement and technology up-gradation to 10 MLD & 1 STP at Moga require capacity enhancement from 27 MLD to 50 MLD.

# Status of O&M Funds for STPs falling in Catchment Area of River Beas (F.Y 2018-19)

Sr. No	Town	(mld)  Requirement received for funds for far (  O&M 2018- Feb,  19 du  (Rs. in Lacs) 201		Funds received so far (upto Feb, 2019) during 2018-19	Payment Cleared upto Month/Year	Pending payment ( Rs. in Lacs )	
	PWSSB						
1.	Pathankot	27.0	SBR				
2.	Shri Hargobindpur	1.0	WSP	16.00	1.00	03/18	15.00
3.	Mukerian	5.0	MBBR	21.02	-	-	21.02
4.	Tanda	4.0	MBBR	15.32	-	-	15.32
5.	Begowal	2.5	SBR	10.20	3.40	07/18	6.80
6.	Bholath	4.0	WSP	16.80	11.20	11/18	05.60
	<b>Municipal Councils</b>						
7.	Dasuya	4.0	WSP	10.00	0	0	0
8.	Kapurthala	25.0	UASB	74.00	0	0	0
9.	SultanpurLodhi	2.6	WSP	30.00	0	0	30.00
10.	Sham Chuarasi	1.0	WSP	1.50	0	0	0
	ВВМВ						
11.	Talwara	8.0	SBR				
	MES, Pathankot						
12.	GE, Air Force	3.0	MBBR				
13.	GE, South	2.0	MBBR				
14.	GE, West	2.0	MBBR				
15.	GE , Mammon	2.0	MBBR				
16.	GE , North	2.0	MBBR				
		95.1					

# Status of O&M Funds for STPs falling in Catchment Area of River Ghaggar (F.Y 2018-19)

Sr. No	Town	Capacity (mld)	Tech.	Annual Requirement of Funds for O&M 2018-19 (Rs. in Lacs)	Funds received so far (upto Feb, 2019) during 2018-19	Payment Cleared upto Month/Year	Pending payment ( Rs. in Lacs )
	PWSSB						
1.	Khanauri	3	SBR	-	-	-	6.91
2.	Lehra Gaga	4	SBR	-	-	-	-
3.	Mandi Gobindgarh	25	SBR	126.5	-	Jan-19	60.5
4.	Moonak	3	SBR	-	-	-	-
5.	Patran	4	SBR	33.95	-	-	-
6.	Samana	10	SBR	80.4	-	Feb-19	37.2
7.	Sunam	8	SBR	39.23	-	May-18	24.74
8.	Zirakpur	17.3	SBR	56.67	80.96	Feb-19	3.20
9.	Rajpura	7	SBR	-	-	-	-
10.	Rajpura	10	SBR	-	-	-	-
11.	Banur	4	MBBR	16.28	0.00	Oct-18	3.40
12.	Budhlada	6.5	MBBR	28.2	Revenue= 37.01 Vat = 37.89	Aug-18	163.7
13.	Baretta	3	WSP	7.09	Revenue= 12.98 Vat = 15.59	Mar-18	13.63
14.	Bhikhi	3	WSP	3.72	Revenue= 06.51 Vat = 16.73	Jun-18	7.29
15.	Sardulgarh	4	WSP	6.72	Revenue= 21.87 Vat = 82.09	Jul-18	4.72
	MC						
16.	Patiala	46	SBR				
17.	Patiala	10	SBR				
	PUDA						
18.	Patiala	13	FAB				
	GMADA						
19.	Mohali	45.4	UASB				
20.	Lalru	1.5	SBR				

### Annexure 6

### **Proforma for reasons for Non-Compliance**

S. No.	Na me of Tow n & Loc atio n	Depart ment responsi ble for O&M	Capac ity (MLD)	Date of Commisio ning	Para	sign meter s	Discha rge Standa rds to be acheiv ed (PPCB)	Complia nce of Dischar ge Standar ds (Yes/No		Reasons for Non-Compliance						Operato r Paymen t Cleared upto Month/ Yr	Outstandin g Payment			
					Inl et	Outl et			Lack of O& M Fun ds	Technol ogy Related	Inadequ ate STP Capacit Y	Mixing with Indust rial efflue nts	Mixi ng with Dair Y Was te	Compon ent breakdo wn	Non availabi lity of Power	Non availabi lity of Chlorin e	Lack of skilled manpo wer	Any othe r reas on		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

### **Annexure 7**

### Status w.r.t Functioning of CETPs

Sr. No.	Name of CETP / Capacity	Month (Marc	h , 2019)	Action Taken for Non Compliance
		Whether Complying with norms	Reason for Non Compliance	
1.	5 MLD CETP at Leather Complex, Jalandhar /	Not Complying		Notice u/s 33-A alongwith SCN for refusal of consent issued with hearing before Chairman on 09.04.19
2.	0.5 MLD CETP at Focal Point, Phase VIII, Ludhiana for electroplating	Complying		
3.	0.035 MLD CETP at Phillour for vegetable tanning units	Complying		
4.	0.2 MLD Re-Processor at Kohara for pickling industries using H <sub>2</sub> SO <sub>4</sub>	Complying		

### Status w.r.t Functioning of ETPs in the Catchment Area of River Sutlej

Sr. No	Total No. of Industries requiring ETP	No. of Units visited during February 19	No. of Units Found Compliant	No. of Units Found Non Compliant	Actions Taken against Non-compliant Units
1	449	69	45	24	Units sealed & electric disconnection- 3 No.  Electric disconnection - 1 No. Permanently closed- 3 No.  Action Under Process- 17 No.

Sr. No	Total No. of Industries requiring ETP	No. of Units visited during March 19	No. of Units Found Compliant	No. of Units Found Non Compliant	Actions Taken against Non-compliant Units
1	450	59	34	16	Action Under Process- 16 No. Effluent results awaited -09 units

# Status w.r.t Functioning of ETPs in the Catchment Area of River Beas

Sr. No	Total No. of Industries requiring ETP	No. of Units visited during March, 19	No. of Units Found Compliant	No. of Units Found Non Compliant	Actions Taken against Non-compliant Units
1	21	06	05	01	Notice u/s 33-A issued with hearing before Chairman

# Status w.r.t Functioning of ETPs in the Catchment Area of River Ghaggar

Sr. No	Total No. of Industries requiring ETP	No. of Units visited during February 19	No. of Units Found Compliant	No. of Units Found Non Compliant	Actions Taken against Non-compliant Units
1	48	8	6	2	<ul> <li>Bank guarantee of Rs.5 lacs encashed &amp; fresh BG of Rs. 5 lacs imposed on M/s. Patiala Distilleries</li> <li>Water consent revoked of M/s. SSG Paper Mills</li> </ul>

Sr. No	Total No. of Industries requiring ETP	No. of Units visited during March 19	No. of Units Found Compliant	No. of Units Found Non Compliant	Actions Taken against Non-compliant Units
1	48	8	8	-	-

### Annexure-9

### Progress w.r.t. Setting up of New/ Up-gradation/ Rehabilitation of STPs - River Sutlej

S.	Urban Bodies	STP	Tech.	Funds	Status of			Timeline	S		Remarks
No.	(Town)	Capacity		(Rs. in crores)	Funds	Preparation of DPR	Financial Closure	Tendering	Commence ment of work	Completion & Commissioning	
	Municipal Corpo	ration, Ludh	niana								
1.	Jamalpur	50		61.71	Tied up	Approved	Done	DNIT under preparation		31.12.20	
2.	Balloke	50			Tied up	Under preparation				31.12.20	
3.	Jamalpur	48	UASB	18.91	Tied up	Approved		DNIT under		31.12.20	Rehabilitation
4.	Balloke	152	UASB	1				preparation			of existing
5.	Bhattian	111	UASB	1							STPs
	Municipal Corpo	ration, Jalaı	ndhar								
6.	Pholriwal	100	SBR	85.00	Not tied up	28.02.19	31.11.19	30.06.20	01.07.20	31.12.21	Tech. Up- gradation of existing STP
7.	Basti Peer Dad	25	SBR	22.00	Not tied up	28.04.19	30.11.19	30.06.20	01.07.20	31.12.21	
8.	Pholriwal	50	SBR	58.00	Tied up	24.04.19	30.11.19	30.06.20	01.07.20	31.12.21	
	Punjab Water Su	pply & Sew	erage Boa	rd					•		
9.	Ferozepur	18	SBR	10.35	Tied up	Approved	Done	Completed	Started	31.03.20	
10.	Guru Har Sahai	1	SBR	43.07	Tied up	Approved	Done	Completed	Started	31.03.20	
11.	Guru Har Sahai	4	SBR								
12.	Jaito	6	SBR	36.15	Tied up	Approved	Done	Completed	Started	30.09.19	
13.	Kotakpura	8	SBR	88.09	Tied up	Approved	Done	Completed	Started	30.11.19	
14.	Kotakpura	6	SBR								
15.	Morinda	5.5	SBR	7.71	Tied up	Approved	Done	Completed	Started	30.06.19	
16.	Gidderbaha	7	MBBR	9.58	Tied up	Approved	Done	Completed	Started	30.09.19	
17.	Balachaur	4		4.04	Tied up	Approved	Done	31.07.19	01.08.19	31.10.20	
18.	Garshankar	3		12.34	Tied up	Approved	Done	31.07.19	01.08.19	31.10.20	
19.	Kiratpur Sahib	2		08.68	Tied up	Approved	Done	31.07.19	01.08.19	31.10.20	
20.	Maluka	1		10.00	Tied up	Approved	Done	31.07.19	01.08.19	31.10.20	
21.	Rahon	3		09.67	Tied up	Approved	Done	31.07.19	01.08.19	31.10.20	

24.   Arniwala   2   24.00   Not tied up   Approved   01.04.20   31.03.22   30.06.22   Sewerage   25.   Barriwala   2.5   24.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   System to   27.   Bhai Roopa   3   22.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   System to   27.   Bhai Roopa   3   22.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   laid follow   28.   Kotha Guru   2   24.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   laid follow   31.05.19   31.03.20   30.09.20   01.10.20	22.	Faridkot	14		94.04	Tied up	Approved	Done	Completed		31.12.20	Land to be acquired
25.   Barriwala   2.5   24.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   Sewerage   System to   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   System to   32.05.19   31.03.20   30.09.20   01.10.20   30.06.22   32.05.19   31.03.20   30.09.20   01.10.20   30.06.22   32.05.19   31.03.20   30.09.20   01.10.20   30.06.22   32.05.19   31.03.20   30.09.20   01.10.20   30.06.22   32.05.19   31.03.20   30.09.20   01.10.20   31.12.21   32.05.19   31.03.20   30.09.20   01.1	23.	Patti	8		15.68	Tied up	Approved	Done	30.09.20	01.10.20	30.06.22	Land to be acquired
26.   BhagtaBhaike   3   39.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   System to Bhai Roopa   3   22.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   Idi follow by installad follow by installad properties of the state of existing States   Stated   Started	24.	Arniwala	2		24.00	Not tied up	Approved	01.04.20	31.03.22		30.06.22	
27.   Bhai Roopa   3   22.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   laid follow   28.   Kotha Guru   2   24.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   by installation   30.06.22   Mahilpur   3   20.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   of STP   ST	25.	Barriwala	2.5		24.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	Sewerage
28.   Kotha Guru   2   24.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   30.06.22   30.06.22   31.06.22   31.06.22   31.06.22   31.06.22   32.00   Mallanwala   3   37.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   32.00   Mallanwala   3   37.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   32.00   Mudki   2   48.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   33.00   Mallanwala   3   37.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   32.00   Mudki   2   48.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   33.00   Mallanwala   3   27.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   33.00.622   33.00   Mallanwala   3   25.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   33.00.622   34.00   Mallanwala   3   25.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   33.00.622   34.00   Moga   23   25.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   31.12.21   Capacity enhancer from Zhangan   Zhanga	26.	BhagtaBhaike	3		39.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	System to be
29.   Mahilpur   3   20.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22   30.00   30	27.	Bhai Roopa	3		22.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	laid followed
30.   Mallanwala   3   37.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22	28.	Kotha Guru	2		24.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	by installation
31.   Mamdot   2   37.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22	29.	Mahilpur	3		20.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	of STP
32.   Mudki   2	30.	Mallanwala	3		37.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	
33.   Nihal Singh   2   27.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   30.06.22	31.	Mamdot	2		37.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	
Wala	32.	Mudki	2		48.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	
35.   Moga   23   25.00   Not tied up   31.05.19   31.03.20   30.09.20   01.10.20   31.12.21   Capacity enhancem from 27 Notes of MLD	33.		2		27.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	
Section   Completed   Comple	34.	Raikot	5		27.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	
37. Goniana         3         05.00         Not tied up         31.05.19         31.03.20         30.09.20         01.10.20         31.12.21         up-gradat of existing of exis	35.	Moga	23		25.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	31.12.21	Capacity enhancement from 27 MLD to 50 MLD
38.         Malout         10         05.00         Not tied up         31.05.19         31.03.20         30.09.20         01.10.20         31.12.21         Capacity enhancem & technology enhance	36.	Phillaur	2.6		04.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	31.12.21	Technology
Baghapurana 4 SBR 19.15 Not tied up Approved - Completed Started 31.12.19  40. Muktsar Sahib 8.7 MBBR 04.03 Not tied up 31.01.19 - 15.05.19 01.06.19 31.12.19 Repair of existing ST	37.	Goniana	3		05.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	31.12.21	up-gradation of existing STP
39.         Baghapurana         4         SBR         19.15         Not tied up         Approved         -         Completed         Started         31.12.19           40.         Muktsar Sahib         8.7         MBBR         04.03         Not tied up         31.01.19         -         15.05.19         01.06.19         31.12.19         Repair of existing ST           41.         Muktsar Sahib         5.7         MBBR         MBBR         04.03         Not tied up         31.01.19         -         15.05.19         01.06.19         31.12.19         Repair of existing ST	38.					Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	31.12.21	Capacity enhancement & technology up-gradation of existing STP
40.         Muktsar Sahib         8.7         MBBR         04.03         Not tied up         31.01.19         -         15.05.19         01.06.19         31.12.19         Repair of existing ST           41.         Muktsar Sahib         5.7         MBBR         Not tied up         31.01.19         -         15.05.19         01.06.19         31.12.19         Repair of existing ST		Department of W	ater Suppl									
41. Muktsar Sahib 5.7 MBBR existing ST	39.					Not tied up	Approved	-	Completed	Started	31.12.19	
	40.	Muktsar Sahib	8.7	MBBR	04.03	Not tied up	31.01.19	-	15.05.19	01.06.19	31.12.19	Repair of
42. Muktsar Sahib 3.5 MBBR	41.	Muktsar Sahib	5.7	MBBR	]							existing STPs
	42.	Muktsar Sahib	3.5	MBBR								

### **Abstract**

Sr. No	Department	New STPs No. / Capacity(MLD)	No. of STPs require technology up- gradation	require	No. of STPs require capacity enhancement	No. of STPs require rehabilitation/ repair	Total No. of STPs/ capacity
1.	MCL	02/ 100	-	-	ı	03/311	02/100
2.	MCJ	02/75	01/100	-	-		03/175
3.	PWSSB	26/120	02/5.60	01/10	01/23		30/158.60
4.	DWSS	01/4	-	-	-	03/17.9	01/4
	Total	31/299	03/105.6	01/10	01/23	06/328.9	42/766.50

### Progress w.r.t. Setting up of New/ Up-gradation of STPs - River Beas

S.	Urban	STP	Tech.	Funds	Status			Timeline	s		Remarks
No	Bodies (Town)	Capacit y (MLD)		(Rs. in crores )	of Funds	Preparation of DPR	Financia I Closure	Tendering	Commencemen t of work	Completio n & Commissio ning	
	Punjab Water S	upply & Se	ewerage	Board						·	
1.	SultanpurLodhi	4	SBR	8.00	Not tied up	Approved	31.03.20	30.09.20	01.10.20	31.12.21	Land to be acquired
2.	SultanpurLodhi	1	SBR	9.22	Tied up	Approved		31.07.19	01.08.19	31.10.20	
3.	Kapurthala	25	SBR	2.98	Tied up	31.03.19		31.07.19	01.08.19	30.06.20	Technology up-gradation
4.	Kartarpur	4	SBR	8.53	Tied up	Approved		31.07.19	01.08.19	31.10.20	
5.	Dhilwan	2.5	SBR	5.99	Tied up	Prepared		31.03.20	01.04.20	30.06.21	Land to be acquired
6.	KothiPandita	2	SBR	3.00	Tied up	Prepared		31.07.19	01.08.19	31.10.20	
7.	Adarash Nagar	1.2	SBR	2.00	Tied up	Approved		31.07.19	01.08.19	31.10.20	
8.	Hariana	2	SBR	14.86	Tied up	Approved		31.07.19	01.08.19	31.10.20	
9.	Sujanpur	5.5	SBR	39.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	Land to be acquired
10.	Talwara	4	SBR	34.00	Not tied up	31.05.19	31.03.20	30.09.20	01.10.20	30.06.22	
	Department of	Water Sup	ply & Sai	nitation							
11.	Goindwal Sahib	1.3	WSP	4.63	Tied up	31.03.19		01.03.19	01.03.19	30.06.19	
	JDA										
12.	Rawal & Colonies	1	SBR	5.77	Not tied up					30.06.22	Land identified
	PSIEC										
13.	FP, Pathankot	2	MBBR	3.00	Tied up	Approved				30.06.21	
14.	FP,Goindwal Sahib	2	SBR	3.50	Tied up					30.09.21	
	MES										
15.	Kapurthala	1		2.32	Tied up	Prepared		Completed	Started	31.03.20	

Progress w.r.t. Setting up of New/ Up-gradation of STPs - River Ghaggar

S.	Urban Bodies	STP	Tech.	Funds	Status of			Timeline	S		Remarks
No.	(Town)	Capac ity (MLD)		(Rs. in crores)	Funds	Preparation of DPR	Financial Closure	Tendering	Commence ment of work	Completion & Commissioning	
	Punjab Water Supply	& Sewe	rage Boar	d						•	
1.	Rajpura	10	SBR	7.42	Tied up	Approved		Completed	Started	30.06.19	
2.	Boha	2	SBR	23.45	Tied up	Approved		Completed	Started	31.07.20	
3.	Cheema	2		7.32	Tied up	Approved		31.07.2019	01.08.2019	31.10.20	
4.	Bhadson	2		25.00	Not tied up	30.05.19		30.09.20	01.10.20	30.06.22	
5.	Nabha	12		19.15	Tied up	Approved		30.09.19	01.10.19	30.06.21	
6.	Dhuri	5	SBR	56.81	Tied up	Approved		Completed	Started	31.07.20	
7.	Dhuri	6		30.00		Approved		Completed	01.09.19	30.11.20	Land to be acquired
8.	Sangrur	4	SBR	100.33	Tied up	Approved		Completed	Started	31.07.20	
9.	Sangrur	11		70.33	Tied up	Approved		Completed	01.09.19	30.11.20	Land to be acquired
10.	Bassi Pathana	3	SBR	20.30	Tied up	Approved		Completed	Started	31.07.20	
11.	Longowal	2		9.67	Tied up	Approved		31.07.19	01.08.19	31.10.20	
12.	Amloh	3		12.58	Being tied up	Approved		30.09.19	01.10.19	31.12.20	Land to be acquired
13.	Issapur, Mubarkpur, Derabassi	2		5.44	Tied up	Approved		31.07.19	01.08.19	31.10.20	
14.	Mirpur	2			Tied up	Approved		31.07.19	01.08.19	31.10.20	
15.	Dappar, Lalru	1		6.44	Being tied up	Approved		31.07.19	01.08.19	31.10.20	
16.	Lalru, Mandi	1.5		3.00	Being tied up	Approved					Court Case
17.	Sanour	3		25.00	Not tied up			30.09.20	01.10.20	30.06.22	Land to be acquired
18.	Ghanaur	2		3.10	Tied up	Approved		31.07.19	01.08.19	31.10.20	-
19.	Sirhind	2	SBR	74.65	Tied up	Approved		Completed	Started	31.07.20	
20.	Sirhind	4	SBR	]	Tied up	Approved		Completed	Started	31.07.20	
21.	Sirhind	5	SBR		Tied up	Approved		Completed	Started	31.07.20	
22.	Gholu Majra, Lalru	0.3			Tied up	Approved		30.09.19	01.10.19	31.12.20	

23.	Chaundhehri & Samalhehri, Lalru	0.3			Tied up	Approved	30.09.19	01.10.19	31.12.20	
24.	Baretta	3		15.00	Not tied up	30.05.19	30.09.20	01.10.20	31.12.21	Technology up-
25.	Bhikhi	3			Not tied up	30.05.19	30.09.20	01.10.20	31.12.21	gradation of
26.	Sardulgarh	4			Not tied up	30.05.19	30.09.20	01.10.20	31.12.21	existing STP (WSP)
	MES									
27.	Patiala	6				Prepared	Completed	Started	31.08.20	
	PSIEC									
28.	Mandi Gobindgarh	5	MBBR			Approved	Completed	Started	30.05.19	
29.	Nabha	3	SBR			Approved	Completed	Started	30.05.19	

### Annexure 10

### Progress w.r.t. Setting up of New/ Up-gradation of CETPs - River Sutlej

Sr. No	Name of Project	Capacity (MLD)	Timelines as per Action Plan					Current Progress
			Preparation of DPR	Financial Closure	Tendering including allotment	Commencement of Work	Completion & Commissioning	
1.	CETP at Bahadur Ke Road, Ludhiana	15	Approved	Done	Completed	Started	31.03.20	90% Completed as on 31.03.19. Likely to be commissioned by 30.06.19
2	CETP at Focal Point, Ludhiana	40	Approved	Done	Completed	Started	31.03.20	75% Civil work Completed. Likely to be commissioned by 31.10.19
3	CETP at Tajpur Road, Ludhiana	50	Approved	Done	Completed	Started	31.12.20	35% Completed as on 31.03.19. Likely to be commissioned by 31.01.20
4	CETP for electroplating industries at Jalandhar	0.15	Approved				31.12.20	
5	Up-gradation of existing CETP at Leather Complex, Jalandhar	5	31.03.19		30.06.19	01.07.19	31.12.20	DPR submitted to CLRI for appraisal

### Annexure 11

### Progress w.r.t. Setting up of ETPs for Dairy and Other Misc. Waste

Sr. No	Name of Project	Capacity (MLD)	Funds (Crores)			Timelines as pe	r Action Plan		Current Progress
				Preparation of DPR	Financial Closure (crores)	Tendering including allotment	Commencement of Work	Completion and Commissioning	
1.	ETP for Dairy complex located at Tajpur and Haibowal, Ludhiana	5 & 10	43.30	Approved	Done	DNIT under preparation		30.06.21	
2	ETP for Jamsher Dairy Complex, Jalandhar	5	10.00	28.04.19	30.11.19	30.06.20	01.07.20	31.03.22	
3	Up-gradation of ETP for Slaughter house located at Ludhiana	0.8	19.50	Approved	Done	Completed	08.09.18	31.03.20	50% work completed as on 15.03.19
4	Setting up of Carcass Handling Plant by MC, Ludhiana	150 Animals/Day	08.00	Approved	Done	Floated		30.06.20	
5	Setting up of Biogas plant by MC, Ludhiana	1 MW (12000 m³/ day of biogas)	Nil	Prepared					To be set up by PEDA
6.	Installation of Bio-gas power plant, Jamsher Dairy Complex, Jalandhar	1 MW (12000 m³/ day of biogas)	Nil	Approved		Completed		31.12.20	

#### Letter dated 9/4/2019 from MC, Ludhiana and Concept Note by MC Ludhiana for join monitoring

### OFFICE OF THE COMMISSIONER, MUNICIPAL CORPORATION, LUDI

To

The Principal Secretary, Department of Science, Technology and Environment, Punjab, Chandigarh.

NO 71 PS/D

Dated 0 9/04/2019

Subject:-

Joint Monitoring of discharge and COD levels of Buddha Nallah ar inlet points of Municipal Corporation, Ludhiana.

It is submitted that the following schedule may be followed jointly by of Municipal Corporation, Ludhiana and Punjab Pollution Control Board to car estimation of waste water generation and COD levels being generated from Ludhiana

- Measurement of discharge as well as COD at following points of Buddl for 48 hours.
- a) Bhamian Village pully (i.e. Entrance in MC limit).
- b) Vijay Nagar pully.
- c) Baranhara pully.
- Measurement of COD at the 3 STPs inlet points (Jamalpur, Bhattian, & simultaneously for 48 hours.

Measurement may be done at every hour simultaneously by in house la and MCL with representatives of other party being present. After every 4 hours sam tested by PBTI/NABL accredited lab.

This exercise shall help in reconciling the quantity and quality of excess in Budhha Nallah so that action plans may be finalized accordingly. This is submitted necessary direction to concerned department for conducting this at the earliest.

Commissioner, Municipal Corpor

#### Buddha Nallah Rejuvenation: Concept Note

A permanent solution to the problem of water pollution in Buddha Nallah requires a coordinated approach based on proper analysis of the quantity of waste water being discharged into the Nallah, sources of waste water generation, quality of waste water being discharged at various points (BOD, COD, E Coli levels etc.) and their effective interception and treatment (before discharge in the Nallah) depending on the type of effluent.

There has been wrangling between MC Ludhiana and PPCB on various issues highlighted here with each department trying to put the onus on the other for the problems, and the dispute has always escaped

resolution due to lack of reliable data on various parameters which is the need of the hour for finding a comprehensive solution to the problem.

With this as basis, following concept note highlights some of the key issues requiring immediate attention in this matter.

#### **Discharge Measurements:**

MC Ludhiana and PPCB recently went for joint discharge measurements along various points of Buddha Nallah. The total discharge of Ludhiana city came out to be roughly 766 MLD and discharge in Buddha Nallah to be 597 MLD. Of 597 MLD discharge in Buddha Nallah, 337 MLD is currently routed through MC STPs (Bhattian STP outlet is directly into Sutlej and hence excluded) and another 90 MLD is being planned to be tapped by CETPs being installed by PPCB (15 MLD CETP at Bahadurke will go directly into Sutlej). 50 MLD additional STP capacity at Jamalpur and 15 MLD ETP capacity is being planned by MC Ludhiana under Amrut/Smart City scheme. Considering these quantities, there is still an excess of about 106 MLD which is flowing directly into the Nallah which needs to be tapped and accounted for. This excess discharge is major bone of contention between MC and PPCB.

Name of Catchment Area	Average (72 hours) discharge of BuddaNalla (in MLD)	Current Sewage Discharge (in MLD)	Excess Unaccounted Sewage Current in BuddaNallah
Balloke	268	269	
	200	209	0
Bhattian	124	8	
	124	0	116
Jamalpur	205	60	145
Total	597	337	261

(90+50+15 = 155 MLD will be tapped by current proposals, so excess is 106 MLD)

#### Joint Discharge measurements at Annexure A

It is pertinent to mention that flow measurement in Balloke catchment area (which is almost fully domestic sewerage catchment) earlier was 318 MLD (when MC water supply was for 10 hours) which has now reduced to 268 MLD (after water supply was reduced by MC Ludhiana to 7 hours). Flow in Bhattian Catchment has decreased by 15 MLD while in Jamalpur (which is mainly industrial catchment area) has increased by 37 MLD showing no effect of reduced water supply by MC.

Earlier Flow measurements taken by MC Ludhiana (not jointly with PPCB)

Name of STP/ Catchment Area	Average (72 hours) discharge of BuddaNalla (in MLD)	Current Sewage Discharge (in MLD)	Excess Unaccounted Sewage Current in BuddaNallah	
Balloke	317	269	40	
Bhattian	139	8	48	
Jamalpur	168	60	131 108	
Total	624	337	287	

Also Joint Discharge measurements in Jamalpur Catchment area show that there is hardly any difference between Peak and Avg discharge (225 MLD and 218 MLD respectively) in this catchment area though domestic effluent generally has a peak to avg ratio of 2 (as taken by PWSSB in its design for domestic STP design). Peak to Avg ratios in other catchment areas are also similar.

These results strongly point to presence of industrial effluent coming in these areas.

#### Joint Discharge and Quality Measurements:

MC Ludhiana has been trying for joint measurements with PPCB of excess discharge along with its BOD/COD levels for the following reasons:

a) Generation of water supply from MC tubewells/private tubewells/ green and white industries registered with MC is not able to account for the excess discharge. In fact the total discharge from MC's own resources comes out to be 477 MLD presently and 525 MLD for 2033 for Ludhiana city. Excluding Bhattian outflow (which flows directly into Sutlej and not Buddha Nallah), total sewer discharge in Buddha Nallah at present from MC's own resources comes out to be 329 MLD while total flow measured in Buddha Nallah is 600 MLD.

Name of STP/ Catchment Area	Technolog Y	Water consumed (in MLD) (Based on tubewells operated by MCL & Private tubewells)	Domestic Sewage Generation in MLD 2018	Addition Discharge of villages adjacent to the periphery of city	Total	Domestic Sewage Generation in MLD 2033 (10% increase from 2018 levels)	STP Installed Capacity (in MLD)	Gap in sewage Treatment for 2033 (Domestic of city) in MLD	Proposed Action
Balloke	UASB	234	219	50	269	296	152	39	50 MLD Proposed
Balloke	SBR						105		
Bhattian	UASB	168	143	5	148	163	111	1.56	Will be reduced after
Bhattian	SBR						50		implementation of volumetric metering policy
Jamalpur	UASB	59	55	5	60	66	48	18	50 MLD Passed
Total		461	417	60	477	525	466	59	

b) It has been a bitter experience of MC in the past that trying to install STPs designed for domestic effluent when industrial effluent is flowing into them is a wasteful expenditure since it only leads to mechanical deterioration of STPs.

Joint discharge and quality measurements will be able to **better pin point the source** of excess water flowing into the Nallah since higher COD levels (at various locations) will indicate the presence of industrial effluent.

#### Efficacy of CETPs being installed by PPCB:

MC Ludhiana while planning for installation of additional STP capacity in Jamalpur for treating mixed effluent coming here has also looked into the CETPs being installed by PPCB along with PDAs and has observed the following:

- a) 40 MLD CETP at Tajpur cluster has been given to the operator (L&T) with inlet parameters of 500 BOD and 1000 COD for treatment whereas the effluent measurement done by MC in this area show COD in the range of 1500+. These raise a serious doubt on its functioning since BOD/COD ratio is the key parameter for designing the process design of CETP and ensuring that it successfully treats the inlet effluent. Even discussion with the operator company has highlighted this lacuna wherein they pointed out that no proper measurements of effluent have been carried out to exactly gauge the quality of the effluent.
- b) Similary, 50 MLD CETP at Focal point cluster has been given to the operator (Triveni) with inlet parameters of 500 BOD and 1100 COD for treatment whereas the effluent measurement done by MC in this area show COD in the range of 1500+.

This needs to be thoroughly investigated by the agency and proper process design be ensured otherwise it will be just wasteful expenditure and will not tackle the root problem.

#### Unaccounted discharge of MC Ludhiana

PPCB has been claiming that MC Ludhiana has not taken peripheral areas/ private tubewells / green industries into account while calculating its water generation and hence excess discharge in Buddha Nallah should be attributed to MC. This has been countered by MC on following grounds:

- a) Peripheral areas have already been accounted for in discharge calculations. In fact 50 MLD plant at Balloke has been proposed just for catering to needs of the new colonies coming in periphery of MC Ludhiana. Also sewer of villages connected with MC under World Bank scheme have also been accounted for.
- b) MC Ludhiana recently carried a massive survey to tap the private tubewells in industrial/domestic premises. Almost 9000 new tubewells have been identified and these have been already been taken into discharge calculations.
- c) Also the category of industry which does not need permission from PPCB but are linked with MC sewer have also already been taken into account by the MC.

d) Flat tariffs imposed by Local Govt Department lead to wastage of water by the residents and more water consumption. This may be true to an extent. Early implementation of volumetric tariff policy with provisions for metering would help in checking water wastage.

#### **Excess Discharge of Industries:**

MC Ludhiana on the other hand has been claiming that industries are discharging water in excess of permission granted to them by PPCB. It has been observed by MC that many industries have created direct outlet systems to Municipal sewer (which are not routed through ETPs) which are used by industries to directly dump their effluent into the municipal sewer without treatment.

Also, MC Ludhiana got carried out effluent measurements from PBTI for some of the industries (granted permission from PPCB) at points of connection with MC sewer, and found that COD levels of the discharged effluent were in range of 800+ with couple of them reaching to 1200 as compared to 500 COD of domestic effluent. This clearly shows that industries are evading their responsibility to treat their effluent properly.

Considering the above reasons, MC Ludhiana claims that not only industries are discharging excess effluent but are also not treating them properly which leads to deterioration of MC STPs. PPCB objected to this checking of industries by MC citing reasons of trespassing their jurisdiction. A proper mechanism needs to be devised to check industrial premises to ensure excess discharge is not being done by industry (compared to consent granted by PPCB) and discharge is being treated properly.

#### **Scattered Industries:**

There are a lot of scattered industries in Ludhiana like washing, greasing etc which require permission from PPCB to run but are running without it. Moreover they are running from small households, hence are difficult to catch. Also they keep on shifting their premises. A joint action by PPCB and MC in this regard with stringent punishment to defaulters should go a long way in checking these illegal industries.

Also PPCB must ensure that all red category industries are covered by the network system of CETPs being established by PPCB.

#### **Quality of STPs of MC:**

PPCB has always pointed out that STPs of MC Ludhiana are not functioning effectively. One main reason is lack of adequate technical manpower in MC for running the same. Though MC is now trying to build its capacity by training and formation of a dedicated STP cell, dedicated and trained STP manpower is required in MC to ensure they are run effectively.

But discounting the above reason, one major reason of failure of STPs in Ludhiana is the mixed effluent reaching the inlet of STPs. MC Ludhiana has initiated hourly sampling to quantify the COD levels reaching the STPs. Initial samples have shown COD levels in range of 1500+ in Jamalpur and 700+ in Bhattian at different points of time. Hence this industrial effluent needs to be tapped so as to ensure that STPs function effectively.

### Release of Fresh Water into Budha Nallah and Holy Bein

Sr. No	Name of Project		Timelines a	Plan		Current Progress	
		Preparation of DPR	Financial Closure (in crores)	Tendering including allotment	Commencement of Work	Completion and Commissioning	
	River Sutlej						
1.	Release 200 cusec water from Sirhind canal to Budha Nallah	T+ 4.5 Months	16.00	T + 6 M	T+ 6 M	T+22 M	
	River Beas						
1.	Release of 350 cusec water from Mukerian Hydel Channel to Holy Bein	Submitted to GoP	6.04	T+ 1.5 M	T+ 1.5 M	T+ 11.5 M	

# Reuse of Treated Waste Water for Irrigation-Sutlej

# Details of Irrigation Schemes where STPs have been installed

		Capacity		Irrigation Scheme Details				
S.No	Town	(mld)	Tech.	Time	Funds (Lakhs)	Remarks		
	MC, Ludhiana							
1.	Jamalpur	48	UASB	-	-	STP is based on old tech,		
2.	Bhattian	111	UASB	-	-	farmer not willing		
3.	Bhattian	105	SBR	-	-	Relates to Water Resources		
4.	Balloke	152	UASB	-	-	STP is based on old tech, farmer not willing		
5.	Balloke	50	SBR	-	-	Farmer not willing to use water.		
	MC, Jalandhar							
6.	Pholriwal	100	UASB	-	-	Relates to Water Resources		
7.	Pholriwal	25	SBR	T+20	910.00	Funds to be tied up		
8.	Pholriwal	25	SBR	T+20	875.00	Funds to be tied up		
9.	Basti Peer Dad	50	SBR	T+ 36	3200.00	Feasibility Study of underway		
10.	Bambian Wali Cantt	10	SBR	T+20	425.00	Funds to be tied up		
11.	Jaitawali, Hsr. Road	25	SBR	T+20	890.00	Funds to be tied up		
	PWSBB							
12.	Phagwara	20	UASB			Commissioned		
13.	Phagwara	8	MBBR			Commissioned		
14.	Phagwara	8	MBBR					
15.	Phillaur	3	MBBR	T+20	83.00	Funds to be tied up		
16.	Phillaur	2.6	WSP			Commissioned		
17.	Nakodar	6	SBR			Commissioned		
18.	Nawanshahar	6	SBR	T+20	204.00	Funds to be tied up		
19.	Banga	3	SBR	-	-	Farmers not willing		
20.	Hoshiarpur	30	MBBR	T+20	925.00	Funds to be tied up		
21.	Nangal	8	ASP			Commissioned		
22.	Nangal	5	ASP	T+20	225.00	Funds to be tied up		
23.	Machhiwara	4	SBR			Commissioned		
24.	Sahnewal	7	SBR	T+20	227.00	Funds to be tied up		

25.	Ropar	10	SBR			Commissioned
26.	Ropar	2.5	SBR			Commissioned
27.	Ropar	2	SBR			Commissioned
28.	Jagraon	12	SBR	T+20	470.00	Funds to be tied up
29.	Jagraon	16	SBR	T+20	625.00	Funds to be tied up
30.	Goniana	3	WSP			Commissioned
31.	Moga	27	SBR	T+20	1293.00	Funds to be tied up
32.	Abohar	25	SBR	T+20	685.00	Funds to be tied up
33.	Malout	3	WSP	T+20	105.00	Funds to be tied up
34.	Malout	10	MBBR			Commissioned
35.	Dharamkot	4	SBR			Commissioned
36.	Makhu	4	SBR	T+20	135.00	Funds to be tied up
37.	Talwandi Bhai	4	SBR	T+20	165.00	Funds to be tied up
38.	Zira	8	MBBR	T+20	306.00	Funds to be tied up
	MC Jalalabad					
39.	Jalalabad	8	MBBR			Commissioned
	DWSS					
40.	Sh.Muktsar Sahib	8.7				Commissioned
41.	Sh.Muktsar Sahib	5.7				Commissioned
42.	Sh.Muktsar Sahib	3.5	MBBR	T+20	125.00	Funds to be tied up
43.	Anandpur sahib	8				Commissioned
	GMADA					
44.	Kurali	5	SBR			Commissioned
	ВВМВ					
45.	Nangal	6.75	-	T+20	135.00	Funds to be tied up
	MES					
46.	East Jalandhar Cantt.	3	MBBR	T+20	90.00	Funds to be tied up
47.	East Jalandhar Cantt.	3	MBBR	T+20	85.00	Funds to be tied up
48.	East Jalandhar Cantt.	0.4	MBBR	T+20	15.00	Funds to be tied up
49.	West Jalandhar Cantt.	1.5	MBBR	T+20	60.00	Funds to be tied up
50.	West Jalandhar Cantt.	1.5	MBBR	T+20	45.00	Funds to be tied up
	Total	873.65			12303.00	

Details of Irrigation Schemes where STPs are proposed to be installed – Sutlej

		Canacitu		Irrigation Scheme Details					
S.No	Town	Capacity (MLD)	Time	Funds (Lakhs)	Remarks				
	PWSSB			-					
1.	Ferozepur	18	T+20	825.00	Funds to be tied up				
2.	Guru Har Sahai	1	T+20	38.00	Funds to be tied up				
3.	Guru Har Sahai	4	T+20	106.00	Funds to be tied up				
4.	Jaito	6	T+20	196.00	Funds to be tied up				
5.	Kotakpura	8	T+20	304.00	Funds to be tied up				
6.	Kotakpura	6	T+20	265.00	Funds to be tied up				
7.	Morinda	5.5	T+20	185.00	Funds to be tied up				
8.	Gidderbaha	7	T+20	225.00	Funds to be tied up				
9.	Balachaur	4	T+20	113.00	Funds to be tied up				
10.	Garshankar	3	T+20	94.00	Funds to be tied up				
11.	Maluka	1	T+20	32.00	Funds to be tied up				
12.	Rahon	3	T+20	95.00	Funds to be tied up				
13.	Kiratpur Sahib	2	T+20	65.00	Funds to be tied up				
14.	Faridkot	14	T+20	410.00	Funds to be tied up				
15.	Patti	8	T+20	200.00	Funds to be tied up				
16.	Arniwala	2	T+20	56.00	Funds to be tied up				
17.	Barriwala	2.5	T+20	74.00	Funds to be tied up				
18.	Bhagta Bhaike	3	T+20	104.00	Funds to be tied up				
19.	Bhai Roopa	3	T+20	105.00	Funds to be tied up				
20.	Kotha Guru	2	T+20	67.00	Funds to be tied up				
21.	Mahilpur	3	T+20	97.00	Funds to be tied up				
22.	Mallanwala	3	T+20	110.00	Funds to be tied up				
23.	Mamdot	2	T+20	60.00	Funds to be tied up				
24.	Mudki	2	T+20	68.00	Funds to be tied up				
25.	Nihal Singh Wala	2	T+20	66.00	Funds to be tied up				
26.	Raikot	5	T+20	225.00	Funds to be tied up				
27.	Moga	23	T+20	795.00	Funds to be tied up				
28.	Baghapurana	4	T+20	145.00	Funds to be tied up				
	PSIEC				-				
29.	FP, Jalandhar	1	T+20	40.00	Funds to be tied up				
	Total	148		5165.00					

# Re-use of Treated Waste Water for Irrigation- Beas

### Towns where STPs have been installed

S.No	Name of Town	Capacity	Technology		Irriga	ation Scheme Details
		(MLD)		Timeline	Funds (Lakhs)	Remarks
Α	PWSSB					
1.	Pathankot	27.0	SBR	T + 20	675	Funds to be tied up
2.	Tanda	4.0	WSP	T + 20	145	Funds to be tied up
3.	Sri Hargobindpur	1	MBBR	Commiss	ioned	
4.	Mukerian	5	MBBR	Commiss	ioned	
В	Municipal Councils					
5.	Dasuya	4	WSP	Commiss	ioned	
6.	Begowal	2.5	SBR	Commiss	ioned	Irrigation Project Commissioned, Extension of project underway, Funds available with Deptt
7.	Bholath	4	WSP	Commiss	ioned	
8.	Kapurthala	25	UASB	Commiss	ioned	Irrigation Project Commissioned, Extension of Pipeline underway, Funds available with Deptt
9.	Sultanpur Lodhi	2.6	WSP	Commiss	ioned	Irrigation Project Commissioned, Extension of Pipeline underway, Funds available with Deptt
10.	Sham Churasi	1	WSP	Commiss	ioned	
С	ВВМВ					
11.	Talwara	8	SBR			
D	MES , Pathankot	•				
12.	GE, Air Force	3.0	WSP	T + 20	90	Funds to be tied up
13.	GE, South	2.0	WSP	T + 20	60	Funds to be tied up
14.	GE, West	2.0	WSP	T + 20	60	Funds to be tied up
15.	GE , Mammon	2.0	WSP	T + 20	62	Funds to be tied up
16.	GE , North	2.0	WSP	T + 20	65	Funds to be tied up
	Total	95.10			1157.00	

# Towns where STPs are proposed to be installed

		Cap.		Irrigation	Scheme
S. No	Name of Town	(MLD)	Time	Funds (Lacs)	Remarks
Α	Municipal Councils				
1.	SultanpurLodhi	4.0	T + 20	117.00	Funds to be tied up
2.	SultanpurLodhi	1.0	T + 20	34.00	Funds to be tied up
3.	Kartarpur	4.0	T + 20	109.00	Funds to be tied up
4.	Dhilwan	2.5	T + 20	62.50	Funds to be tied up
5.	KothiPandita, Pathankot	2.0	T + 20	75.00	Funds to be tied up
6.	Adarash Nagar, Pathankot	1.2	T + 20	38.00	Funds to be tied up
7.	Hariana	2.0	T + 20	58.00	Funds to be tied up
8.	Sujanpur	5.5	T + 20	135.00	Funds to be tied up
9.	Talwara Town	4.0	T + 20	95.00	Funds to be tied up
10.	Rayya	3.5	T + 20	95.00	
В	Other Local Bodies				
11.	Goindwal Sahib	1.3	T + 20	65.00	Funds to be tied up
12.	Jalandhar Dev. Authority	1.0	T + 20	65.00	Funds to be tied up
С	MES				
13.	GE, Kapurthala	1.0	T + 20	35.00	Funds to be tied up
D	PSIEC				
14.	Industrial Growth Centre Pathankot	2.0	T + 20	67.00	Funds to be tied up
15.	Industrial Focal Point Goindwal Sahib	2.0	T + 20	65.00	Funds to be tied up
Total		37		1115.50	

# Re-use of Treated Waste Water for Irrigation- Ghaggar

### Towns where STPs have been installed

S. No	Name of Town	Capacity	Technology		Irrigation Sc	heme Details
		(MLD)		Timeline	Funds (Lakhs)	Remarks
Α	PWSSB					
1.	Khanauri	3	SBR	T+20	110	
2.	Lehra Gaga	4	SBR			Commissioned
3.	Mandi Gobindgarh	25	SBR	T+20	673	
4.	Moonak	3	SBR			Commissioned
5.	Patran	4	SBR			Commissioned
6.	Samana	10	SBR			Commissioned
7.	Sunam	8	SBR			Commissioned
8.	Zirakpur	17.3	SBR			Not Feasible
9.	Rajpura	7	SBR			
10.	Rajpura	10	SBR	T+20	390	
11.	Banur	4	MBBR			Commissioned
12.	Budhlada	6.5	MBBR			Not Feasible
13.	Baretta	3	WSP			Commissioned
14.	Bhikhi	3	WSP			Commissioned
15.	Sardulgarh	4	WSP			Commissioned
В.	МС					
16.	Patiala	46	SBR	T+20	2800	
17.	Patiala	10	SBR			
C.	PUDA					
18.	Patiala	13	FAB			
D.	GMADA					
19.	Mohali	45.4	UASB			
20.	Lalru	1.5	SBR			

# Towns where STPs are proposed to be installed

S.	Name of	Can	Tech.	Irrigation Scheme				
3. N	Town	Cap. (MLD)		Time	Funds (Lacs)	Remarks		
Α	Punjab Water Supply & Sewerage Board							
1.	Rajpura	10	SBR	T+20	390			
2.	Boha	2	SBR	T+20	65			
3.	Cheema	2		T+20	70			
4.	Bhadson	2		T+20	85			
5.	Nabha	12		T+20	325			
6.	Dhuri	5	SBR	T+20	175			
7.	Dhuri	6		T+20	225			
8.	Sangrur	4	SBR	T+20	150			
9.	Sangrur	11		T+20	385			
10.	Bassi Pathana	3	SBR	T+20	115			
11.	Longowal	2		T+20	105			
12.	Amloh	3		T+20	115			
13.	Issapur, Mubarkpur, Derabassi	2		T+20	145			
14.	Mirpur	2						
15.	Dappar, Lalru	1		T+20	25			
16.	Lalru, Mandi	1.5		T+20	60			
17.	Sanour	3		T+20	125			
18.	Ghanaur	2		T+20	74			
19.	Sirhind	2	SBR	T+20	80			
20.	Sirhind	4	SBR	T+20	109			
21.	Sirhind	5	SBR	T+20	225			
22.	Gholu Majra, Lalru	0.3		T+20	10			
23.	Chaundhehri & Samalhehri, Lalru	0.3		T+20	10			
В.	MES							
24.	Patiala	6		T+20	185			
	PSIEC							
25.	Mandi Gobindgarh	5	MBBR					
26.	Nabha	3	SBR	T+20	82			

### Annexure 15

### **Setting up of Treatment Facilities in Villages**

Sr.	, , , , , , , , , , , , , , , , , , , ,						Current		
No		MLD							
			Preparation of DPR	Financial Closure	Tendering including allotment	Commencement of Work	Quarterly Milestones during construction	Completion and Commissioning	
	River Sutlej								
1.	Phase I- 75 Villages	12.22	30.06.19	31.08.19	31.10.19	01.11.19		30.06.20	
2	Phase II- 131 Villages	37.30	30.06.20	31.08.20	31.10.20	01.11.20		30.06.21	
3	Phase III- 130 Villages	17.77	30.06.21	31.08.21	31.10.21	01.11.21		30.06.22	
	River Beas								
1.	Phase I- 5 Villages	1.24	30.06.19	31.08.19	31.10.19	01.11.19		30.06.20	
2	Phase II- 35 Villages	6.68	30.06.20	31.08.20	31.10.20	01.11.20		30.06.21	
3	Phase III- 35 Villages	9.31	30.06.21	31.08.21	31.10.21	01.11.21		30.06.22	

Annexure 16

# Installation of OCMS and CCTVs for Existing STPs - River Sutlej

S. No	Town	STP	Status of OCMS		Status	of CCTVs
		Capacity	Expected	Current	Expected	<b>Current Status</b>
		(MLD)	Completi	Status	Completio	
			on Date		n Date	
	MC, Ludhiana					
1.	Jamalpur	48	14.10.19	DPR	31.12.19	Tender
2.	Bhattian	111	14.10.19	Prepared.	31.12.19	prepared &
3.	Bhattian	50	14.10.19	Tender	31.12.19	floated after
4.	Balloke	152	14.10.19	floated	31.12.19	model code of
5.	Balloke	105	14.10.19	after model	31.12.19	conduct
				code of		
				conduct		
	MC, Jalandhar					
6.	Pholriwal	100	31.12.19		31.12.19	
7.	Pholriwal	25	31.12.19		31.12.19	
8.	Pholriwal	25	31.12.19		31.12.19	
9.	Basti Peer Dad	50	31.12.19		31.12.19	
10.	BambianWaliCantt	10				CCTV Installed
11.	Jaitawali	25	31.12.19			CCTV Installed
	PWSBB					
12.	Phagwara	20	30.11.19			CCTV Installed
13.	Phagwara	8	30.11.19			CCTV Installed
14.	Phagwara	8	30.11.19			CCTV Installed
15.	Phillaur	3	30.11.19			CCTV Installed
16.	Phillaur	2.6	30.11.19			CCTV Installed
17.	Nakodar	6	30.11.19			CCTV Installed
18.	Nawanshahar	6	30.11.19			CCTV Installed
19.	Banga	3	30.11.19			CCTV Installed
20.	Hoshiarpur	30	30.11.19			CCTV Installed
21.	Nangal	8	30.11.19			CCTV Installed
22.	Nangal	5	30.11.19			CCTV Installed
23.	Machhaiwara	4	30.11.19			CCTV Installed
24.	Sahnewal	7	30.11.19			CCTV Installed
25.	Ropar	10	30.11.19			CCTV Installed
26.	Ropar	2.5	30.11.19			CCTV Installed
27.	Ropar	2	30.11.19			CCTV Installed
28.	Jagraon	12	30.11.19			CCTV Installed
29.	Jagraon	16	30.11.19			CCTV Installed
30.	Goniana	3	30.11.19			CCTV Installed
31.	Moga	27	30.11.19			CCTV Installed
32.	Abohar	25	30.11.19			CCTV Installed
33.	Malout	3	30.11.19			CCTV Installed

S. No	Town	STP	Status o	of OCMS	Status	of CCTVs
		Capacity	Expected	Current	Expected	<b>Current Status</b>
		(MLD)	Completi	Status	Completio	
			on Date		n Date	
34.	Malout	10	30.11.19			CCTV Installed
35.	Dharamkot	4	30.11.19			CCTV Installed
36.	Makhu	4	30.11.19			CCTV Installed
37.	Talwandi Bhai	4	30.11.19			CCTV Installed
38.	Zira	8	30.11.19			CCTV Installed
	MC Jalalabad					
39.	Jalalabad	8	10.07.19		10.07.19	
	DWSS					
40.	Sh.Muktsar Sahib	8.7	31.12.19			
41.	Sh.Muktsar Sahib	5.7	31.12.19			
42.	Sh.Muktsar Sahib	3.5	31.12.19			
43.	Anandpur sahib	8	31.12.19		10.05.19	
	GMADA					
44.	Kurali	5	30.06.19		30.06.19	
	BBMB					
45.	Nangal	6.75				
	MES					
46.	East Jalandhar	3				
	Cantt.					
47.	East Jalandhar	3				
	Cantt.					
48.	East Jalandhar	0.4				
	Cantt.					
49.	West Jalandhar	1.5				
	Cantt.					
50.	West	1.5				
	JalandharCantt.					

# Installation of OCMS and CCTVs for Existing STPs - River Beas

S. No	Town	STP	Status of	OCMS	Status	of CCTVs
		Capacity	Expected	Current	Expected	Current
		(MLD)	Completi	Status	Completi	Status
			on Date		on Date	
	PWSSB					
1.	Pathankot	27.0	30.11.19			CCTV Installed
2.	Shri Hargobindpur	1.0	30.11.19			CCTV Installed
3.	Mukerian	5.0	30.11.19			CCTV Installed
4.	Tanda	4.0	30.11.19			CCTV Installed
5.	Begowal	2.5	30.11.19			CCTV Installed
6.	Bholath	4.0	30.11.19			CCTV Installed
	Municipal Councils					
7.	Dasuya	4.0	30.11.19		31.03.19	
8.	Kapurthala	25.0	30.11.19		31.03.19	
9.	SultanpurLodhi	2.6	30.11.19		31.03.19	
10.	Sham Chuarasi	1.0	30.11.19		31.03.19	
	ВВМВ					
11.	Talwara	8.0	30.06.19		30.06.19	
	MES, Pathankot					
12.	GE, Air Force	3.0	30.11.19		30.04.19	
13.	GE, South	2.0	30.11.19		30.04.19	
14.	GE, West	2.0	30.11.19		30.04.19	
15.	GE , Mammon	2.0	30.11.19		30.04.19	
16.	GE , North	2.0	30.11.19		30.04.19	

# Installation of OCMS and CCTVs for Existing STPs - River Ghaggar

S. No	Town	Town STP Status of OCMS		OCMS	Status	of CCTVs
		Capacity	Expected	Current	Expected	Current
		(MLD)	Completi	Status	Completi	Status
			on Date		on Date	
A.	PWSSB					
1.	Khanauri	3	30.11.19		30.04.19	
2.	Lehra Gaga	4	30.11.19		30.04.19	
3.	Mandi Gobindgarh	25	30.11.19		30.04.19	
4.	Moonak	3	30.11.19		30.04.19	
5.	Patran	4	30.11.19		30.04.19	
6.	Samana	10	30.11.19		30.04.19	
7.	Sunam	8	30.11.19		30.04.19	
8.	Zirakpur	17.3	30.11.19		30.04.19	
9.	Rajpura	7	30.11.19		30.04.19	
10.	Rajpura	10	30.11.19		30.04.19	
11.	Banur	4	30.11.19		30.04.19	
12.	Budhlada	6.5	30.11.19		30.04.19	
13.	Baretta	3	30.11.19		30.04.19	
14.	Bhikhi	3	30.11.19		30.04.19	
15.	Sardulgarh	4	30.11.19		30.04.19	
B.	MC					
16.	Patiala	46				
17.	Patiala	10				
C.	PUDA					
18.	Patiala	13	30.06.19		30.06.19	
D.	GMADA					
19.	Mohali	45.4	30.06.19		30.06.19	
20.	Lalru	1.5	30.06.19		30.06.19	

### Installation of OCMS for Industries - River Sutlej

Sr	Activity	Date of Start	Date of
No.			completion
1	Procurement Process	01.02.2019	28.02.2019
2	Finalization of Supply orders	01.03.2019	31.03.2019
3	Installation of online continuous monitoring system	01.04.2019	31.05.2019
4.	Calibration of online continuous monitoring system	01.06.2019	30.06.2019
5.	Connecting the online continuous monitoring system with the server of PPCB	01.07.2019	31.07.2019

**Note:** PPCB reported that 48 industries having discharge more than 50 KLD are required to install OCMS. Out of 48 industries, 2 industries installed OCMS & letters issued to the remaining units to install OCMS.

### **Installation of OCMS for Industries - River Beas**

Sr. No.	Activity	Date of Start	Date of completion
1	Contacting to various suppliers for inviting quotations.	01.02.2019	28.02.2019
2	Finalization of orders with the supplier	01.03.2019	31.03.2019
3	Installation of online continuous monitoring system	01.04.2019	31.05.2019
4.	Caliberation of online continuous monitoring system	01.06.2019	30.06.2019
5.	Connecting the online continuous monitoring system with the server of the CPCB and PPCB	01.07.2019	31.07.2019

**Note:** PPCB reported that out of total 21 industries, OCMS installed in 3 industries, not required in 10 industries &yet to install in 8 industries. Similarly, CCTVs installed in 4 industries, not required in 6 industries & yet to install in 11 industries.

# Installation of OCMS for Industries - River Ghaggar

Sr No.	Activity	Date of Start	Date of completion
1	Procurment Process	01.02.2019	28.02.2019
2	Finalization of Supply orders	01.03.2019	31.03.2019
3	Installation of online continuous monitoring system	01.04.2019	31.05.2019
4.	Caliberation of online continuous monitoring system	01.06.2019	30.06.2019
5.	Connecting the online continuous monitoring system with the server of PPCB	01.07.2019	31.07.2019

### Organization of Health Check-up Camps - River Sutlej & Beas

Sr. No.	No. of Health Camps organized during January, 2019	City / Town / Location of Camps	No. of people examined	No. of people foundaffected with water borne disease

# Public Awareness Programmes Organized - River Sutlej & Beas

Sr. No.	No. of awareness programme organized during January, 2019	City / Town / Location of programme	Avg. No. of participants	Brief detail about programme