

**1<sup>st</sup> Report of the Expanded  
Monitoring Committee  
constituted by  
Hon'ble National Green Tribunal  
in OA No. 916 of 2018  
in the matter of Sobha Singh  
& Others Vs State of Punjab &  
Others  
vide order dated 28.02.2019**

**Report submitted to Hon'ble National Green  
Tribunal, New Delhi**

**12<sup>th</sup> June, 2019**

## Contents

Point No.	Description	Page No.
1.0	Background	2-3
2.0	Actions of the monitoring committee:	3
2.1	Meeting of the Monitoring Committee held under the chairmanship of Justice Pritam Pal Former Judge Punjab and Haryana High Court with the officers of the concerned Departments of the State Govt. on 20.03.2019	3
2.1.1	Present status of water quality of river Sutlej and Beas	4
2.1.2	Functioning of the Existing STPs for towns located in the catchment area of these rivers.	4
2.1.3	Functioning of the CETP for leather Complex, Jalandhar	5
2.1.4	Functioning of ETP installed by the industries	5
2.1.5	Setting up of new/upgradation of STP's	5
2.1.6	Setting up of the new/ upgrading of CETPs in the catchment area of these rivers.	6
2.1.7	Setting up of ETPs for Dairy effluent:	6
2.1.8	Reuse of treated wastewater for irrigation	6
2.1.9	Action taken to prevent dumping of solid waste into Budha Nallah:	6
2.1.10	Setting up of treatment facility to treat the domestic sewage of villages:	7
2.1.11	Organization of Health Camps	7
3.0	Visit of Monitoring Committee of MSW site SBS Nagar and STPs of Sultanpur Lodhi Area on 26/3/2019 and 27/3/2019.	8
3.1	Municipal Solid Waste Management Site SBS Nagar:	8
3.2	STP SBS Nagar:	8
3.3	Stretch along Kala Singian Drain:	9
3.4	Low cost STP at Vill Seechewal	9
3.5	Ponds provided along Railway line near Chandigarh Colony, Sultanpur Lodhi	10
3.6	STP Sultanpur Lodhi	10
4.0	Visit of the Monitoring Committee to the Industries and STP of Nangal Area on 18/4/2019	11
4.1	National Fertilizer Ltd., Naya Nangal	11
4.1.1	Observations of the Committee	11
4.2	M/s Punjab Alkalies & Chemical Ltd., Naya Nangal, Distt. Roopnagar	11
4.2.1	Observations of the committee	11-12
4.3	Sewage Treatment Plant installed by Punjab Water Supply & Sewerage Board of capacity 8 MLD, Mojowal Road, Naya Nangal	12
4.3.1	Observations of the Committee	12

4.4	Sewage Treatment Plant installed by Punjab Water Supply & Sewerage Board of capacity 5 MLD, Village Burarri, Nangal	12
4.4.1	Observations of the Committee	12
4.5	Sewage Treatment Plant installed by BBMB of capacity 6.75 MLD, Nangal	13
4.5.1	Observations of the Committee	13
4.6	Recommendations:	13-14
5.0	Second meeting of the monitoring Committee to review the progress of implementation of Action Plan for river Sutlej and Beas held on 24.04.2019.	15
5.1	Monitoring of water quality of river Sutlej and Beas	15
5.2	Review of monitoring of functioning of existing STP's in the catchment area	15-16
5.3	Monitoring of functioning of CETP's in the catchment area:	16
5.4	Monitoring of functioning of ETP's installed by the industries:	16
5.5	Progress of setting up of New/Upgrading CETP's in catchment area:	17
5.6	Setting of ETP's for dairy and others misc. waste:	17
5.7	Release of fresh water in Budha Nallah and Holy Bein:	17
5.8	Reuse of treated waste water for irrigation and other purposes:	17
5.9	Action taken to prevent dumping of Solid Waste into Budha Nallah:	17
5.10	Setting of treatment facility in the villages:	18
5.11	Shifting of small/medium scale scattered dyeing units:	18
5.12	Organization of Health Checkup Camps:	18
5.13	Public awareness programs regarding cleaning of rivers:	18
6.0	Visit of the Monitoring Committee of Pollution Sources in Budha Nallah and status of STP's on 01.05.2019	19
6.1	Visit along Budha Nallah	19
6.2	Budha Nallah at Bhamian Kalan, Ludhiana	19
6.3	Sewage Treatment Plant Jamalpur:	19
6.4	Dairy Complex, Tajpur Road, Ludhiana:	20
6.5	Transport Nagar outlet into Budha Nallah Near Gurdwara Gaughat:	20
6.6	Common Effluent Treatment Plant (CETP) Bahadurke Road, Ludhiana	21
6.7	Qasabad (confluence of STP Bhattian outlet with River Sutlej) and STP Bhattian	21-22
6.8	Sewage Treatment Plant Balloke of capacity 257 MLD	22
6.9	Disposal of effluent from Dairy Complex, Haibowal into Budha Nallah and Bio-gas Plant, Haibowal	22

6.10	Budha Nallah at Barnhara Bridge	22-23
6.11	Confluence point of Budha Nallah with river Sutlej	23-24
6.12	Verification of complaint made by Sh. Nitin Dhiman, Press reporter of Punjab Group of Kesari Newspaper	24-25
7.0	Report on Visit to Industries, Sewage Disposal points into Kala Singhian Drain and STPs of Jalandhar Area by the Monitoring Committee on 08.05.2019.	26
7.1	Disposal points of sewage of Focal Point, Jalandhar maintained by PSIEC	26
7.1.1	Disposal point located in Beant Singh Park	26
7.1.21	Second disposal point near M/s Jagran Prakashan Ltd.	26
7.2	Visit to the Industries	27
7.2.1	M/s Victor Forgings, A-3-4 Focal Point (Extn), Jalandhar.	27
7.2.2	M/s Vishal Tools & Forging Pvt. Ltd, B-9 Focal Point (Extn), Jalandhar.	27-28
7.2.3	M/s Proxima Steel Forge Pvt Ltd, B 14-15, Focal Point Extn, Jalandhar.	28
7.2.4	M/s Talbro Forging, C-88, Focal Point Jalandhar	28
7.2.5	M/s Doaba Co-operative The Doaba Cooperative Milk Producers Union Ltd, G.T Road, Bye Pass, Jalandhar.	28-29
7.3	Disposal of Sewage of Kalia Colony, Jalandhar:	29
7.4	Disposal Points near Sabji Mandi, Maqsudan Road, Jalandhar:	29-30
7.5	Disposal Points of Industrial Area, Jalandhar:	30
7.6	Meeting with Deputy Commissioner Jalandhar	30
7.7	Common Effluent Treatment Plant (CETP) at Leather Complex, Jalandhar	30-31
7.8	M/s Jay Dee Leather Pvt Ltd, Plot no 28, and 29, Leather Complex, Jalandhar:	31-32
7.9	STP Pholriwal (100MLD)	32-33
7.10	Restricted Supply of fresh water for domestic usage to the residents of the city as per prescribed norms:	33-34
8.0	Report on visit to the STPs, sewage/Sullage disposal points into drains leading to Holy Bein (Kali Bein or West Bein) by the Monitoring Committee on 22.05.2019.	35
8.1	STP Sultanpur Lodhi	35
8.2	Disposal of Sewage/ Sullage of Village Kheda Donna into Holy Bein.	36-37
8.3	STP Kapurthala (25 MLD)	37-39
8.4	Bhulana Drain leading to Holy Bein	39
8.5	Disposal point into Wadala Drain leading to Holy Bein	40-41
<b>Sr. No.</b>	<b>List of Annexure</b>	
<b>1.</b>	<b>Annexure-1:</b> Copy of the Hon'ble National Green Tribunal order dated 28-02-2019	42-53
<b>2.</b>	<b>Annexure-2:</b> Status of water quality of river Sutlej (January, 2019)	54
<b>3.</b>	<b>Annexure-3:</b> Status of water quality of river Beas (January, 2019)	55

4.	<b>Annexure-4:</b> Proceedings of the first meeting of the Monitoring Committee to review the progress on implementation of Action Plans for abatement of pollution in river Sutlej and Beas held under the Chairmanship of Hon'ble Justice Pritam Pal, former Judge, Punjab & Haryana High Court on 20.3.2019.	56-64
5.	<b>Annexure-5:</b> Visit of Monitoring Committee to Municipal Solid Waste Plant at SBS Nagar, Kala Singhian Drain, STP Seechewal and Sultanpur Lodhi on 26.3.2019 and 27.3.2019	65-71
6.	<b>Annexure-6:</b> Report on visit to the industries of Nangal Area and Sewage Treatment Plant installed by PWSSB, BBMB Nagal on 18.4.2019	72-78
7.	<b>Annexure-7:</b> Letter written to the various officers w.r.t. visit to the industries of Nangal Area and Sewage Treatment Plant installed by PWSSSB and BBMB Nangal on 18.4.2019.	79-80
8.	<b>Annexure-8:</b> Proceedings of the second meeting of the NGT Monitoring Committee to review the progress on implementation of Action Plans for river Sutlej Beas and Ghaggar on 24.4.2019.	81-90
9.	<b>Annexure-9:</b> Report on visit to the pollution sources into Buddah Nallah and sewage treatment system provided by MC Ludhiana on 1.5.2019 by the Monitoring Committee	91-102
10.	<b>Annexure-10:</b> Letter written to all the concerned officers w.r.t. visit to the pollution sources into Budha Nallah and sewage treatment system provided by MC Ludhiana on 1.5.2019 by the Monitoring Committee	103-106
11.	<b>Annexure-11:</b> Report on visit to the industries, sewage disposal points into Kala Singhian Drain and STPs of Jalandhar area by the Monitoring Committee on 8.5.2019.	107-121
12.	<b>Annexure-12:</b> Letter written to various officers of the State Government/Board regarding visit to the industries, Sewage disposal points into Kala Singhian Drains and STPs of Jalandhar area on 8.5.2019 by the Monitoring Committee	122-123
13.	<b>Annexure-13:</b> Report on visit to the STPs, Sewage/sullage disposal points into drains leading to Holy Bein by the Monitoring Committee on 22.5.2019	124-130
14.	<b>Annexure-14:</b> Letter written to various officers of State Government/ Board w.r.t. visit to the STPs sewage/sullage disposal points into drains leading to Holy Bein by the Monitoring Committee on 22.5.2019.	131-132

# 1<sup>st</sup> Quarterly report of Monitoring Committee in OA no. 916 of 2018 in the matter of Sobha Singh & Others Vs State of Punjab & Others.

## 1.0 Background

River Sutlej is the easternmost tributary of the Indus River. The source of the river is at Lake Rakshastal in Tibet, near Mount Kailas. It enters India near Mansarovar and flows generally north westwards. It crosses great Himalayas ranges on its way from Shipkipass and enters into the State of Punjab near Nangal and from here, the River takes southern direction. After flowing for about 50 kms, it enters the plain near Ropar and passes through Distt. Ludhiana, Jalandhar, Moga, Ferozepur and meets River Beas At Harike Headworks.

Similarly, river Beas is a river in north India. The river rises in the Himalayas in central Himachal Pradesh, India, and flows for some 470 kilometers to the Sutlej River in the State of Punjab. Its total length is 470 kilometers but it flows in Punjab covering a distance of 256 kms.

The confluence point of these rivers is at Harike Lake from which two canals namely Sirhind Canal and Rajasthan Feeder Canal originate. The water of these canals is used for drinking and irrigation purposes in South-Western Districts of the State of Punjab and some part of Rajasthan. Thus, it becomes imperative to maintain the quality of water of rivers Sutlej and Beas.

The Hon'ble National Green Tribunal in OA no. 916 of 2018 in the matter of Sobha Singh & Others V/s State of Punjab & Others vide its order dated 28.02.2019 while considering the pollution of River Sutlej and Beas in the State of Punjab, it has been observed that main sources of pollution are discharges of untreated industrial effluent by industries, discharge of untreated municipal sewage as well as solid waste disposal either directly into these rivers or in drains or tributaries of the said rivers. The Hon'ble National Green Tribunal vide its order dated 28-02-2019 has passed the detailed order (**Annexure-1**) alongwith reconstitution of the monitoring committee to monitor the activities carried out by the various Departments of the State of Punjab and State of Himachal Pradesh regarding installation of Sewage Treatment Plants, utilization of treated sewage for irrigation purposes and monitoring of the Effluent Treatment Plants installed by the industries to assess their effectiveness to ensure the achievement of the standards before their discharge.

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The members of the reconstituted monitoring committee are mentioned as under:

Sr. No	Name & Designation	Designation in the Committee
1)	Justice Pritam Pal, Former Judge Punjab & Haryana High Court	Chairman of the Committee
2)	Sh. Subodh Agrawal, Former Chief Secretary, Punjab	Senior Member
3)	Dr. Babu Ram, Former Member Secretary, PPCB	Member
4)	Sant Balbir Singh Seechewal	Member
5)	Representative of Central Pollution Control Board	Member
6)	Representative of Rajasthan Pollution Control Board	Member

The Hon'ble National Green Tribunal in its order dated 28-2-2019 in para no. 22 has passed the following orders:

***"The Committee may also consider stringent action against polluters by the way of closure, recovery of compensation for damage to the environment prosecution or otherwise. The Committee may also consider recommending disciplinary and penal action against erring officers. The Tribunal expects that the State Government may record failure of individual officers in their annual confidential reports."***

The monitoring committee started its functioning in the first week of March, 2019 and started visiting the pollution sources and also held meeting with the concerned department of the State Government and other stakeholders.

## **2.0 Actions of the monitoring committee:**

The different activities carried out by the Monitoring Committee to monitor the Action Plan, prepared by the Govt. of Punjab, functioning of the sewage treatment plants installed by the executing agencies of the State Government and effluent treatment plants installed by the industries and steps taken by the concerned departments to prohibit the discharge of untreated wastewater into river system of the State during the last three months are enumerated as under:

### **2.1 Meeting of the Monitoring Committee held under the chairmanship of Justice Pritam Pal Former Judge Punjab and Haryana High Court with the officers of the concerned Departments of the State Govt. on 20.03.2019**

In order to get the stock of situation of the State of Punjab with regard to control of pollution in the rivers of the State, the Monitoring Committee held its first meeting with the officers of the State Government on

20.8.2019. The various issues discussed in the meeting are mentioned as under:

### **2.1.1 Present status of water quality of river Sutlej and Beas**

In the meeting, the information about the water quality of the rivers Sutlej and Beas was discussed. The water quality of these rivers is mentioned at **Annexures-2 and 3**. The data indicated that at the entry point of the river Sutlej in State of Punjab, its water quality of water has been determined as class-B as per the water quality criteria prescribed by CPCB, whereas, at Harike lake, the confluence point of river Sutlej and Beas, its quality degrades to class 'C'.

Similarly, in case of river Beas, the quality of water at its entry into Punjab was monitored as class-'B' and at Harike lake its quality was measured as class 'C'. The data indicated that the overall water quality of these rivers has been degraded due to discharge of sewage of the towns and industrial effluent of the industries. However, to get the reliable and real time data through the online continuous monitoring system, Punjab Pollution Control has been directed to install atleast 7 online continuous monitoring station at various critical locations of river Sutlej and Beas.

### **2.1.2 Functioning of the Existing STPs for towns located in the catchment area of these rivers.**

The monitoring committee was informed that 53 STPs were monitored by PPCB in the month of January, 2019, of which 30 STPs were found not achieving the prescribed standards. These non compliances of standards were mentioned due to use of old technology, operational failure of STPs due to unskilled man power and lack of upkeep of equipment or material shortage. Therefore, the committee directed as under:

- i) **The reasons for not meeting the standards have to be ascertained for each STP.**
- ii) **In case of STPs designed for old standards, a column regarding their meeting old standards shall also be brought out.**
- iii) **The detailed status of requirement of funds and availability of funds in respect of each STP may be brought out.**
- iv) **Monitoring at inlet as well as outlet shall be carried out.**
- v) **The requirement of holding tank in the design of STPs may be examined by Department of Local Government and clarified to the committee.**

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- vi) Transfer of STPs for O & M from multiple agencies such as GLADA, DWSS to the nodal agency laid down by Department of Local Government shall be expedited.
- vii) PPCB shall monitor the sludge of STPs on quarterly basis to ascertain quantity as well as quantity.
- viii) All concerned agencies will provide the information as per the prescribed proforma for review by the Committee.

### 2.1.3 Functioning of the CETP for leather Complex, Jalandhar

PPCB had informed that CETP for leather Complex at Jalandhar was found to be not achieving the prescribed standard. However, due to close monitoring, some improvement in the functioning of CETP has been observed.

The committee directed PPCB to monitor the CETP closely and ascertain the reasons for its operational failure and remedial measure to be taken to improve its performance.

### 2.1.4 Functioning of ETP installed by the industries

Though the PPCB informed that action against the non compliant industries are being taken regularly **but the committee observed that the industrial units for inspection need to be selected based on risk for causing pollution such as their proximity to water body, past history and quantity of effluents and toxicity of effluent.**

**The Committee also directed that about 15 % of the industries should be inspected by the Senior Level Officers of PPCB.**

### 2.1.5. Setting up of new/upgradation of STP's

As per the Action Plan prepared by the State Government, the status of setting up of new STPs is mentioned as under:

	Funds Tied up					Funds Not tied up	Total
	DPR Stage	Land Acquisition	Tendering Stage	Work in progress	Total		
Sutlej	0	2	5	8	15	28	43
Beas	2	1	3	1	7	8	15

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**The Committee desired that the detailed review of the STPs shall be carried out in the next meeting.**

### **2.1.6 Setting up of the new/ upgrading of CETPs in the catchment area of these rivers.**

The progress with regard to installation of CETP for treatment of effluent from dyeing industries of Ludhiana was presented before the Committee. After detailed deliberation in the matter, the Committee directed PPCB as under:

- i. **Two CETP of capacity 15 MLD and 40 MLD for treatment of dyeing effluent shall be installed by 30.06.2019 and 31.10.2019, respectively.**
- ii. **PPCB shall strictly monitor the 3<sup>rd</sup> CETP to restart the same in a time bound manner.**
- iii. **Legal framework for setting up of CETPs and their Operation and maintenance shall also be examined.**

### **2.1.7 Setting up of ETPs for Dairy effluent:**

It was observed by the Committee that the dairy effluent is a major source of pollution in the river because it contains high organic and bacteriological load, which degrade the quality of the water of the river drastically. **Therefore, the committee directed the Municipal Corporation, Ludhiana to finalize the firm time lines for setting up of the ETPs and biogas plants for treatment of dairy effluent for dyeing complex at Tajpur Road and Haibowal, Ludhiana.**

### **2.1.8 Reuse of treated wastewater for irrigation**

The committee gave the following directions to the concerned Departments w.r.t. utilization of treated waste water for irrigation.

- i) Department of Soil & Water Conservation shall present the latest progress for setting up of the irrigation schemes for utilization of treated sewage for irrigation.
- ii) The Department of Water Resources shall channelize the lower Budha Nallah, to be used as carrier, to carry the treated sewage along with treated industrial effluent of Ludhiana area for irrigation of the fields of the farmers of the adjoining villages so that discharge into river Sutlej may be cut off .

### **2.1.9 Action taken to prevent dumping of solid waste into Budha Nallah:**

The Committee directed Municipal Corporation, Ludhiana to take effective measures including installation of CCTV cameras, fencing and awareness and challaning of the offenders to keep a check on the dumping of solid waste into Budha Nallah.

#### **2.1.10 Setting up of treatment facility to treat the domestic sewage of villages:**

The Committee directed Department of Rural Development & Panchayats to implement the Action Plan regarding installation of treatment facility to treat the domestic sewage of the villages in a time bound manner.

#### **2.1.11 Organization of Health Camps**

The Committee directed the Department of Health & Family Welfare to organize regular Health Camps in the vicinity of river Sutlej and Beas and detect the persons affected with the water borne deceases along with other related dangerous deceases.

**In this first meeting, the Chairman of the Committee informed the senior officers of the State Government that the regular site visits to all the critical and vulnerable points of sources of pollution would be conducted by the Monitoring Committee to review the progress on monthly basis. All the stakeholder departments were directed to nominate Nodal Officers and firmly adhere to the timelines for implementation of Action Plan in compliance of the orders of the Hon'ble NGT. It was also stressed that involvement of civil society is must for concrete and substantial outcomes. It was also emphasized that all the relevant rules and other guidelines must be implemented in letter and spirit and officers at all levels to enforce the same with due diligence.**

The minutes of the meeting held on 20.03.2019 are annexed as per Annexure 4.

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### 3.0 Visit of Monitoring committee of MSW site SBS Nagar and STPs of Sultanpur Lodhi Area on 26/3/2019 and 27/3/2019.

The monitoring committee visited the Municipal Solid Waste Management plant at SBS Nagar, STP, Village Seechewal and STP, Sultanpur Lodhi on 26.03.2019 and 27.03.2019. The detailed report is attached as per **Annexure-5**. Briefly, the contents of the report are mentioned as under:

#### Visit on 26/03/2019

### 3.1 Municipal Solid Waste Management Site SBS Nagar:

Monitoring Committee visited the Municipal Solid Waste Management site SBS Nagar on 26/3/2019. In this town about 10-12 TPD solid waste is generated which comprises of 50% degradable waste, 25% dry recyclable, 25% non-recyclable and inert waste.

With the consistent efforts made by the Local Bodies Officers and President of the Municipal Council, door to door collection, transportation of the segregated material started and composting of the degradable waste and recovery of the material has been started in the town in the year 2018 which resulted into composting of the waste aerobically and about 6 TPD waste is recovered in the form of compost and 25% recyclable waste is recovered, segregated and sent to the Kabbadies. Now there is more than 90% door to door collection of waste and at source segregation.

Thereafter, a meeting with the stakeholder was taken, wherein a large no. of persons participated. In the meeting, it was apprised that Hon'ble NGT has constituted the Monitoring Committee to monitor the various activities with regard to control of pollution due to Municipal Solid Waste, domestic and industrial sources along Rivers Sutlej and Beas. More emphasis was laid on the use of non-plastic material to discourage the use of plastic bags/material. The persons present in the meeting were requested to keep their surrounding and sources of drinking water and surface water clean and pollution free.

### 3.2 STP SBS Nagar:

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The Monitoring Committee visited 06 MLD capacity STP at SBS Nagar. The STP was functioning on MBBR Technology. **Some of the Areas/Colonies are yet to connect to STP for which Municipal council is required to connect the same.**

**Visit on 27.03.2019**

### **3.3 Stretch along Kala Singian Drain:**

Monitoring Committee along with Officers of concerned stakeholder departments visited the Kala Singian Drain to take stock of situation. It was observed that foul smell was emanating from the wastewater flowing in the Kala Singian Drain.

**The Monitoring Committee directed Punjab Pollution Control Board Officers to collect at least 10 samples of ground water in the catchment area of Kala Singian Drain by following the due sample collection protocols.**

During discussion, the officers of PWSSB informed that the outlets at three locations along railway line presently, discharging untreated wastewater around 10 MLD into Kala Singhian drain, are being connected to the main sewerage network leading to the existing 50 MLD STP at Basti Peer Dad, Jalandhar by 15 April, 2019. They further assured that thereafter no untreated wastewater from these outlets shall be discharged into Kala Singhian drain.

With regard to performance of CETP Leather Complex Jalandhar, PPCB claimed that there is substantial improvement in the performance of the CETP. However, to achieve the prescribed standards, there is proposal for up-gradation of the existing CETP for which, DPR is under preparation with PETS.

Further, the Monitoring Committee directed Punjab Pollution Control Board officers to make surprise inspection of the industries of Jalandhar to ensure that no untreated wastewater is discharged into sewerage system and these industries must achieve the standard prescribed by the Board.

### **3.4 Low cost STP at Vill Seechewal**

The Monitoring Committee also visited the low cost STP at Village Seechewal. In order to treat the domestic wastewater of Village Seechewal, a low cost STP known as Waste Stabilization Pond (WSP) has been set up at village Seechewal. The treated wastewater from this pond is utilized for irrigation of agriculture fields.

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### **3.5 Ponds provided along Railway line near Chandigarh Colony, Sultanpur Lodhi**

In order to treat and regulate the flow of wastewater of Chandigarh Colony of Sultanpur Lodhi, 3 ponds have been provided to impart treatment. Now the treated wastewater is being utilized for plantation developed along Railway line. These efforts have been made by Sant Balbir Singh Seechewal and his followers.

### **3.6 STP Sultanpur Lodhi**

Monitoring Committee along with other Officers of Municipal Committee, Sultanpur Lodhi visited 2.6 MLD STP, which is based on Waste Stabilization Pond (WSP) technology. During visit, STP was in operation. The analysis results of treated sewage of STP were also shown to the committee and it was observed that the parameters namely BOD, COD and F.Coli are beyond the permissible limits prescribed by the PPCB. Furthermore, sludge in fluffy form was found floating, which indicate that the STP required de-sludging, which has not been done since its commissioning in the year 2003. **Therefore, there is need to de-sludge the STP to improve its performance and effectiveness. The treated waste water of STP was being utilized for irrigation of agriculture fields.**

**Now the STP Sultanpur Lodhi has been again visited on 22/5/2019 and the position of STP was the same which was earlier noted on 27/3/2019, therefore, the Monitoring Committee has recommended for taking legal action against M.C. Sultanpur Lodhi and responsible officers for not improving the performance of STP.**

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#### **4.0 Visit of the Monitoring Committee to the Industries and STP of Nangal Area on 18/4/2019**

The monitoring committee visited the industries and STPs of Nangal Area on 18.04.2019. The detailed report is enclosed as per **Annexure-6**. The brief report and observations of the committee are mentioned as under:

#### **4.1 National Fertilizer Ltd., Naya Nangal**

For the treatment of effluent generated from urea hydrolysis section, effluent treatment plant consisting of collection tank, chlorination of ammonia containing effluent, pH adjustment tank and the treated effluent is utilized for de-ashing of boiler ash which is further carried to ash dyke ponds and overflow of the ash dyke pond is utilized back into the process for the de-ashing of the boiler ash. The once through cooling water is discharged into river Sutlej.

##### **4.1.1 Observations of the Committee**

The rise in temperature at inlet and outlet after cooling should not increased by 5°C. as prescribed by MOEF for which the industry has provided series of tanks with Zig-zag mechanism to guide the flow of cooling water into these tanks to drop the temperature.

#### **4.2 M/s Punjab Alkalies & Chemical Ltd., Naya Nangal, Distt. Roopnagar**

The committee after visiting the industry, made the following observations

##### **4.2.1 Observations of the committee**

- 1) Though the industry has claimed that 20-30 % of the RO permeate generated from RO system is utilized for irrigation purpose and rest of the quantity of effluent (70-80%) is again taken into ETP for its re-treatment, but, the committee is of the view that it is difficult to retreat the RO reject water with freshly generated effluent, whereas the RO reject water must be taken to the Multi Effect Evaporator for its evaporation and dried sludge must be sent to the TSDF site developed at Village Nimbuan, Tehsil Dera Bassi, Distt. SAS Nagar.
- 2) The facts indicate that the industry does not operate its RO system regularly to treat whole of the effluent and even the RO reject water containing high value of TDS is utilized for irrigation which may increase salt contents in the soil and further may reduce the fertility of the land.
- 3) The capacity of RO system is inadequate. The industry needs to increase the capacity of the RO system preferably two stage RO system to recover the

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maximum quantity of permeate and low generation of rejection from RO system so that it can be easily evaporated in the Multi Effect Evaporator.

- 4) The permeate from RO system is being discharged on to land for plantation which is not appropriate option. The industry need to reuse RO permeate in the processes of the industry to minimize the usage of fresh water.
- 5) The Industry need to submit the water balances statement to PPCB.

#### **4.3 Sewage Treatment Plant installed by Punjab Water Supply & Sewerage Board of capacity 8 MLD, Mojowal Road, Naya Nangal**

The committee after visiting the STP, made the following observations

##### **4.3.1 Observations of the Committee**

- 1) The sludge drying beds provided by the PWSSB were found almost dry which indicate that the industry has not withdrawn the sludge from secondary clarifier for the last 10-15 days
- 2) The PWSSB has not provided any separate shed for storage of the dried sludge so that new sludge to be generated daily may be taken into these beds.
- 3) The sludge drying beds have not been maintained properly.
- 4) M.C Nangal shall comply with ten common action points for managements of solid waste at dumping site scientifically.

#### **4.4 Sewage Treatment Plant installed by Punjab Water Supply & Sewerage Board of capacity 5 MLD, Village Burarri, Nangal**

The committee after visiting the STP, made the following observations

##### **4.4.1 Observations of the committee**

- 1) A bye pass drain carrying untreated sewage of locality mixing with treated sewage of STP was leading to river Sutlej. This drain was identified by the Committee Members, whereas no information in this regard was disclosed by the concerned Executive Engineer and Sub Divisional Engineer of Punjab Water Supply and Sewerage Board, moreover as inform by Sh. Ashok Kumar Sharma, Environment Engineer Punjab Pollution Control Board, the fact regarding existence of bye pass drain was already in the knowledge of Executive Engineer of PWSSB. As such, these officers have mislead the committee about bye-passing of untreated sewage and discharging the same into river Sutlej during visit, the effluent sample after the confluence point of treated sewage and untreated sewage carried through this drain was collected and the sample was handed over to PPCB team for analysis.

- 2) For dewatering of secondary sludge, the department has provided filter press and semi dried sludge is collected in a small pit, which is not scientifically designed to dry and store the sludge.
- 3) Member of the committee were also shown the discharge of untreated sewage of Jawahar market into drain and further leading to river Sutlej by the local residents of Naya Nangal. **The concerned Executive Engineer of PWSSB informed that this discharge point shall be connected to 5 MLD soon after the approval given by railway authorities.**

#### **4.5 Sewage Treatment Plant installed by BBMB of capacity 6.75 MLD, Nangal**

The committee after visiting the STP, made the following observations

##### **4.5.1 Observations of the Committee**

- 1) STP was not in operation at the time of visit. The representative of the Department claimed that due to electricity failure, the plant has become non operational for a shorter period.
- 2) The authorities of BBMB later on started the operation of the STP after the arrival of the committee at site.
- 3) Anaerobic digester is not being operated properly, resulting in no generation of methane gas and digestion of the sludge anaerobically. No skilled/ trained man power is available with the Department for effective operation of anaerobic digester.
- 4) The condition of the sludge drying beds was pathetic because most of the sludge drying beds were full of wild grass which indicate that inspite of ineffective functioning of anaerobic digester, the sludge is not dried on sludge drying beds which indicate that STP is not being operated regularly and properly.
- 5) A bye pass arrangement has been maintained to bye pass the effluent. The representative of the BBMB claimed that the bye pass arrangements have been maintained to bye pass the effluent in case of any emergency.

Based on the observations made by the monitoring committee with respect to visit to the STPs, the committee made its recommendations as under:

#### **4.6 Recommendations:**

- 1) The observations of the Monitoring Committee with regard to the STPs and industries be conveyed to PPCB, PWSSB, BBMB and M.C Naya Nangal for further Immediate action in the matter.

- 2) PWSSB authorities be asked to issue show cause notice to Sh. Rahul Kaushal, Executive Engineer and Sh. Tarun Gupta, Sub Divisional Engineer for misleading the Committee about bye pass drain, carrying untreated sewage, leading to river Sutlej.
- 3) BBMB authorities be asked to issue advisory letters to Sh. Manvinderpal Singh, Executive Engineer and Sh. Sukhdev Singh, Sub Divisional Engineer regarding irregular operation and non maintenance of STP and worst condition of sludge drying beds, which were not found used for the last so many days, because these sludge drying beds were found full of wild grass.

The visit report of the monitoring committee alongwith its observations and recommendations were sent to the CEO, Punjab Water Supply & Sewerage Board, Chairman, PPCB, Chairman BBMB and EO, Municipal Council, Nangal vide committee letter no. CEC/2019/64-67, dated 25.04.2019, a copy of the same is enclosed as per **Annexure-7.**

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**5.0 Second meeting of the monitoring Committee to review the progress of implementation of Action Plan for river Sutlej and Beas held on 24.04.2019.**

During the second meeting of the monitoring committee, the following issues were discussed which are briefly mentioned as under:

**5.1 Monitoring of water quality of river Sutlej and Beas**

It was apprised that PPCB has identified 7 locations for installation of Real Time Water Quality Monitoring Stations. The Board is further interacting with the various suppliers for finalizing the technical specification for preparing tendered document. The proposal includes operation and maintenance for 5 years. The Monitoring Committee recommended as under:

- i. The quality of river water for the month under report should be compared 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 the domestic sewage or industrial effluents or any other reason should be stated. The flow of river shall also be taken into account while comparing the data of water quality of the rivers.
- ii. PPCB shall install Real Time Water Quality Monitoring Stations expeditiously.

**5.2 Review of monitoring of functioning of existing STP's in the catchment area**

The detailed presentation was given by the Secretary Local Government with regard to functioning of existing STP's falling in the catchment area of River Sutlej and Beas.

After detailed deliberations on all the issues, the monitoring committee decided as under:

- i. The Department of Local Government must prepare a comprehensive manual for O & M of all STP's and towards ensuring compliance with the prescribed norms. A copy of the manual may be send to the department of Environment and PPCB for suggestions.
- ii. Financial penalty must be imposed on the contractors maintaining STP's which don't meet the Standards and suitable provisions must be built in the contracts, if required. All O & M contracts must have inbuilt mechanism for meeting the standard and levying of the penalties in case of failure. The department must submit a compliance report along with Action taken against the contractors.
- iii. Supervisory staff shall also be held responsible and accountable if there is no improvement in the functioning of the STP's. Their role and responsibilities shall be clearly documented and the same shall also be linked to their performance assessment.

- iv. The Department will get all bye pass systems sealed in the presence of Board Officials. In case of emergency, the department will break the seal and use the by-pass system and simultaneously inform the board officials, who would inspect the site and seal the by-pass system again after the emergency is over. Proper record will be maintained by the department Local Government duly counter signed by the board officials visiting the site. Any unauthorized use of bye pass system will invite penalties.
- v. Composite samples would be taken by the board for STP's in Ludhiana and Jalandhar for the time being keeping in view the shortage of staff with the Board.
- vi. The board shall expedite hiring of the requisite field staff after the election code of conduct is over.
- vii. The Department of local government and municipal corporation shall ensure that the waste water being carried through municipal sewer is treated and then discharged into Budha Nallah.
- viii. Online continuous monitoring system shall be made assessable to the members of the Monitoring Committee, PPCB and DECC to see the compliances. If the STP continue to default except on account of industrial effluents, which are to be taken care of by the Board then the concerned ULB will be liable to pay environmental compensation for polluting the rivers.

### **5.3 Monitoring of functioning of CETP's in the catchment area:**

- i. It was decided that monitoring of all tankers, which bring untreated industrial effluent to CETP from various locations shall be effectively so that there is no possibility of untreated effluent being discharged without bringing it to the CETP. Suitable mobile application and GPS system should be used for effective functioning.
- ii. Leather CETP should be monitored effectively and environment compensation should be levied for exceeding the prescribed standards.

### **5.4 Monitoring of functioning of ETP's installed by the industries:**

- i. For effective use of continuous monitoring system, the Board shall set up a dedicated team to monitor the data of the continuous monitoring system and detect any non compliance and take action. The online system interface may also be made available to the members of the monitoring committee and the DECC so that they can see the compliances online.
- ii. The Board should carry special monitoring of ETP's of the industries located in the catchment area of Jamalpur STP.

- iii. Some of the ETP's of the industries with high risk are required to be inspected personally by the chairman of PPCB as the local officers at times may not be in a position to carry out their duties in a free and fair manner due to various local factors.
- iv. The samples of atleast 10% of ETP's should got analyzed from 3<sup>rd</sup> party by department of Environment.

#### **5.5 Progress of setting up of New/Upgrading CETP's in catchment area:**

- i. PPCB shall closely supervise the time schedule given by the SPV's for timely completion of CETP. The Board shall impose environmental compensation after the due date.
- ii. The Board shall also put in place a legally binding mechanism for successful operation of these CETP's.
- iii. The board shall also analyze the design parameters of the CETP's to ensure that they would be able to treat the industrial effluent of the respective industrial clusters.
- iv. Conveyance system for carrying the industrial effluent to CETP shall also be ensured.

#### **5.6 Setting of ETP's for dairy and others misc. waste:**

It was decided that Department of Environment may held separate meeting with PEDDA for setting up of ETP's for dairy waste.

#### **5.7 Release of fresh water in Budha Nallah and Holy Bein:**

It was decided that the Department of Water Resources shall submit the Road Map to the Department of Environment for release of 300 cusecs of Water into Holy Bein and 200 cusecs of water into Budha Nallah through Nilon drain.

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#### **5.8 Reuse of treated waste water for irrigation and other purposes:**

It was informed to the Monitoring Committee that a separate Action Plan on reuse of treated waste water is being prepared by the Department of environment as per the directions of Hon'ble NGT.

#### **5.9 Action taken to prevent dumping of Solid Waste into Budha Nallah:**

The monitoring committee directed Municipal Corporation Ludhiana to initially undertake 500m stretch of Budha Nallah to prevent dumping of solid waste by taking various measures such as installation of CCTV cameras, manual monitoring with involvement of social welfare organization and hiring of the man power. It was further directed that offenders be challenged regularly.

#### **5.10 Setting of treatment facility in the villages:**

The monitoring committee was informed that appropriate technology for treatment of Sullage of villages will be finalized by the committee constituted under Chairman PPCB.

#### **5.11 Shifting of small/medium scale scattered dyeing units:**

It was discussed that scattered units either plan for separate CETP or achieve ZLD.

#### **5.12 Organization of Health Checkup Camps:**

The Chairman of the Monitoring Committee directed Department of Health and Family welfare to carry out epidemiological studies to study the effect of water borne diseases on human health in catchment area of rivers.

#### **5.13 Public awareness programs regarding cleaning of rivers:**

It was decided that MC Ludhiana shall organized the capacity building and awareness activities.

The other decisions taken in the meeting are summarized as under:

- i. Chairman of the Monitoring Committee decided that disciplinary action will be recommended against the officers/ officials found negligent in their duties.
- ii. Focus must be made on 5 STP's and 3 CETP's Ludhiana to take care of major challenges of cleaning of Budha Nallah as well as river Sutlej.

The detailed minutes of the meeting held on 24.04.2019 are annexed as per **Annexure-8.**

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## **6.0 Visit of the Monitoring Committee of Pollution Sources in Budha Nallah and status of STP's on 01.05.2019**

The Monitoring Committee visited the pollution sources into Budha Nallah and sewage treatment plants provided by the Municipal Corporation Ludhiana on 01.05.2019. The detailed report of the committee is annexed as per **Annexure-9**. The brief observations and recommendations of the committee are mentioned as under.

### **6.1 Visit along Budha Nallah**

### **6.2 Budha Nallah at Bhamian Kalan, Ludhiana**

The Monitoring Committee along with officers of the various departments, started its visit to the Budha Nallah from Bhamian kalan, the point where it enters into Ludhiana. At this point, the quality of water in Budha Nallah was found deteriorated due to the discharge of M.C. Sahnewal and Machhiwara. It was informed to the committee that these municipal councils have installed their Sewage Treatment Plants (STPs).

**The committee desired that STPs of these municipal councils be monitored by Punjab Pollution Control Board to check their performance.**

The discharge in Budha Nallah at this point is shown as under.



**Budha Nallah at Bhamian Kalan**

### **6.3 Sewage Treatment Plant Jamalpur:**

The capacity of the STP Jamalpur is 48 MLD. The officers of Punjab Pollution Control Board and Municipal Corporation, Ludhiana informed that presently, the discharge into this STP is about 111 MLD which is due to discharge from industries of Tajpur Road and Focal Point and residents of nearby colonies. **During visit to STP by the committee, it was observed that the STP was**

not operation and the officers of Municipal Corporation, Ludhiana informed that this STP is lying defunct and non-functional.

After visiting the STP Jamalpur, the committee has directed as under:

**The Committee directed the Municipal Corporation, Ludhiana to rehabilitate the STP based on appropriate technology and sewage flow entering into STP in view of future increase in discharge due to growth in population.**

#### **6.4 Dairy Complex, Tajpur Road, Ludhiana:**

The wastewater from Dairy Complex, Tajpur Road (5 MLD) is discharged into Budha Nallah without any treatment which deteriorates its quality.

**The committee desired that the Municipal Corporation, Ludhiana shall prepare concrete and firm proposal for treatment of wastewater from Dairy Complex, Tajpur Road. In case, these dairies are to be shifted to designated area, the firm timelines must be submitted so that the discharge from these dairies may be cut off from entering into Budha Nallah.**

The discharge from dairy complex into Budha Nallah is shown as under.



**Untreated Discharge from Dairy complex, Tajpur Road into Budha Nallah**

#### **6.5 Transport Nagar outlet into Budha Nallah Near Gurdwara Gaughat:**

Lot of discharge of wastewater (60 MLD) coming from Transport Nagar was found entering into Budha Nallah.

**The committee desired that this outlet should be connected to the main sewerage system leading to the nearest STP.**

## 6.6 Common Effluent Treatment Plant (CETP) Bahadurke Road, Ludhiana

To treat the effluent of 23 dyeing industries of Bahadurke Road dyeing complex, Ludhiana, 1.5 MLD CETP is under construction, which is almost on completion stage.

**The committee desired that the CETP must be completed by 30.06.2019.**

## 6.7 Qasabad (confluence of STP Bhattian outlet with River Sutlej) and STP Bhattian

At Bhattian, Municipal Corporation, Ludhiana has installed two STPs of capacity 111 MLD and 50 MLD based on UASB and SBR Technology, respectively. The combined treated sewage of both these STPs is discharged into river Sutlej. During visit, it was observed that the color of the treated sewage entering into river Sutlej was black in colour which indicates that the performance of STP is not satisfactory.

After the visit of confluence point, the committee also visited STP's of capacity 111 MLD and 50 MLD. The colour of final outlet of 50 MLD STP was physically seen by the Committee and it was observed that the color was almost clear but with slight pink tinge. **Therefore, the committee desired that the treated sample must be analyzed from a reputed laboratory for its chemical analysis to identify the reasons for color in the treated sewage.**

The quality of treated sewage from outlet of 111 MLD UASB based STP was also seen physically by the committee and it was observed that the color was black which indicated that the treated sewage was contaminated and it was felt that the STP is not functioning properly and it needs upgradation/rehabilitation as per the time schedule mentioned in the Action Plan.

The confluence of combined partially treated sewage through STPs of capacity 50 MLD and 111 MLD with river Sutlej is mentioned in the photograph given below:



**Confluence of combined partially treated sewage of STP Bhattian with river Sutlej**

After visiting the above STPs, the Committee members took serious view about the discharge of partially treated sewage into river Sutlej, resulting in deterioration in the quality of river water. The officers of Municipal Corporation, Ludhiana were directed to improve the performance of STP. The committee desired that the corporation should explore the possibility of wet dredging in consultation with experts from the relevant department.

#### **6.8 Sewage Treatment Plant Balloke of capacity 257 MLD**

The total capacity of STP's at Balloke is 257 MLD. Two STPs of capacity 152 MLD and 105 MLD have been installed which are based on UASB and SBR Technology, respectively. The quality of treated sewage coming from both these STPs was seen physically by the committee and it was observed that the color of treated sewage was quite black which indicate that the sewage is not being treated properly and effectively. **It was felt that there is need to upgrade/rehabilitate the STP based on UASB technology as per the timeline given in the Action Plan.**

#### **6.9 Disposal of effluent from Dairy Complex, Haibowal into Budha Nallah and Bio-gas Plant, Haibowal**

There is a dairy complex at Haibowal. From this Dairy Complex, about 400 TPD animal dung is generated, out of which 180 TPD is given to Bio-Gas Power Plant, Haibowal and rest of the animal dung is sold by the dairy owners in the market.

During visit, it was observed that the plant was not functioning. The liquid effluent (10 MLD) in the form of washings and urine of animals is directly discharged into Budha Nallah. The officers of Municipal Corporation, Ludhiana informed that there is a proposal to install 10 MLD ETP for this dairy complex. Alternatively, the Corporation has also proposal to shift these dairies to the designated area for which concrete decision is yet to be taken.

**The committee desired that the Municipal Corporation, Ludhiana shall prepare concrete and firm proposal for treatment of wastewater from Dairy Complex, Haibowal. In case, these dairies are to be shifted to designated area, the firm timelines must be submitted so that the discharge from these dairies may be cut off from entering into Budha Nallah.**

#### **6.10 Budha Nallah at Barnhara Bridge**

The members of the committee also visited the Budha Nallah at Barnhara Bridge. It was observed that lot of wild grass and other plants were grown in the Budha Nallah and the effluent was passing under the layer of these wild grass and other

plants. The quality of effluent falling into Budha Nallah was quite black and was giving stinking odor.

**The committee took a serious note in this regard and decided as under:**

- 1) Department of Water Resources shall take immediate steps to desilt the Budha Nallah at this location and desilting process be completed within 15 days.**
- 2) Department of water resources shall desilt Budha Nallah within city area within 2 months i.e. before monsoon.**

### **6.11 Confluence point of Budha Nallah with river Sutlej**

The committee also visited the place where the Budha Nallah meets with river Sutlej. The quality of effluent flowing into Budha Nallah was quite dark which indicate that the water flowing into Budha Nallah was contaminated with high level of organic parameters such as BOD, COD and TSS etc. The confluence of Budha Nallah in river Sutlej was showing different coloured streams of Budha Nallah and river Sutlej and the same is shown in the photograph given below.



**Confluence of Budha Nallah with River Sutlej**

The residents of the nearby villages, present at site, made complaint that they are suffering with serious diseases like hepatitis-c, because of seepage of Budha Nallah water.

**Therefore, the Chairman of the committee desired that Medical Health Camp be organized in these villages, he may also be invited in the camp.**

**It was also desired that the Punjab Pollution Control Board should conduct ground water sampling at 5-6 locations in Village Walipur in**

the presence of Sarpanch of the village to assess the quality of the ground water.

#### **6.12 Verification of complaint made by Sh. Nitin Dhiman, Press reporter of Punjab Group of Kesari Newspaper**

In the press conference held on 01.05.2019 at Ludhiana, Sh. Nitin Dhiman, Press reporter of Punjab Kesari Group of Newspaper raised an issue regarding discharge of trade effluent by some industries and which has been freshly closed, in view of the visit of monitoring committee. As per his information, there are five outlets which are directly discharged into Budha Nallah without any treatment.

Sh. Parmjit Singh, Environmental Engineer of Punjab Pollution Control Board and Sh. Ranbir Singh, Executive Engineer, Municipal Corporation Ludhiana visited the area on the same day i.e. on 01.05.2019 and it was observed that out of five outlets, two outlets were not in existence. Out of remaining three outlets, two were from scattered dairies and 5<sup>th</sup> outlet was found maintained as overflow of the main sewer, laid to the proposed CETP of 50 MLD at Tajpur Road, Ludhiana into Budha Nallah. In this sewer line, a manhole has been kept from where two pipelines of 12" diameter each leading to Budha Nallah, were found laid. Sh. Ranbir Singh, Executive Engineer of Municipal Corporation, Ludhiana informed that the said sewer line has been laid by the Punjab Dyers Association on its own. During visit, this pipeline was plugged by the Municipal Corporation, Ludhiana.

**The committee took a serious view in this regard and directed as under:**

- Buk*
- 1) Chairman Punjab Pollution Control Board shall take legal action under the provisions of the Water Act, 1974 against the Municipal Corporation Ludhiana and Punjab Dyers Association, Ludhiana which has maintained unauthorized direct outlets into Budha Nallah through the sewerage system and Municipal Corporation has not checked these unauthorized outlets, whereas, such discharges are not allowed into Budha Nallah.**
  - 2) Chairman PPCB shall take disciplinary action against the Assistant Environmental Engineer, who is looking after the area of Tajpur Road, for not reporting the existence of said unauthorized outlet into Budha Nallah.**
  - 3) Chairman PPCB shall direct Municipal Corporation Ludhiana to remove all the outlets carrying industrial wastewater directly into Budha Nallah. Officers of PPCB shall coordinate in the matter.**

**4) Municipal Corporation should be more vigilant in future so that no such illegal discharges are allowed into Budha Nallah.**

The report on visit to the above mentioned pollution sources into Budha Nallah and sewage treatment plants provided by the Municipal Corporation, Ludhiana, along with observations on various points and recommendations made by the committee have been sent to the Chairman, PPCB, Municipal Corporation, Ludhiana and Chief Engineer, Drainage, Department of Water Resources vide committee letter no. CEC/2019/93 dated 15.05.2019 (copy annexed as per **Annexure-10**)

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## 7.0 Report on Visit to Industries, Sewage Disposal points into Kala Singhian Drain and STPs of Jalandhar Area by the Monitoring Committee on 08.05.2019.

The monitoring committee made its visit to the industries, Sewage disposal points into Kala Sanghian drain and STPs of Jalandhar area on 08.05.2019. The detailed report, prepared by the committee, is annexed as **Annexure-11**. The brief report is discussed as under:

### 7.1 Disposal points of sewage of Focal Point, Jalandhar maintained by PSIEC

#### 7.1.1 Disposal point located in Beant Singh Park

This disposal point has been connected with MC sewer. At this disposal point, lot of oil and grease (as mentioned below) was observed in the collection sump.



**Oil & Grease in the collection sump**

#### 7.1.2 Second disposal point near M/s Jagran Prakashan Ltd.

The overflow of this disposal point exists in Kala Singhian drain, but during visit it was observed that this outlet was covered with fresh soil, **but the condition indicated that the outlet is being regularly operated by Punjab Small Industries & Export Corporation (PSIEC) and the same is discharged into Kala Singhian drain.**

Based on the inspection, the committee made the following recommendations

- i) **Punjab Small Industries & Export Corporation (PSIEC) should install separate STP, keeping in view the quantum of the discharge and the quality of the effluent being discharged into sewerage system / Kala Singhian drain.**
- ii) **Punjab Small Industries & Export Corporation limited (PSIEC) should cut off the discharge from Kala Singhian Drain within 10 days and get its connectivity with sewerage system.**

## 7.2 Visit to the Industries

### 7.2.1 M/s Victor Forgings, A-3-4 Focal Point (Extn), Jalandhar.

It is an electroplating industry having discharge about 4000 ltr/month which is sent to the CETP at Ludhiana. The effluent from barreling section is settled in the overhead steel tank with hopper mechanism and the sludge is drained out into the sludge drying beds. It was claimed by the industry that the sludge after drying is disposed of on low lying area. Sludge lying in the sludge drying beds is shown in the photograph given below.



**Sludge drying beds for drying of sludge generated from treatment of barreling section effluent**

**After visiting the industry, the committee made the following recommendations**

- i) **PPCB shall get analyze the quality of sludge w.r.t. parameters as expected in the sludge.**
- ii) **PPCB shall verify the actual discharge of electroplating effluent generated by the industry and it shall match with the quantity lifted by CETP operator and shall ensure that no untreated effluent is discharged into sewerage system.**

### 7.2.2 M/s Vishal Tools & Forging Pvt. Ltd, B-9 Focal Point (Extn), Jalandhar.

It has installed electroplating machinery and is disposing of trade effluent to Common Effluent Treatment Plant at Ludhiana. The industry also has installed barreling process and effluent from barreling section is reused in process through sedimentation mechanism. After visiting the industry, the committee made the following recommendations.

- i) **PPCB shall get analyze the quality of sludge w.r.t. parameters as expected in the sludge.**
- ii) **PPCB shall verify the actual discharge of electroplating effluent generated by the industry and it shall match with the quantity lifted by CETP operator and shall ensure that no untreated effluent is discharged into sewerage system.**

#### **7.2.3 M/s Proxima Steel Forge Pvt Ltd, B 14-15, Focal Point Extn, Jalandhar.**

It has installed oil fired reheating furnaces, powder coating plant, induction hardening. The industry has removed its electroplating machinery as informed by the person available at site. After visiting the industry, the committee made the following recommendations.

- i) **PPCB shall get cancel the MoU made by the industry with CETP, Ludhiana, for the lifting of the effluent so that in future it may not operate the electroplating process.**
- ii) **PPCB shall cancel the consents granted to the industry under the Water Act, 1974.**
- iii) **PPCB shall issue directions under the provisions of the Water Act, 1974 to the industry to dismantle the electroplating machinery to ensure its non operation.**

#### **7.2.4 M/s Talbro Forging, C-88, Focal Point Jalandhar**

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The industry is engaged in the manufacturing of finished tools with electroplating process from which the effluent about 12000 ltr/month is generated and the same is sent to CETP at focal point Ludhiana for treatment. It was also observed that the industry has closed its electroplating process and now there is no machinery within its premises. The committee made its recommendations as under:

- i) **PPCB shall cancel its consents granted to the industry under the Water Act, 1974 and Air Act, 1981 immediately.**
- ii) **PPCB shall direct CETP operator to cancel his agreement.**
- iii) **PPCB shall get disconnect its electric connection from the concerned department, so that it may not operate its electroplating process and other polluting machinery.**

#### **7.2.5 M/s Doaba Co-operative The Doaba Cooperative Milk Producers Union Ltd, G.T Road, Bye Pass, Jalandhar.**

The industry is large scale unit engaged in the manufacturing of Milk products by processing milk. For the treatment of effluent generated from the industry it has

installed ETP based on Activated Sludge Process (ASP). During visit, ETP was in operation but the physical appearance of the sludge drying beds indicated that the industry has not extracted the sludge from secondary clarifier which indicate that the system is not being operated properly and appropriate MLSS, MLVSS & DO level are not maintained in the aeration tank.

The effluent sample collected during the visit indicated that the values of various parameters like TSS, COD and BOD were observed as 119 mg/l, 198 mg/l and 71 mg/l. The values of TSS and BOD are higher than the permissible limits of 100 mg/l and 30 mg/l. Based on the observations of the committee and analysis profile of the effluent sample collected from the final outlet of the ETP, the committee made the following recommendations.

- 1) **PPCB shall impose Environmental compensation on the industry amounting to Rs.10 lakh. This amount shall be spent on the rejuvenation of the quality of water of river Sutlej and maintain flora and fauna in the river.**
- 2) **PPCB shall issue directions under the provisions of the Water Act, 1974 to the industry for the upgradation/modification to be made in the existing effluent treatment plant within 3 months to achieve the various parameters of the treated effluent within the prescribed limits.**

### **7.3 Disposal of Sewage of Kalia Colony, Jalandhar:**

During visit, the committee observed that the untreated sewage of Kalia Colony is directly discharged into Kala Sanghian Drain without any treatment. Therefore, the committee made its recommendations as under:

- i) **The committee directed MC Jalandhar authority to connect these outlets to the sewerage system and disconnect their discharge from Kala Singhian drain within 07 days.**
- ii) **PPCB shall take legal action against the Municipal Corporation and other Govt. agencies in case the discharge into Kala Singhian Drain is not cut off by these agencies.**

### **7.4 Disposal Points near Sabji Mandi, Maqsudan Road, Jalandhar:**

During visit, it was observed that the Punjab Water Supply Sewerage Board has constructed one manhole for connecting the sewage of this area with sewer line of STP Peer Dad but it was found that the connection was made with flexible pipe fitted with pump, which was not acceptable to the committee. Another manhole which was under construction, was found submerged with sewage

because of non operation of lifting pumps. Based on the above observations, the committee made the following recommendations.

- i) **The officers of PWSSB and MC Jalandhar shall make joint efforts to connect all the outlets with the sewerage system, within one month and ensure that no untreated sewage should be discharged into Kala Singhian Drain.**
- ii) **PPCB shall take legal action against the municipal corporation Jalandhar and Punjab Water Supply and Sewerage Board in case these outlets are not cutoff from entering into Kala Singhian drain.**
- iii) **MC Jalandhar shall clean / de silt the sewer line of Zone-1, so that the sewage of the area may enter and treat into designated STP.**

#### **7.5 Disposal Points of Industrial Area, Jalandhar:**

During visit, it was observed that the pipeline from the manhole provided in the sewerage system to carry the sewage to STP Peer Dad, was found broken and the untreated sewage was being discharged into Kala Singhian drain. Therefore, the committee recommended that **PWSSB shall make necessary arrangements for disconnection of sewage outlet into Kala Singhian drain and sewage must flow to STP, Peer Daad. This work must be completed within 10 days.**

#### **7.6 Meeting with Deputy Commissioner Jalandhar**

The Monitoring Committee also held meeting with DC Jalandhar apprising him of the factual position as observed by the committee. The committee directed DC Jalandhar to immediately to call a meeting of Punjab Water Supply Sewerage Board, MC Jalandhar and Punjab Pollution Control Board Jalandhar and ask these authorities to coordinate with each other so that all the above said unplugged points be properly got connected with STP sewerage system and to ensure that no untreated sewage may enter into Kala Singhian drain.

**Deputy Commissioner, Jalandhar assured that soon after the election, the compliance of the above direction shall be made.**

#### **7.7 Common Effluent Treatment Plant (CETP) at Leather Complex, Jalandhar**

For the treatment of effluent from leather tanning unit of Jalandhar, which are located in Leather Complex, CETP has been installed which consists of Primary treatment system, aerobic biological system followed by secondary clarifier. The capacity of CETP is 5 MLD. The effluent after CETP is discharged into Kala Singhian Drain. As per the analysis results of the sample collected by the

monitoring committee on 08.05.2019, the values of the parameters namely TSS, TDS, BOD, COD and Chloride were observed as 130 mg/l, 13585 mg/l, 45 mg/l, 320 mg/l and 7250 mg/l respectively. These values were higher than the permissible limits of 100 mg/l, 2100 mg/l, 30 mg/l, 250 mg/l and 1000 mg/l, respectively. Based on the inspection and analysis results, the monitoring made the following recommendations.

- i) **PPCB shall issue directions under the provisions of the Water Act, 1974 to Punjab Effluent Treatment Society (PETS) to upgrade the CETP within the time schedule as mentioned in the Action Plan prepared by the State Government, Department of Environment to achieve all the parameters within the prescribed limits.**
- ii) **PPCB shall get performance guarantee of Rs 25 Lakh from PETS for effective operation of equipments to be installed for upgradation of existing CETP to ensure the achievement of standards as prescribed by the Board.**
- iii) **PPCB shall issue directions under the provisions of the Water Act, 1974 to PETS to install and commission the following systems within one month for effective monitoring of CETP.**
  - a) **Electromagnetic flow meter at the outlet of CETP.**
  - b) **pH measuring sensor to be installed in OCEMS.**
  - c) **Connectivity of OCEMS with CPCB and PPCB servers.**
  - d) **To ensure regular lifting of sludge from CETP and to send it to TSDF Nimbua.**
- iv) **PPCB shall issue directions under the provisions of the Water Act 1974 to PSIEC to disconnect all the outlets of storm water drain from Kala Singhian drain, presently carrying Sewage of Leather Complex, into said drain within 15 days. These outlets shall only be operated during rainy season in the presence of officials of PPCB.**
- v) **PPCB shall lay down primary effluent treatment plant standards of waste water to be further treated into common effluent treatment plant within 15 days.**
- vi) **Municipal Corporation Jalandhar shall close outlet maintained near STP Peer Daad to discharge untreated sewage into Kala Singhian drain within 15 days.**

#### **7.8 M/s Jay Dee Leather Pvt Ltd, Plot no 28, and 29, Leather Complex, Jalandhar:**

The Committee also visited one of the tanning unit namely M/s Jay Dee Leather Pvt Ltd, whose beam house (raw hide to wet blue leather) process exist in plot no. 29 and

finishing process (wet blue to dyeing process) in plot no. 28. After visiting the industry the committee made the following recommendations

- i) **PPCB shall carry out analysis of effluent before and after pre-treatment system to assess its adequacy and efficacy.**
- ii) **The quantification of sludge generated by all the tannery industries and lifted by PETS through designated vehicles must be made by PPCB within 15 days.**

### **7.9 STP Pholriwal (100MLD)**

To treat the sewage of part of Jalandhar area, STP based on UASB technology of capacity 100 MLD has been installed at Pholriwal. During visit, the condition of gas collection system of UASB was not satisfactory as the gas chamber was almost empty and little chances were there for the generation of methane. Moreover there is no mechanism available for flaring of biogas. These facts indicate that the functioning of UASB system is poor. During visit, it was observed that high dosing of chlorine was being given by the Municipal Corporation Officers, which was generating fumes and were irritable to the eyes. The quality of the effluent at final outlet of ETP is just improved by adding high dose of chlorine as disinfectant.

**The committee also observed that the sludge generated from sludge drying beds has not been removed and found stacked near the edges of sludge drying beds very low quantity of fresh sludge was observed in sludge drying beds.**

The committee also observed that a nallah carrying untreated sewage of some part of Jalandhar area was flowing near disposal points of STP.

Further, the officers of Punjab Water Supply Sewerage Board and MC Jalandhar informed that earlier there was a proposal for replacement of this 100 MLD UASB technology with 100 MLD SBR technology as mentioned in "Action Plan for Clean River Sutlej" but, now this proposal has been revised and there is proposal for rehabilitation of existing 100 MLD UASB technology to make it capable to achieve the prescribed standards.

The committee made the following recommendations:

- i) **Municipal Corporation Jalandhar shall upgrade/rehabilitate the existing UASB Technology system strictly as per the time schedule as mentioned in the Action Plan for "clean river Sutlej."**
- ii) **The existing components of STP must be operated efficiently and regularly so as to achieve the various parameters. PPCB shall make**

surprise inspection of STP w.r.t. its performance at least once in a month regularly.

- iii) Municipal Corporation Jalandhar shall install additional STP's as per the quantity of discharge of MC Jalandhar and ensure that no untreated sewage is discharged into any drain/Nallah leading to river Sutlej.
- iv) MC Jalandhar shall maintain adequate concentration of biomass in anaerobic biological treatment systems (UASB) in the range as prescribed in the design of UASB system. The necessary arrangements for flaring of biogas shall be made by the Municipal Corporation Jalandhar within one month.

#### **7.10 Restricted Supply of fresh water for domestic usage to the residents of the city as per prescribed norms:**

After visiting all pollution sources entering into Kala Singhian drain and other problems relating to excess discharge of sewage than the capacity of STP. **The committee decided that PPCB shall issue necessary directions to the Deptt. of Local Government to impose restriction on the excess use of water by the residents of Jalandhar area. The water supply given by the Government agency or through private mechanism, must be restricted to 135 lpcd. The department must adopt appropriate mechanism to reduce the water consumption from present use of 250-300 lpcd to 135 lpcd.**

**By adopting the said mechanism, the major advantages shall be as under:**

- i) The capacity of existing STPs may be sufficient to handle whole of the sewage of Jalandhar area.
- ii) There shall be lot of saving in ground water abstraction.
- iii) No need for installation of new STP's resulting in saving of crores of rupees of the State Government.
- iv) Lot of saving in terms of money in operation of STPs, less sludge handling and less quantity of chemical to be used.
- v) Lot of improvement in the quality of water of river Sutlej.

**The committee further desired that the restricted water consumption mechanism must be adopted for other big cities like Ludhiana and Jalandhar in the first phase. Later on, it can be replicated for the other towns of the State.**

The report on visit to the industries, sewage disposal points into Kala Singhian drains and STPs of Jalandhar area by the Monitoring Committee along with observations on

various points and recommendations made by the committee have been sent to the CEO, PWSSB, MD, PSIEC, Chairman, PPCB, Commissioner, MC, Jalandhar with copy to Principal Secretary, Environment and Deputy Commissioner, Jalandhar. vide committee letter no. CEC/2019/168-171 dated 30.05.2019 (copy annexed as per **Annexure-12**)

Ret

## 8.0 Report on visit to the STPs, sewage/Sullage disposal points into drains leading to Holy Bein (Kali Bein or West Bein) by the Monitoring Committee on 22.05.2019.

The monitoring committee visited STP Sultanpur Lodhi, Kapurthala and sewage/Sullage disposal points into drain leading to Holy Drain on 22.05.2019. The detailed report is annexed as per **Annexure-13**. The brief report along with observations and recommendations of the committee are mentioned as under.

### 8.1 STP Sultanpur Lodhi

STP of capacity 2.6 MLD, based on Waste Stabilization Pond (WSP) Technology, for the treatment of sewage of Sultanpur Lodhi town has been installed by Punjab water Supply and sewerage Board. The Monitoring Committee visited STP site on 22.05.2019 and the following observations were made.

- I. All the ponds of the STP have been found filled with sludge (**shown in Plates– 1, 2 and 3**) and the same have not been de-sludged so far.



**Plate- 1 : Ponds of STP filled with sludge**



**Plate- 2 : Ponds of STP filled with Sludge**



**Plate - 3: Ponds of STP filled with sludge**

- II. For lifting the sewage to be treated through STP, three lifting pumps have been installed, of which only one was in operation and remaining 02 no. pumps were found out of order.
- III. About 50% of the sewage was entering into STP and remaining about 50 % was being directly discharged into Sultanpur drain leading to Holy Bein.

**Therefore, the Committee recommends that PPCB shall take legal action against the MC, Sultanpur Lodhi and other responsible officers/officials for not operating the STP effectively and discharging the untreated sewage into Sultanpur drain leading to holy Bein.**

- IV. Physical appearance of components of STP indicate that the performance of the STP may be poor due to filling of these ponds with sludge.

During the visit, the Sh. Ajay Kawar, Chief Engineer, Local Govt., was contacted telephonically and he was apprised about the condition of STP and its other components. He assured as under:

- i) **02 pumps, presently not in operation, shall be replaced with 2 new lifting pumps and be made operational within 03 months.**
- ii) **He also assured that the ponds of STP shall be de-sludged within 03 months.**

*Bell*

## **8.2 Disposal of Sewage/ Sullage of Village Kheda Donna into Holy Bein.**

The disposal point of sewage of village Kheda Dona was visited and it was observed that about 0.3 MLD untreated sewage of the village Kheda Donna is discharged into Holy Bein (**shown as under**).



### **Untreated sewage of Village Kheda Donna being discharged into Holy Bein**

In order to facilitate the treatment of sewage of the village, the Department of Rural Development and Panchayat has provided pumping facility alongwith pipeline to carry the sewage to the pond, constructed by the Department. But the system could not be made operational due to non operation of pumping system. SDO, Department of Panchayati Raj informed that they have handed over the pond and pumping system to the village Panchayat Kheda Dona. Now for the operation and maintenance of pond, it is the responsibility of village Panchayat.

**Thereafter, S. Tajinder Singh, Sarpanch of the village, who was also present at site, informed that they were not aware about this project. He assured that now they will regularly operate the lifting pump, provided, to discharge the domestic effluent of the village into the pond and shall not discharge untreated domestic effluent into the Holy Bein.**

**The committee directed the SDO, Department of Rural Development and Panchayati Raj and Sarpanch of the Village Kheda Donna to make the system operational on 27.05.2019.**

*Ball*

### **8.3 STP Kapurthala (25 MLD)**

For treatment of sewage of Kapurthala town, STP of capacity 25 MLD, based on UASB Technology, has been installed by Punjab water Supply and sewerage Board.

- I. The UASB reactors were found choked with sludge resulting in least generation of biogas (**shown as under**).



**UASB reactor choked with sludge**



**UASB reactor choked with sludge**

*Bein*

- II. Polishing tanks were also filled with sludge and needs to be cleaned immediately.
- III. During visit, some quantity of untreated domestic effluent was been bypassed into the drain leading to Holy Bein.
- IV. Physical appearance of the components of the STP indicates that the performance of the STP is poor.
- V. The partial treated sewage was partly being discharged onto land for irrigation and partly into drain leading to Holy Bein.

- VI. Municipal Council, Kapurthala was not adding the dose of chlorine in the chlorination tank. The unused chlorine cylinders were found stored in the shed (**shown in as under**).



**Unused Chlorination tank lying in the shed**

- VII. During visit, the committee asked the concerned officer of Municipal Council, Kapurthala to raise the baffle walls provided in the chlorination tank and channelize the same to the pipe line leading to irrigation area.

#### **8.4 Bhulana Drain leading to Holy Bein**

Bek  
Bhulana Drain carries untreated domestic effluent of Rawal & its Colonies. The quantity of flow is about 1 MLD which is major source of pollution into Holy Bein. During discussion, it was apprised that STP of capacity 1 MLD has been proposed to be installed for the treatment of domestic effluent of these colonies for which Jalandhar Development Authority (JDA) has already released the funds amounting to Rs. 2.0 crore but till date, no steps have been taken to install STP for treatment of sewage of these colonies.

### 8.5 Disposal point into Wadala Drain leading to Holy Bein

During the visit, one disposal point at Kanjali Road, Kapurthala was found discharging untreated domestic effluent into Wadala Drain leading to Holy Bein (shown as under).



**Wadala Drain carrying untreated domestic effluent of some localities of Kapurthala town**

It was informed to the committee that this domestic sewage is from some localities of Kapurthala town, therefore, M.C Authorities be directed to plug this point and it may be connected to main sewerage system of the area leading to STP.

With regard to point no. 7.4 and 7.5, the committee made the following recommendations.

1. Punjab Pollution Control Board shall issue directions under the provisions of Water (Prevention & Control of Pollution) Act, 1974 to the Department of Local Govt. to de-sludge the ponds of the STP, Sultanpur Lodhi and to replace 02 no. lifting pumps with new one to lift the sewage to the STP within 02 months.
2. Department of Rural Development & Panchayat be directed to make the pumping system operational so as to carry the sewage of Village Kheda Donna to the pond provided to treat the sewage and utilize the same for irrigation and plug the outlet into Holy Bein.
3. Department of Local Govt. be directed to ask Municipal Council, Kapurthala to operate the existing STP regularly and efficiently and no effluent should be bypassed. The treated sewage should be utilized for irrigation and no treated/untreated effluent should be allowed to be discharged into any drain leading to Holy Bein. The necessary upgradation in ETP shall be made within the time schedule as mentioned in the Action Plan "**Clean River Sutlej.**"

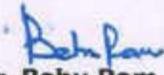
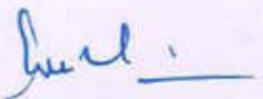
4. PPCB shall issue directions to Jalandhar Development Authority to arrange suitable chunk of land for installation of STP to treat the sewage of Rawal and its Colonies as it a major source of pollution in Holy Bein and it may be directed to install STP within 06 months.
5. Department of Local Govt. be directed to ask the Municipal Council Kapurthala to disconnect the outlets of some localities of Kapurthala town falling into Wadala Drain and same should be diverted to main sewerage system leading to STP.

The report on visit to the STPs, sewage/sullage disposal points into drains leading to holy Bein by the Monitoring Committee along with observations on various points and recommendations made by the committee have been sent to the Principal Secretary, Rural Development & Panchayats; Principal Secretary, Local Government; Deputy Commissioner, Jalandhar; Chairman, PPCB; Executive Officer, M.C., Kapurthala, District Development & Panchayat Officer, Kapurthala with copy to Principal Secretary, Environment vide committee letter no. CEC/2019/161-166 dated 30.05.2019 (copy annexed as per **Annexure-14**).



Sant Balbir Singh Seechewal

J. Chandra Babu

  
Dr. Babu Ram  
S C Agrawal  
Justice Pritam Pal,  
Former Judge, Punjab  
and Haryana High Court

# ANNEXURE-1

Item No. 02

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 916/2018  
(Earlier O.A. No. 101/2014)

Sobha Singh & Ors.

Applicant(s)

Versus

State of Punjab & Ors.

Respondent(s)

Date of hearing: 28.02.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Appellant(s): Mr. Balbir Singh Seechewal, in person.  
Mr. Amber Sachdeva, Advocate

For Respondent (s): Mr. Rajkumar, Advocate for CPCB  
Mr. A.R. Takkar, Ms. Shriya Takkar and Mr.  
Ajay Bansal, Advocates for Municipal  
Corporation Ludhiana, Municipal Corporation  
Jalandhar and Water Supply and Sewage Board  
Mr. Shubham Bhalla, Advocate  
Mr. Naginder Benipala and Mr. Gagan Kumar,  
Advocates for PPCB

**ORDER**

1. Issue for consideration is pollution of rivers Satluj and Beas in the State of Punjab and other incidental and allied issues. The subject has been dealt with by this Tribunal in the last five years on several occasions. Background has been elaborately set out in the order dated 24.07.2018. Main sources of pollution are discharge of untreated industrial effluents by industries, discharge of untreated municipal sewage as well as solid waste

disposal either directly in the said rivers or in the drains or the tributaries of the said rivers.

2. During testing of samples, water quality has been found to be toxic *inter-alia* with chromium, nickel, zinc. Various study reports have been published in journals.
3. River Satluj also finds mention in the identified polluted river stretches based on data compiled by Central Pollution Control Board (CPCB).
4. The industrial area of Ludhiana is critically polluted area generating hazardous industrial waste by industries engaged in dyeing, electroplating, induction furnaces etc. Leather industries, Sugar Mills, Distilleries also contribute to the pollution in the area. The CPCB, in its report furnished to this Tribunal, found that the water is not up to the mark and recommended setting up of STPs etc. for treatment of industrial effluents and municipal sewage before the same are discharged in the water bodies.
5. Vide order dated 24.07.2018, this Tribunal directed the CPCB to constitute a Monitoring Committee with representatives from the Pollution Control Boards of Punjab and Rajasthan and Mr. Balbir Singh Seechewal, a volunteer and to prepare a time bound action plan to be put on the website. Involvement

of stake holders was to be sought, apart from undertaking awareness programs.

6. The Monitoring Committee furnished its interim report which was considered vide the order dated 14.11.2018. The report noted lack of sewage system, non-availability of STPs or other appropriate waste water treatment facilities, lack of skilled man power, non-sustainable approach in designing sewage management project. The pollution in the catchment area remained uncontrolled. Solid waste was not being properly handled. The sludge generated was not being pre-treated. There was no stand by arrangement during maintenance. The STPs were being by passed. This resulted in damage to the health of the inhabitants and to the environment.

7. The observations and conclusion in the report were noted as follows:-

*a. Samples were collected from 34 out of 43 STPs inspected by the Committee.*

*b. 01 out of 43 STPs is having valid Consent.*

*c. 17 out of 43 STPs are bye-passing the sewage without imparting any treatment.*

*d. 36 STPs have installed flow meters at the inlet and only 12 out of 43 STPs have installed flow meters at the outlet.*

*e. Out of 34 samples, 33 are not complying with the sewage discharge norms.*

*f. 39 STPs are discharging their effluent either in rivers or drains and 3 STPs are using for onland irrigation. 01 STP gate found locked during the visit.*

*g. Most of the STPs located at Bhattian, Jamalpur, Bastipirdadd, Phillaur, Ropar Waddi, MaujewalNangal, Makhueither lying defunct or the effluent was being by-passed (STPs at Jagraon, Balloki, NakodarPhillaur, Moga, Anandpur Sahib, Kapurthala, Phagwara etc.) without imparting any treatment for the generated sewage. At some STPs, operators were not present."*

8. With regard to CETPs, it was found that:

*(i) CETP in leather complex was not in operation but under maintenance;*

*(ii) Chromium bearing sludge removed from the sludge drying beds is kept in open yard adjacent to the sludge drying bed which may lead to soil and ground water contamination;*

*(iii) Housekeeping in CETP was very poor;*

*(iv) Workers were found to be replacing the new aerators in place of old aerators without any safety precautions (without wearing any PPE);*

*(v) There is no provision of surface run off collection drain provision within the premises of CETP and thereby surface run off is leading towards preliminary storage tank;*

*(vi) OCEMS at the ETP outlet not yet provided for continuous monitoring of the treated effluent before its discharge, which is a serious violation of directions issued by Central Pollution Control Board;*

*(vii) Outlet of CETP is located close to the Kala Singhian drain and possibility of untreated industrial effluent into the drain cannot be ruled out.*

*(viii) Considering the likely impacts due to improper disposal of chromium bearing sludge in Open Yard, the Committee directed the CETP authorities to lift and dispose of the chromium bearing sludge immediately through a TSDF, Nimbua following the*

+45-

*manifest as per Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016 as amended.*

*(ix) The CETP authorities could not show any documents relating to the CETP."*

9. Observations with regard to 50 MLD capacity STP adjacent to the leather complex at Jalandhar are as follow:

*"(i) There is no sign of proper operation of the STP;*

*(ii) Automatic skimming provision is not in working condition;*

*(iii) STP is having bye-pass arrangement without any electromagnetic flow measuring unit to record any discharge through bye-pass arrangement*

*(iv) The sludge generated from the press filter arrangement were surprised to find that the cake of sludge had long dried up and efforts had been made to drench it by throwing water on it.*

*(v) Sludge lying in the STP premises is not at par with the efficiency of the STP w.r.to removal of solids present in the raw sewage;*

*(vi) OCEMS installed in the STP outlet is not in working condition;*

*(vii) Authorities are not having thorough knowledge on operation aspects of STP due to lack of adequate training and skilled man power for proper operation of the STP;*

*(viii) Requisite records are not maintained properly."*

10. With regard to CETP at Ludhiana, it was observed:

*"(i) The CETP Operator is required to provide information on industry-wise information regarding quantity for which agreement has*

been made, quantity actually lifted on monthly basis for the last one year. PPCB shall also provide the list of all these electroplating industries along with consented quantity of trade effluent to be generated.

(ii) The transportation vehicles used for collection of industrial effluent should be lined with acid proof lining on sides and at bottom with a spill collection provision at the bottom for collection of spillages during the transportation or may also use closed type of tanker with all necessary provisions. Such collected spillages may be ensured further treatment.

(iii) The transportation vehicles should be provided with name and contact details of the CETP Operator on all the four sides so that the information can be provided in case of any eventuality/accident.

(iv) PPCB should direct all the member industries of CETP to provide only neutralized industrial effluent to the CETP Operator, considering the safety aspects during transportation and handling of such industrial waste water.

(v) Automatic dosage system in place of the manual dosage of lime be practiced by the CETP operator for neutralization of untreated effluent.

(vi) All the CETP areas should be properly earmarked by providing proper sign boards and also a layout of ETP at the entrance and also display board at the entrance indicating validity of consent and authorisation, wastewater treatment capacity and contact details of the CETP, should be provided by the Operator.

(vii) The CETP should provide acid proof lining in the collection tank and the trenches in which the effluent is collected from the tankers, with proper sealing to avoid soil contamination.

(viii) House keeping needs improvement.

*(ix) Instead of sludge drying beds, drum filter or centrifuge may be used for sludge handling prior to the disposal through TSDF Operator.*

*(x) Proper records should be maintained by the CETP Operator and submitted."*

11. In view of the above, the Tribunal held that damage in monetary terms was not less than Rs. 50 crores which was required to be paid by the State of Punjab for failure of its legal obligation so that this amount could be spent on restoration of the environment and for relief to the victims. The amount could be recovered from the erring industries, local bodies and erring officers and individuals. Further report was required to be furnished to by the Monitoring Committee.
12. Reports dated 30.01.2019 and 21.02.2019 have been filed by the CPCB which are for consideration today.
13. Report dated 21.02.2019 refers to the order of this Tribunal dated 20.09.2018 and 19.12.2018 in Original Application No. 673 of 2018, *News item published in "The Hindu" authored by Shri Jacob Koshy Titled "More river stretches are not critically polluted:CPCB"*, wherein this Tribunal has dealt with the issue of 351 identified polluted river stretches in India and required action plans to be prepared by the River Rejuvenation Committee (RRC) of the concerned States and submitted to the Nodal Agency, CPCB. The report states that action plans

for rejuvenation of river Satluj and Beas have been submitted by the State of Punjab. The action plans identified the major drains which are being polluted and which are joining the rivers and the sources of pollution which mainly are industrial and municipal. The action plans deal with the gaps in solid waste management, bio-medical waste management, hazardous waste management as well as in discharge of untreated sewage and industrial effluents. The report also refers to meetings of the Monitoring Committee and the deliberations for taking remedial steps. The recommendations of the Monitoring Committee *inter-alia* provide for steps for water supply, sewage treatment and management, industrial effluent management, organizing health camps, plans for rejuvenation of rivers and mechanism for utilization of Rs. 50 crores to be recovered from the State of Punjab.

14. This Tribunal has come across the problem of pollution of water bodies in large number of cases and acknowledged unsatisfactory state of affairs and failure of statutory regulatory authorities and Governments,<sup>1</sup> threatening availability of potable water for drinking purposes, causing deaths and diseases<sup>2</sup>.

<sup>1</sup> Order dated 11.01.2019, Aryavart Foundation vs. M/s. Vapi Green Enviro Ltd. & Ors., Original Application No. 95/2018 and order dated 19.02.2019, Paryavaran Suraksha Samiti vs. Union of India & Ors., Original Application no. 593/2017

<sup>2</sup> Orders dated 20.09.2018 & 19.12.2018, New item published in "The Hindu" authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted :CPCB and other connected matters, Original Application No. 673/2018.

15. On the connected issue of solid waste management, the Tribunal has constituted Committees mostly headed by former High Court Judges for better coordination and execution of orders of this Tribunal passed from time to time<sup>3</sup>.
16. Vide order dated 16.01.2019 in Original Application No. 606/2018, the Tribunal has required the personal presence of the Chief Secretaries of all the States on different dates, after being fully briefed on serious issues of environment in their respective States<sup>4</sup>.
17. The Tribunal has also directed recovery of compensation from the regulatory bodies themselves for their failure and also furnishing of performance guarantees, conducting performance audit of the regulatory bodies and review their manning by suitable persons since the existing mechanism is far from satisfactory.
18. During hearing today, suggestions received are preventing pollution, rational use of potable water, proper operation and maintenance of pollution control devices, re-use of treated water, regulating drawal of ground water and strengthening of the Monitoring Committee by including more independent persons in senior positions committed to the cause of environment protection.

<sup>3</sup> Order dated 16.01.2019, Compliance of Municipal Solid Waste Management Rules, 2016, Original Application No. 606 of 2018

<sup>4</sup> Order dated 11.01.2019, Aryavart Foundation vs. M/s. Vapi Green Enviro Ltd. & Ors., Original Application No. 95/2018

19. Accordingly, while directing the Monitoring Committee to continue its further deliberations and monitoring, we direct that the Monitoring Committee will now be headed by Justice Pritam Pal, former Judge of Punjab and Haryana High Court, who is also heading the Committee for solid waste management and for rejuvenation of Gaggar river. In addition Shri Subodh Agarwal, former Chief Secretary of Punjab will be a senior member. We suggest that the Committee may seek, wherever viable, the guidance of Justice Kuldeep Singh, former Judge Hon'ble Supreme Court, who is available in Chandigarh and is an acknowledged expert on environmental issues. The Committee may also consider co-opting suitable members, including sub Committees to be constituted for different areas, having hotspots of pollution or for dealing with different subjects. The Committee may also consider undertaking programs to create awareness by involving religious and social organizations or individuals committed to the cause of environment in a suitable way.
20. The Committee may also consider the plan prepared by the Committee constituted by this Tribunal vide order dated 26.07.2018 in *Manoj Mishra Vs. Union of India & Ors., Original Application 06/2012*. Its plan is available on the website of the said Committee.<sup>5</sup>
21. We are informed that Shri Satish Chandra and Shri Sanjay Kumar, IAS Officers in the State of Punjab have been involved in

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<sup>5</sup> <https://yamuna-revival.nic.in/meetings-of-mc/>

the work of environment protection. The Committee may consider their involvement in a suitable manner. Shri Babu Ram, former Member Secretary, Punjab State Pollution Control Board (State PCB) will also be a member of the Committee.

22. The Committee may also consider stringent action against polluters by way of closure, recovery of compensation for damage to the environment, prosecution or otherwise. The Committee may also consider recommending disciplinary and penal action against erring officers. The Tribunal expects that the State Government may record failure of individual officers in their annual confidential reports.
23. The Chief Secretary, State of Punjab may also include the steps taken in his presentation before this Tribunal on the date fixed for his personal appearance as noted earlier.
24. Since Justice Pritam Pal is already working for two Committees, he may not like to claim any separate honorarium but may be provided all logistic support by State PCB and security by the State, as may be required.
25. Shri Subodh Agarwal and Shri Babu Ram will be entitled to honorarium equal to the corresponding current basic pay for the posts held by them.
26. As suggested by the learned counsel for the CPCB, the Committee may ensure that standards of PETP outlets connected

to the CETPs are notified at the earliest as the said issue is said to be pending since long.

List for consideration of further report of the Committee on 16.07.2019.

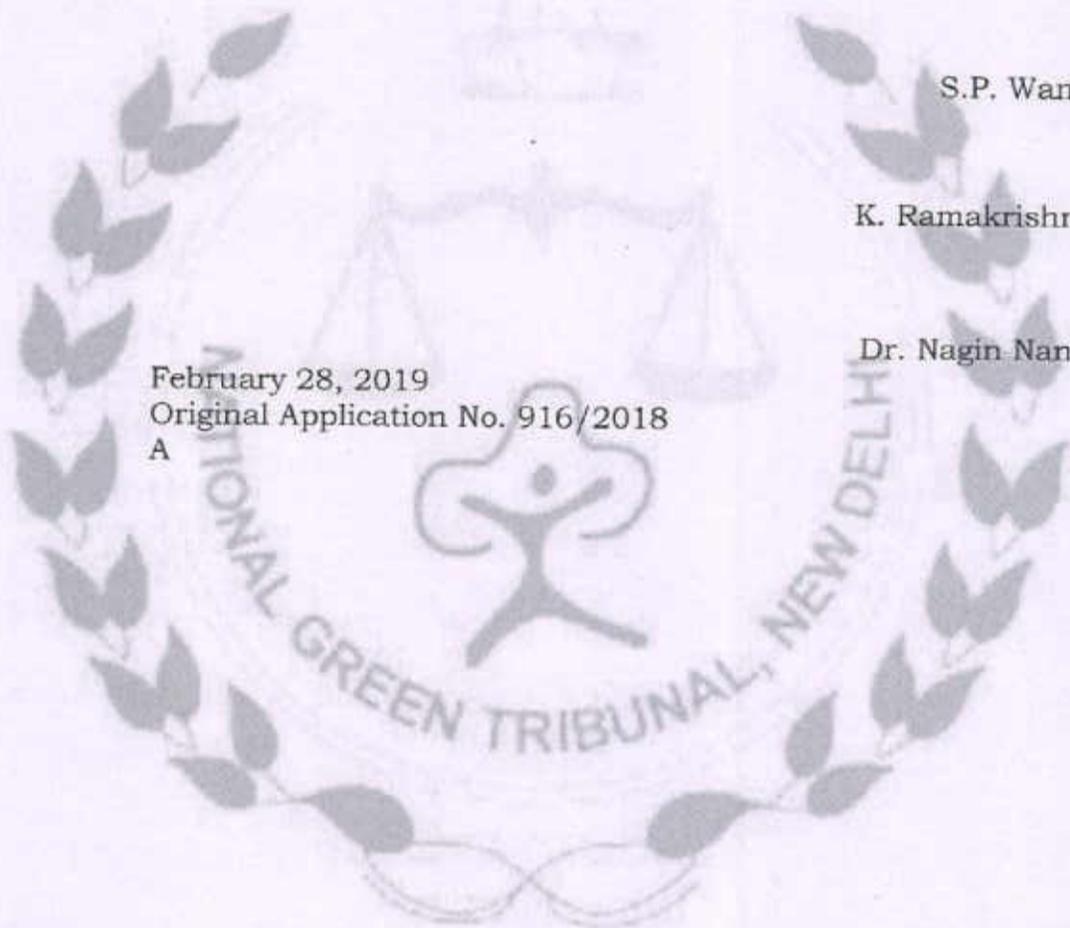
Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

February 28, 2019  
Original Application No. 916/2018  
A



## ANNEXURE-2

Status of Water Quality of River Sutlej (Jan., 2019)

S.N.	Point of Sample Collection	pH	DO mg/l	BOD mg/l	Cond $\mu$ s/Cm	T.Coli MPN/100ml	B mg/l	Quality of water as per DBU
1	River Sutlej at U/s Nangal	7.1	8.9	<1	220	140	0.08	B
2	River Sutlej at D/s NFL	7.01	8.5	<1	263	210	0.1	B
3	River Sutej at 100m D/s PACL Nangal	7.04	8.2	<1	258	220	0.15	B
4	River Sutlej at D/s Nangal	6.93	8.6	<1	241	150	0.19	B
5	River Sutlej at Kiratpur Sahib	7.33	8.2	<1	271	1100	0.23	C
6	Ropar Head-Works	7.28	8.2	<1	268	1200	0.1	C
7	River Sutlej D/s of Rishab- Paper Mills	7.15	8.1	1.1	448	1400	0.31	C
8	River Sutlej U/s Buddha Nallah	7.25	7.7	1.2	442	3300	0.19	C
9	River Sutlej at 100 mts D/s after Budha Nallah confluence, Ludhiana	7.06	2.2	48	935	9,40,000	0.25	E
10	River Sutlej at Boat Bridge, Dharamkot Nakodar Road	6.94	4.4	14	644	1,70,000	0.24	D
11	River Sutlej at D/s East Bein	7.4	1	14	494	35000	0.14	E
12	River Sutlej at Harike	7.6	5.2	2.8	408	11000	0.17	D
13	Harike Lake D/s from canal	7.8	7.8	1.7	226	3500	0.19	C
14	D/s Harike lake	7.9	8	1.6	240	4100	0.12	C
15	U/s Hussainiwala H/W Ferozepur	8.14	8.1	<1	203	2400	0.11	C
16	D/s Hussainiwala H/W Ferozepur	8.16	8.2	<1	205	2100	0.12	C

# ANNEXURE-3

Status of Water Quality of River Beas ( Jan., 2019)

Sr. No.	Point of Sample Collection	pH	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	9.2	10	1.0	94	43	B
2.	Beas at Mirthal Bridge Gurdaspur	7.9	9.1	12	1.3	170	110	B
3.	U/S Pathankot	8.0	8.8	12	1.3	280	130	B
4.	D/S Pathankot	8.3	8.6	16	1.7	490	330	B
5.	Beas 1km D/S effluent discharge point at Mukerian	7.9	8.4	18	2.0	920	540	C
6.	Beas Bridge at village BheatePatan Tehsil Batala Distt. Gurdaspur	7.6	8.7	16	1.4	700	490	C
7.	Beas at G.T. Road, under Bridge Near Kapurthala	7.8	9.4	19	1.6	940	630	C
8.	U/s Goindwal	7.9	9.5	14	1.3	580	250	B
9.	D/s Goindwal	8.0	8.6	16	1.6	630	330	C
10.	Beas at Harike	7.7	8.0	14	1.3	490	330	C

# ANNEXURE-4

Government of Punjab  
Department of Science Technology and Environment  
Directorate of Environment & Climate Change

To

- (i) The Administrative Secretary,  
Department of Local Government
- (ii) The Administrative Secretary,  
Department of Rural Development & Panchayats
- (iii) The Administrative Secretary,  
Department of Industries & Commerce
- (iv) The Administrative Secretary,  
Department of Housing and Urban Development
- (v) The Administrative Secretary,  
Department of Soil & Water Conservation  
Department of Agriculture
- (vi) The Administrative Secretary,  
Department of Water Resources
- (vii) The Administrative Secretary,  
Department of Water Supply & Sanitation
- (viii) The Commissioner,  
Municipal Corporation, Ludhiana
- (ix) The Commissioner,  
Municipal Corporation, Jalandhar
- (x) The Regional Director,  
Central Ground Water Board

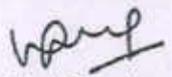
Letter No. DECC/2019/148-157

Date: 28.03.2019

**Subject:** Proceedings of First meeting of Monitoring Committee to review the progress on implementation of Action Plans for abatement of pollution in River Sutlej & Beas held under the Chairmanship of Hon'ble Justice Pritam Pal, Former Judge, Punjab & Haryana High Court on 20.03.2019 at 10.00 AM in CR/PSCST, MGSIPA Building, Chandigarh.

Kindly refer to the subject cited above.

2. Please find enclosed herewith copy of proceedings of First meeting of Monitoring Committee to review the progress on implementation of Action Plans for abatement of pollution in River Sutlej & Beas held under the Chairmanship of Hon'ble Justice Pritam Pal, Former Judge, Punjab & Haryana High Court on 20.03.2019 at 10.00 AM for information & further necessary action please.

  
Joint Director

Endst. No. DECC/2019/ 158-163

Date: 28.03.2019

A copy of the above is forwarded to following members of Monitoring Committee for their information:

- 1) Hon'ble Justice Pritam Pal, Former Judge, Punjab & Haryana High Court, Chandigarh.
- 2) Sh. Subodh Aggarwal, Former Chief Secretary, Punjab
- 3) Dr. Babu Ram, Former Member Secretary, Punjab Pollution Control Board
- 4) Sant Balbir Singh Seechewal,
- 5) Sh. J. Chandra Babu, Central Pollution Control Board
- 6) Sh. Niraj Mathur, Rajasthan Pollution Control Board



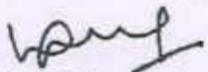
Joint Director

Endst. No. DECC/2019/164-167

Date: 28.03.2019

A copy of the above is forwarded to following for their information please:

- 1) PS to Principal Secretary, Department of Science Technology & Environment, Govt. of Punjab
- 2) PS to Director, Directorate of Environment & Climate Change, Department of Science Technology & Environment, Government of Punjab.
- 3) PS to Chairman, Punjab Pollution Control Board, Patiala
- 4) PS to Additional Secretary, Department of Science Technology & Environment, Govt. of Punjab



Joint Director

Scanned by CamScanner

Proceedings of the 1<sup>st</sup> Meeting of the Expanded Monitoring Committee set up by National Green Tribunal (NGT) under the Chairmanship of Hon'ble Justice Pritam Pal, Former Judge, Punjab & Haryana High Court to review progress of implementation of Action Plans for River Beas and Sutlej on 20.03.2019 at 10:00 am in Conference room of PSCST, MGSIPA, Chandigarh

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**Item No. 1 Leave of Absence**

The following members of the Committee attended the meeting

Members of the Committee	Sh. Subodh Agrawal
	Dr. Babu Ram
	Sh. Balbir Singh Seechewal
	Sh. J Chandra Babu, CPCB
	Sh. Niraj Mathur, RPCB

The following officers from various Departments attended the meeting

Department of Science, Technology & Environment	Sh. R.K. Verma, IAS, Principal Secretary Sh. Pardeep Garg, Joint Director Sh. Gurharminder Singh, SSO Ms. Manak Bola, JRF
Department of Local Government	Sh. Mohd. Ishfaq, IAS, Additional CEO, PWSSB Sh. K.P. Goyal, EIC, PWSSB Sh. A.S. Dhaliwal, Chief Engineer Sh. Mukhtiyar Singh, Chief Engineer Sh. Jatin Vasudeva, EE
Municipal Corporation, Ludhiana	Sh. Sanyam Aggarwal, IAS, Additional Commissioner Sh. Ravinder Garg, SE Sh. Ekjot Singh, SDO
Municipal Corporation, Jalandhar	Sh. Harcharan Singh, PCS, Joint Commissioner Sh. Kishor Bansal, SE
Punjab Pollution Control Board	Dr. S.S. Marwaha, Chairman Sh. Gulshan Rai, CEE Sh. Harbir Singh, SEE Sh. Sandeep Behal, SEE

Department of Rural Development and Panchayat	Sh. Jaskiran Singh, IAS, Director Sh. Davinder Kumar, SE
Department of Water Supply & Sanitation	Sh. R.P. Gupta, SE
Department of Information & Public Relation	Ms. Anindita Mitra, IAS, Director Sh. Kamaljeet Paul, PRO
Department of Industries & Commerce	Sh. S.K. Sharma, PSIEC
Department of Soil & Water Conservation	Sh. G.S. Dhillon,
Department of Water Resources	Sh. J.S. Bhandari, SE Sh. Mahesh Singh, XEN, Drainage Sh. Ashutosh Kumar, XEN Sh. Kuljinder Singh, SDO Sh. Bhupinder Singh, SDO Sh. Narindra Kumar, JE
Department of Housing & Urban Development	Sh. Gurpreet Singh, SDE, GLADA
Central Ground Water Board	Sh. Anoop Nagar, Regional Director Sh. Rakesh Rana, Scientist-D
Department of Agriculture	Sh. Jaswant Singh, Geologist

No representative from Department of Health & Family Welfare attended the meeting. The reasons for the absence may be ascertained and informed in the next meeting.

**Item No. 2 Review of monitoring of Water Quality of River Sutlej & Beas**

Principal Secretary, Environment informed the Committee that reliable data regarding quality of water at various locations of the rivers is essential for monitoring the progress and PPCB has been asked to install online continuous monitoring system by State level committee under Chief Secretary. PPCB is also in the process of finalizing the protocol for taking samples of water for quality testing.

The Committee noted the current status and directed to expedite installation of at least 7 continuous monitoring stations at various critical locations of the rivers Sutlej and Beas.

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

PPCB informed that out of 53 STPs monitored during the month of January, 2019, 30

STPs were found to be not achieving the prescribed discharge standards. It was discussed that the non-compliance may be due to old technology, operational failures due to unskilled manpower, operational failures due to lack of upkeep of equipment or material shortage, operational failures due to lack of spare parts.

It was further informed that regular funds are not made available for operation and maintenance of the STPs impacting their operations leading to failure. It was also brought out that there is no provision of holding tanks to detain sewage in case of repair/ breakdown of the STP.

The Committee noted the current status with great concern that majority of the STPs are not achieving the prescribed standards and directed as under:

- (i). The reasons for not meeting the standards have to be ascertained for each STP.
- (ii). In case of STPs designed for old standards, a column regarding their meeting old standards shall also be brought out.
- (iii). The detailed status of requirement of funds and availability of funds in respect of each STP may be brought out.
- (iv). Monitoring at inlet as well as out let shall be carried out.
- (v). The requirement of holding tank in the design of STPs may be examined by Department of Local Government and clarified to the committee.
- (vi). Transfer of STPs for O&M from multiple agencies such as GLADA, DWSS to the nodal agency laid down by Department of Local Government shall be expedited.
- (vii). PPCB shall monitor the sludge of STPs on quarterly basis to ascertain quantity as well as quantity.
- (viii). All concerned agencies will provide the information as per the prescribed proforma for review by the Committee.

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

PPCB informed that CETP for Leather Complex at Jalandhar was found to be not achieving the prescribed discharge standards. Chairman PPCB informed that due to close monitoring, there has been some improvement in the functioning of CETP, Leather Complex.

The Committee noted the current status and directed that PPCB shall closely monitor the CETP, leather complex and ascertain the reasons for operational failures of CETP along with remedial measures required for the same.

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

PPCB informed about the status of inspection of ETPs and action taken by the Board in case of non-compliance. It was discussed that there is need to make the inspections more effective by introducing suitable checks by senior officers and also focusing on industrial units carrying greater risk of causing pollution. Chairman, PPCB further informed that he had taken strict action of closure against the industrial unit in Dera Bassi, which was discharging its untreated effluents into ground.

The Committee noted the current status and after discussion directed the Board to strengthen inspection mechanism as follows:

- (i) Industrial units for inspection shall be selected based on risks for causing pollution such as their proximity to water bodies, past history, quantity of effluents, toxicity of effluent and other relevant factors to be finalized by the Board.
- (ii) From the total inspections carried out by Regional Officers (Environmental Engineer), certain percentage say 10% shall be re-inspected by Senior Environmental Engineer and certain percentage say 5% by Chief Environmental Engineer and certain percentage say 1% by Chairman. This will ensure that entire exercise is carried out diligently by ROs and other levels.
- (iii) The Board must take strict action in all cases, which are found violating the laid down norms.

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

The current status of progress of setting up of new STPs is given below:

	Funds Tied Up					Funds Not Tied Up	Total
	DPR Stage	Land Acquisition	Tendering Stage	Work in progress	Total		
Sutlej	0	2	5	8	15	28	43
Beas	2	1	3	1	7	8	15

The Committee noted the current status and directed that a detailed review will be carried out in the next meeting.

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

PPCB informed that two CETPs namely 15MLD at Bahadur Ke Road and 40 MLD at Focal Point will be commissioned by 30.06.2019 and 31.10.2019, respectively. The

progress in respect of third CETP of 50 MLD was not satisfactory.

It was discussed that the Department of Environment and Board shall examine the provisions of Environment Act, 1986 and Water Act, 1974 to provide a legally binding framework for the industrial units for availing the services of CETP and providing requisite financial contribution for construction and subsequent operation and maintenance of the facility.

Regarding up-gradation of ETPs by 14 large scale dyeing units to achieve standards at par with CETPs, PPCB informed that letters have been issued to all the units in this regard.

The Committee noted the progress and directed as under:

- (i) The two CETPs to be commissioned by 30.06.2019 and 31.10.2019 must be completed in time and no more extension in time shall be given.
- (ii) PPCB shall strictly monitor the third CETP to restart the same and its completion in a time bound manner.
- (iii) Legal framework for setting up of CETPs and their operation and maintenance shall also be examined.
- (iv) PPCB to report on the status of up-gradation of 14 large scale dyeing units in the next meeting.

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

The Committee noted the current status and directed that the firm timelines be finalized for setting up of ETPs and Biogas plants.

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

The status w.r.t. the quantity of waste water generated from Ludhiana city being discharged into Budha Nallah alongwith view point<sup>were</sup> of Municipal Corporation, Ludhiana & Punjab Pollution Control Board ~~was~~ presented before the Committee.

Further, it was informed that MC, Ludhiana has been raising the issue of quantity of waste water discharged into Budha Nallah being in far excess of domestic supply of waste water and there is a substantial difference between the waste water generation estimated by MC, Ludhiana & PPCB.

The Committee discussed the matter and directed that MC, Ludhiana & PPCB shall jointly carry out the estimation of waste water generation in a scientific manner within one month & the progress in this regard may be put up before the Committee in the next meeting.

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

Superintending Engineer (Canals), Department of Water Resources informed that the release of fresh water into Budha Nallah and Holy Being relates to their Drainage Division.

The Committee desired that the Department of Environment may hold the meeting with Department of Water Resources on these two projects.

The detailed status be reported in the next meeting and the concerned officer of the Department shall be called for the meeting.

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

Department of Soil & Water Conservation informed that it has submitted projects amounting to Rs. 269 crores to Government of India under Pradhan Mantri Krishi Sanchai Yojna (PMKSY) for re-using the treated sewage of 52 STPs for irrigation in February, 2018.

Further, it was informed that the project amounting to Rs. 95 crores for re-using the treated sewage of 25 STPs for irrigation department has been approved by Government of Punjab under NABARD- RIDF-25 in December, 2018. The funds for the same are to be released in the coming Financial Year i.e. 2019-20.

The Department of Water Resources informed that the treated sewage of STPs located at Jamalpur & Balloke cannot be utilized for irrigation as these STPs are surrounded by thickly populated industrial areas. The Budha Nallah should be channelized from Balloke at RD 100000 to Walipur Village at RD 150000 (approximately 15.24 Km) before constructing the proposed channel from 150000 of Budha Nallah onwards.

Further, the re-use of treated sewage of Bhattian, STP for irrigation, the scheme is not feasible as the STP is very near to river Sutlej surrounded by Ludhiana city.

The Committee noted the current status and directed as under:

- (i) Department of Soil & Water Conservation to present the latest progress for the project submitted to Government of India in the next meeting of the Committee.
- (ii) The Department of Water Resources, Department of Local Government and Department of Environment to hold meeting regarding future roadmap and way forward for channelization of Lower Budha Nallah as informed by Department of Water Resources. The progress shall be reported in the next meeting.

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

The Committee noted the progress and directed Municipal Corporation, Ludhiana to take adequate measures including installation of CCTV cameras, fencing, awareness

and challaning of the offenders to keep a check on the dumping of solid waste into Budha Nallah.

**Item No.13 Review of Progress for Setting up of Treatment Facilities in Villages**

The Committee noted the progress and directed Department of Rural Development & Panchayats to expedite implementation of phase 1.

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

The Committee noted the current status.

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

The Committee noted the progress.

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

The information is awaited from the Department of Health & Family Welfare. The Committee directed the Department to present their progress on the number of health camps organized and the people found affected with water borne diseases. Besides above, the Department may also collect information from surrounding Government Hospitals/ dispensaries as well as from private Health Care Facilities in this regard.

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

The Committee 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.

**Concluding Remarks**

At the end, the Chairman solicited proactive support of all the departments to control the water pollution of River Sutlej & Beas. Further it was informed that regular site visits to all the critical & vulnerable points of sources of pollution would be conducted by the committee to review the progress on monthly basis. The Chairperson directed all the stakeholder departments to nominate the nodal officers and firmly adhere to the timelines for implementation of Action plans in compliance of the orders of the Hon'ble NGT. He stressed that involvement of civil society is must for concrete and substantial outcomes. He also emphasised that all the relevant rules and other guidelines must be implemented in letter and spirit and officers at all levels to enforce the same with due diligence.

The meeting ended with vote of thanks to Chair.

# ANNEXURE-5

Visit of Monitoring Committee (Constituted by Hon'ble National Green Tribunal in Original Application No. 916/2018 in the matter of Sobha Singh & Ors. Vs State of Punjab & Ors) to Municipal Solid Waste Management Plant at SBS Nagar, Kala Singhian Drain, STP at Vill Seechewal and STP at Sultanpur Lodhi and its Irrigation Network on 26.03.2019 and 27.03.2019.

The following Members of the Monitoring Committee and Officers of the Department visited the Municipal Solid Waste Management Plant at SBS Nagar, Kala Singhian Drain, STP at Vill Seechewal and STP at Sultanpur Lodhi and its Irrigation Network on 26.03.2019 and 27.03.2019.

#### Members of the Monitoring Committee

1. Justice Pritam Pal, Former Judge, Punjab and Haryana High Court.
2. Sh. S.C Aggarwal, Former Chief Secretary, Punjab.
3. Dr. Babu Ram, Former Member Secretary, Punjab Pollution Control Board.
4. Sant Balbir Singh Seechewal

#### Officers of the Department:-

##### Department of Environment:

1. Er. Pardeep Garg, Joint Director
2. Sh. Gurharminder Singh, SSO
3. Er. Anuradha Sharma, Environmental Engineer

##### Punjab Pollution Control Board:

1. Er. G.S Majithia, Chief Environmental Engineer, PPCB, Jalandhar.
2. Er. Harbir Singh, Senior Environmental Engineer, PPCB, Jalandhar.
3. Er. Arun Kakkar, Environmental Engineer, PPCB, Jalandhar.
4. Er. S.S Matharu, Environmental Engineer, PPCB, Hoshiarpur.
5. Er. Sandeep Kumar, Assistant Environmental Engineer, PPCB, Jalandhar
6. Er. Bhisam, Assistant Environmental Engineer, PPCB, Jalandhar

##### Punjab Water Supply and Sewerage Board:

1. Er. K.P Goyal, EIC cum Technical Advisor
2. Sh. Mukhtiar Singh, Chief Engineer, Amritsar

3. Sh. Jatin Vasudeva, Xen, Jalandhar

**District Administration SBS Nagar**

1. Sh. Vinay Bublani, I.A.S.,DC, SBS Nagar
2. Ms Anupam Kaler, A.D.C, SBS Nagar

**District Administration Kapurthala**

1. Sh. D.P.S Kharbanda, I.A.S.,DC, Kapurthala
2. Ms Navreet Kaur Bal, P.C.S, S.D.M Sultanpur Lodhi
3. Ms Charumitta, P.C.S, S.D.M Shahkot

**Department of Local Govt.**

1. Dr. Puran Singh, PMIDC
2. Dr. Naresh Kumar, PMIDC

**26.03.2019**

**1. Municipal Solid Waste Management Site SBS Nagar:**

The members of Monitoring Committee visited the Municipal Solid Waste Management site SBS Nagar. President of the Municipal Council apprised that the current population of the town is 50000 and about 10-12 TPD solid waste is being generated which comprises of 50% degradable waste, 25% dry recyclable, 25% non-recyclable and inert waste. With the consistent efforts made by the Local Body Officers and President of the Municipal Council, door to door collection, transportation of the segregated material, composting of the degradable waste and recovery of the material has been started in the town in the year 2018. Rag pickers and waste collectors were integrated. The hand hold and the holding support was provided to the staff of the council which resulted into aerobic composting of the waste and about 6 TPD waste is recovered in the form of compost and 25% recyclable waste is recovered and sent to the Kabadies. Now there is more than 90% door to door collection of waste.

Thereafter, a meeting with the stakeholder was taken, wherein the large no. of persons participated. In the meeting, it was apprised that Hon'ble NGT has constituted

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Monitoring Committee to monitor the various activities with regard to control of pollution due to Municipal Solid Waste, domestic and industrial sources along River Sutlej and River Beas. More emphasis was laid on the use of non-plastic material to discourage the use of plastic bags/material. The persons present in the meeting were requested to keep their surrounding and sources of drinking water and surface water clean and pollution free.

Monitoring Committee was of the view that the Municipal Solid Waste Management System adopted in SBS Nagar must be replicated in other towns of the State to reduce the quantity of waste to be further managed by the Municipal Councils/Municipal Corporations.

## **2. STP SBS Nagar:**

The Monitoring Committee visited 06 MLD capacity STP at SBS Nagar. The STP is based on SBR Technology. It has been informed that some of the Areas/Colonies, which are not connected with the STP, are required to be connected. Further, the regular funds are to be provided by Municipal Committee to the operator for the smooth operation and maintenance.

**27.03.2019**

### **1. Stretch along Kala Singhian Drain:**

Monitoring Committee Members along with Officers of concerned stakeholder Department visited the Kala Singhian Drain to take stock of situation. It was observed that foul smell was emanating from the wastewater flowing in the Kala Singhian Drain. During the visit, the effluent sample of the drain was collected by the Monitoring Team and handed over to the Officers of the Punjab Pollution Control Board for its detailed analysis.

The Monitoring Committee directed Punjab Pollution Control Board Officers to collect at least 10 samples of ground water in the catchment area of Kala Singhian Drain by following the due sample collection protocols. These samples must be analyzed for the all the parameters concerning to drinking water.

Bal-t

During discussion, the officers of PWSSB informed that the outlets at three locations along railway line in the area under MC Jalandhar, presently, discharging untreated wastewater about 10 MLD into Kala Singhian, drain are being connected to the main sewerage network leading to the existing 50 MLD STP at Basti Peer Dad, Jalandhar by 15 April, 2019. They further ensured that thereafter no untreated wastewater from these outlets shall be discharged into the drain. However, after the connection of these outlets, the quantity of wastewater shall increase at the inlet of STP Peer Dad. In addition to these steps, PWSSB/MC Jalandhar has a proposal to install 25 MLD new STP at Peer Dad, Jalandhar to ensure the treatment of the entire wastewater discharged into Kala Singhian Drain.

**After detailed discussion, monitoring committee directed the Officers of PWSSB as under:**

1. To connect all the outlets to main sewerage network by 15.04.2019 and thereafter no untreated sewage shall be discharged into kala singhian drain, falling which the responsibility of concerned officers shall be fixed for further action.
2. New STP of 25MLD shall be commissioned in a particular time schedule.
3. Department of Soil conservation shall lay irrigation network to utilize the treated sewage for irrigation for which funds for the same shall be arranged by department of soil conservation.

Officers of the Punjab Pollution Control Board informed that no effluent from the electroplating industries is discharged into the drain resultantly no heavy metal contents have been found in the wastewater flowing in the drain. With regard to the discharge of effluent by other industries of Jalandhar, it was apprised that previously CETP for Leather Industries of Leather Complex Jalandhar was not functioning properly and analysis results were much beyond the permissible limits, therefore, Punjab Pollution Control Board have launched prosecution against the SPV(Punjab Effluent Treatment Society, Leather Complex Jalandhar) and its operator (Ramkey Infra Structure, Leather Complex Jalandhar) and Municipal Corporation Jalandhar under the provisions of

*Balbir*

Water Act, 1974 . Due to malfunctioning of 50 MLD STP Basti Peer Dad, Jalandhar, the officers of the PWSSB have also been prosecuted under the provision of the Water (Prevention & Control of Pollution) Act, 1974.

Officers of PPCB further informed that with the consistent efforts made by the PETS and Operator of CETP, substantial improvement in the performance of the CETP has been observed. However, to achieve the prescribed standards, there is proposal for up-gradation of the existing CETP. PETS is in the process of preparation of DPR.

After detailed deliberation, Monitoring Committee directed the PPCB officers as under:

1. PPCB shall make surprise inspection of the industries of Jalandhar to ensure that no untreated wastewater is discharged into sewerage system and these industries must achieve the standard prescribed by the Board. The list of such inspections, observations of the visiting officers and action taken/recommendations made against the deflating industries must be placed before the monitoring committee in its next meeting.
2. PPCB shall carry out monthly monitoring of waste water flowing into kala Singhian Drain and detailed analysis be carried out for organic, inorganic parameters and heavy metals and analysis report be provided to the Monitoring Committee before 10<sup>th</sup> of every month.
3. Monitoring Committee clearly informed the PPCB Officers that the Committee itself shall also visit industrial units surprisingly and in case the 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.

#### **2. Low cost STP at Vill Seechewal**

To treat the domestic wastewater of vill Seechewal, a low cost STP known as Waste Stabilization Pond (WSP) has been set up at vill Seechewal. The treated wastewater from this pond is utilized for irrigation of agriculture fields. During visit, the analysis results of the treated wastewater was shown to the monitoring committee. It was

*Bobak*

observed that all the parameters were within the permissible limits except F.Coli which shall be deliberated in the next meeting of the monitoring committee.

### **3. Ponds provided along Railway line near Chandigarh Colony, Sultanpur Lodhi**

It was informed by Sant Balbir Singh Seechewal that previously the domestic wastewater of Chandigarh Colony, Sultanpur Lodhi was being stagnated in the form of big pond along railway line, which was a big source of contamination and pollution in the area. Therefore, in order to treat and regulate the flow of wastewater of Chandigarh Colony of Sultanpur Lodhi, 3 ponds have been provided to impart treatment. Now the treated wastewater is being utilized for plantation developed along Railway line.

### **4. STP Sultanpur Lodhi**

Monitoring Committee along with other Officers of Municipal Committee, Sultanpur Lodhi visited 2.6 MLD STP, which is based on Waste Stabilization Pond (WSP) technology. During visit the plant was in operation and the analysis results of treated sewage of STP were shown to the committee and it was observed that the parameters namely BOD, COD and F.Coli were beyond the permissible limits prescribed by the Board. Furthermore, sludge in fluffy form was found floating, which indicate that the STP required de-sludging, which has not been done since its commissioning in the year 2003. Therefore, there is need to de-sludge the STP to improve its performance and effectiveness.

The treated waste water of 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 agriculture fields in the command area of STP. The disposal/utilization of treated wastewater during no demand period may also be informed in the next meeting of Monitoring Committee.

### **5. STP for Focal Point Jalandhar**

In the meeting, the officers of the Punjab Pollution Control Board informed that about 5 MLD of wastewater from Focal Point Jalandhar is being discharged into MC sewer

without any treatment, which need to be treated by the PSIEC before discharging into MC sewer. No timeline/schedule has been mentioned in the Action Plan prepared for Clean River Sutlej. Matter needs to be taken up with MD, PSIEC in the next meeting of Monitoring Committee.

P. K. Singh  
Member  
E.C.

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Report on visit to the industries of Nangal area and Sewage Treatment Plants installed by the Punjab Water Supply & Sewerage Board and BBMB, Nangal on 18.04.2019 by the Executive Committee constituted by the Hon'ble National Green Tribunal in OA no. 916 of 2018 titled as Sobha Singh & Others V/s State of Punjab & Others.

Date of visit :18/04/2019

Inspection was carried out by the members of the Executive Committee and officers of the various Departments mentioned as under:

**a) Members of the Executive Committee**

Sr. No.	Name & Designation	Designation in the Committee
1)	Justice Pritam Pal, former Judge Punjab & Haryana High Court	Chairman
2)	Sh. S.C. Aggarwal, former Chief Secretary, Punjab	Member
3)	Dr. Babu Ram	Member
4)	Sant Balbir Singh Seechewal	Member

**b) Punjab Water Supply & Sewerage Board**

Sr. No.	Name & Designation	Department
1)	Sh. V.K. Garg, Chief Engineer	Punjab Water Supply & Sewerage Board
2)	Sh. Rahul Kaushal, Executive Engineer	Punjab Water Supply & Sewerage Board
3)	Sh. Tarun Gupta, Sub Divisional Engineer	Punjab Water Supply & Sewerage Board

**c) Punjab Pollution Control Board**

Sr. No.	Name & Designation	Department
1)	Sh. Sandeep Behl, Senior Environmental Engineer	Punjab Pollution Control Board
2)	Sh. Ashok Kumar Sharma, Environmental Engineer	Punjab Pollution Control Board
3)	Sh. Harsimran Singh, Assistant Environmental Engineer	Punjab Pollution Control Board
4)	Sh. Gurinderpal Singh Chhina, Assistant Environmental Engineer	Punjab Pollution Control Board

**d) Bhakra Beas Management Board (BBMB)**

Sr. No.	Name & Designation	Department
1)	Sh. A.K Aggarwal, Chief Engineer	BBMB

2)	Sh. H.L Kamboj, Deputy Chief Engineer	BBMB
3)	Sh. Manvinderpal Singh, Executive Engineer	BBMB
4)	Sh. Sukhdev Singh, Sub Divisional Engineer	BBMB

**e) Municipal Council**

Sr. No.	Name & Designation	Department
1)	Sh. Amandeep, Junior Engineer	MC, Nangal

**A) Inspection of industries**

The following industries were visited by the members of the Executive Committee in the presence of the Senior Personnel of the industries

**1) M/s National Fertilizers Ltd., Naya Nangal, Distt. Roopnagar**

From Industry side:

- 1) Sh. Sanjeev Mehta, Chief General Manager
- 2) Sh. S.K Shrivastav, Deputy General Manager (O &M)
- 3) Ms. Renu R.P Singh, DGM, HR
- 4) Sh. I.P Singh, Chief Manager Production

The brief manufacturing process of the industry is as under:

The industry is engaged in the manufacturing of ammonia, urea, nitric acid, methanol, ammonium nitrate and sodium nitrate using natural gas as raw material. The natural gas is deformed into carbon dioxide and hydrogen. The nitrogen is taken from the air. For manufacturing of ammonia, nitrogen and hydrogen are used. Urea is manufactured by using carbon dioxide and ammonia. For the manufacturing of nitric acid, ammonia and air is reacted in the reactor. For manufacturing of ammonium nitrate, nitric acid is used.

For the treatment of effluent generated from urea hydrolysis section, effluent treatment plant consisting of collection tank, chlorination of ammonia containing effluent, pH adjustment tank and the treated effluent is utilized for de-ashing of boiler ash which is further carried to ash dyke ponds and overflow of the ash dyke pond is utilized back into the process for the de-ashing of the boiler ash. The once through cooling water is discharged into river Sutlej.

### Observations of the Committee

The rise in temperature at inlet and outlet after cooling should not increase by 5°C. as prescribed by MOEF for which the industry has provided series of tanks with Zig-zag flow of cooling water into these tanks to drop the temperature.

### 2) M/s Punjab Alkalies & Chemical Ltd., Naya Nangal, Distt. Roopnagar

From Industry side:

- 1) Sh. M.P.S Walia, General Manager
- 2) Sh. Ashwani Kumar, Deputy General Manager

The industry is engaged in the manufacturing of caustic soda, chlorine gas, hydrogen gas and by product as sodium hydrochloride, liquid chlorine and hydrochloric acid. For the manufacturing of these products, it uses washery salt, barium carbonate, soda ash, sodium bisulphate, sulphuric acid. The manufacturing processes of the industry are manufacturing of brine solution, impurities removal, brine filtration, electrolysis, hydrogen separation, HCl production, sodium hypochlorite production by scrubbing chlorine with caustic soda.

The source of water supply is from river Sutlej and own tubewell, the quantity of effluent generated by the industry is 300 KLD. For the treatment of the effluent generated by the industry, it has installed effluent treatment plant consisting of aeration chamber, where air is supplied to reduce organic parameters. The mixed effluent is treated with coagulants and further settled into the settling chamber. As claimed by the representative of the industry, the overflow of the settling tank is further taken to the RO system which generate permeate about 20-30 % and rest of the effluent in the form of RO rejects taken back into the system. It was further claimed by the industry that the permeate generated from the RO system is utilized for plantation purposes.

### Observations of the committee

- 1) Though the industry has claimed that 20-30 % of the RO permeate generated from RO system is utilized for irrigation purpose and rest of the quantity of effluent (70-80%) is again taken into ETP for its re-treatment, but, the committee is of the view that it is difficult to retreat the RO reject water with freshly generated effluent, whereas the RO reject water must be

taken to the Multi Effect Evaporator for its evaporation and dried sludge must be sent to the TSDF site developed at Village Nimbuan, Tehsil Dera Bassi, Distt. SAS Nagar.

- 2) The facts indicate that the industry does not operate its RO system regularly to treat whole of the effluent and even the RO reject water containing high value of TDS is utilized for irrigation which may increase salt contents in the soil and further may reduce the fertility of the land.
- 3) The capacity of RO system is inadequate. The industry needs to increase the capacity of the RO system preferably two stage RO system to recover the maximum quantity of permeate and low generation of rejection from RO system so that it can be easily evaporated in the Multi Effect Evaporator.
- 4) The permeate from RO system is being discharged on to land for plantation which is not appropriate option. The industry need to reuse RO permeate in the processes of the industry to minimize the usage of fresh water.
- 5) The Industry need to submit the water balances statement to PPCB.

**B) Sewage Treatment Plant installed by Punjab Water Supply & Sewerage Board of capacity 8 MLD, Mojowal Road, Naya Nangal**

From Department side:

- 1) Sh. V.K. Garg, Chief Engineer
- 2) Sh. Rahul Kaushal, Executive Engineer
- 3) Sh. Tarun Gupta, Sub Divisional Engineer

For the treatment of sewage of Naya Nangal area and NFL township, Punjab Water Supply & Sewerage Board has installed a STP of capacity 8 MLD based on Activated Sludge process. The component of the STP are collection tank, screen chamber, grit chamber, primary clarifier, aeration tank, secondary clarifier and chlorination. The treated sewage is presently discharged into river Sutlej. Irrigation network has also been laid to utilize the treated sewage for irrigation during demand period.

During the visit, the Committee Members also observed lot of obnoxious smell from municipal solid waste dumping site near 10 MLD STP was there. Therefore, members of Executive committee tried to contact the Executive Officer of MC, Nangal to discuss the issue about poor management of MSW but he was out of station, Therefore, Junior Engineer of MC, Nangal was

called and he was apprised about the malfunctioning of the Municipal Solid waste dumping site.

#### **Observations of the Committee**

- 1) The sludge drying beds provided by the PWSSB were found almost dry which indicate that the industry has not withdrawn the sludge from secondary clarifier for the last 10-15 days
- 2) The PWSSB has not provided any separate shed for storage of the dried sludge so that new sludge to be generated daily may be taken into these beds.
- 3) The sludge drying beds have not been maintained properly.
- 4) M.C Nngal shall comply with ten common action points for managements of solid waste at damping site scientifically.

#### **C) Sewage Treatment Plant installed by Punjab Water Supply & Sewerage Board of capacity 5 MLD, Village Burarri, Nangal**

From Department side:

- 1) Sh. V.K. Garg, Chief Engineer
- 2) Sh. Rahul Kaushal, Executive Engineer
- 3) Sh. Tarun Gupta, Sub Divisional Engineer

For the treatment of sewage of Nangal area, Punjab Water Supply & Sewerage Board has installed a STP of capacity 5 MLD based on Activated Sludge process. The component of the STP are collection tank, screen chamber, grit chamber, primary clarifier, aeration tank, secondary clarifier and chlorination. The treated sewage is presently discharged into river Sutlej.

#### **Observations of the committee**

- 1) A bye pass drain carrying untreated sewage of locality mixing with treated sewage of STP was leading to river Sutlej. This drain was identified by the Committee Members, whereas no information in this regard was disclosed by the concerned Executive Engineer and Sub Divisional Engineer of Punjab Water Supply & Sewerage Board, Moreover, as informed Sh. Ashok Kumar Sharma, Environmental Engineer, Punjab Pollution, the fact regarding existence of bye pass drain was already in the knowledge of the Executive

Engineer, PWSSB. As such, these officers have misled the Committee about by passing of untreated sewage and discharging the same into river Sutlej. During visit, the effluent sample after the confluence point of treated sewage and untreated sewage carried through this drain has been collected and the sample has been handed over to PPCB team. The analysis results are awaited.

- 2) For dewatering of secondary sludge, the department has provided filter press and semi dried sludge is collected in a small pit, which is not scientifically designed to dry and store the sludge.
- 3) Member of the committee were also shown the discharge of untreated sewage of Jawahar market for into drain and further leading to river Sutlej by the local residents of Naya Nangal. The concert Executive Engineer of PWSSB informed that this discharge point shall be connected to 5 MLD soon after the approval given by railway authorities.

**D) Sewage Treatment Plant installed by BBMB of capacity 6.75 MLD, Nangal**

From Department side:

- 1) Sh. A.V Aggarwal, Chief Engineer
- 2) Sh. H.L Kamboj, Deputy Chief Engineer
- 3) Sh. Manvinderpal Singh, Executive Engineer
- 4) Sh. Sukhdev Singh, Sub Divisional Engineer

For the treatment of sewage of BBMB township area, BBMB has installed a STP of capacity 6.75 MLD based on Activated Sludge process. The component of the STP are collection tank, screen chamber, grit chamber, primary clarifier, aeration tank, secondary clarifier, anaerobic digester for sludge management and sludge drying bed. The treated sewage is discharged into river Sutlej during no demand period.

**Observations of the Committee**

- 1) STP was not in operation at the time of visit. The representative of the Department claimed that due to electricity failure, the plant has become non operational for a shorter period.
- 2) The authorities of BBMB later on started the operation of the STP after the arrival of the committee at site.

- 3) Anaerobic digester is not being operated properly, resulting in no generation of methane gas and digestion of the sludge anaerobically. No skilled/ trained man power is available with the Department for effective operation of anaerobic digester.
- 4) The condition of the sludge drying beds was pathetic because most of the sludge drying beds were full of wild grass which indicate that inspite of ineffective functioning of anaerobic digester, the sludge is not dried on sludge drying beds which indicate that STP is not being operated regularly and properly.
- 5) A bye pass arrangement has been maintained to bye pass the effluent. The representative of the BBMB claimed that the bye pass arrangements have been maintained to bye pass the effluent in case of any emergency.

**E) Recommendations:**

- 1) The observation of the Monitoring Committee with regard to the STPs and industries be conveyed to PPCB, PWSSB, BBMB and M.C Naya Nangal for further Immediate action in the matter.
- 2) PWSSB authorities be asked to issue show cause notice to Sh. Rahul Kaushal, Executive Engineer and Sh. Tarun Gupta, Sub Divisional Engineer for misleading the Committee about bye pass drain, carrying untreated sewage, leading to river Sutlej.
- 3) BBMB authorities be asked to issue advisory letters to Sh. Manvinderpal Singh, Executive Engineer and Sh. Sukhdev Singh, Sub Divisional Engineer regarding irregular operation and non maintenance of STP and worst condition of sludge drying beds, which were not found used for the last so many days, because these sludge drying beds were found full of wild grass.

*Rahul*  
( Dr. Babu Ram ) 27/11/2011

*Akhansh Jee*  
*Justice n/a*  
*Pal*  
(Justice Pritam Pal) 25.  
Former judge,  
Punjab and Haryana  
High Court

**OFFICE OF THE MONITORING COMMITTEE**

Constituted by the Hon'ble National Green Tribunal in Original Application no.138 and 139 of 2016, OA No.916/2018 (earlier OA No.101 of 2014) OA No.606 of 2018 and OA No.1040 of 2018

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex,  
Sector 68, SAS Nagar) Tel. No. 0172-2298091  
Email: sutlejbeasriver@gmail.com

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To

1. The Chief Executive Officer,  
Punjab Water Supply & Sewerage Board,  
Plot No.1-B,  
Sector 27- A,  
Madhya Marg, Chandigarh 160019
2. The Chairman,  
Punjab Pollution Control Board,  
Patiala.
3. The Chairman,  
Bhakra Beas Management Board,  
Sector 19-B, Madhya Marg,  
Chandigarh
4. The Executive Officer,  
Municipal Council, Nangal,  
Distt. Roopnagar.

No. CEC/2019/ 64-67  
Dated: 25.4.2019

**Subject:** Report on visit to the industries of Nangal area and Sewage Treatment Plants installed by the Punjab Water Supply & Sewerage Board and BBMB, Nangal on 18.04.2019 by the Executive Committee constituted by the Hon'ble National Green Tribunal in OA no. 916 of 2018 titled as Sobha Singh & Others V/s State of Punjab & Others.

\*\*\*\*

It is intimated that the Executive/Monitoring Committee constituted by the Hon'ble National Green Tribunal in OA No. 916 of 2018 titled as Sobha Singh and others Vs. State of Punjab and others has visited the

9/c

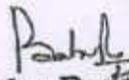
industries and Sewage Treatment Plants of Nangal area on 18.4.2019. The copy of the inspection report is enclosed herewith.

The Committee has made the following recommendations based on its observations: -

- 1) The observation of the Monitoring Committee with regard to the STPs and industries be conveyed to PPCB, PWSSB, BBMB and M.C Naya Nangal for further Immediate action in the matter.
- 2) PWSSB authorities be asked to issue show cause notice to Sh. Rahul Kaushal, Executive Engineer and Sh. Tarun Gupta, Sub Divisional Engineer for misleading the Committee about bye pass drain, carrying untreated sewage, leading to river Sutlej.
- 3) BBMB authorities be asked to issue advisory letters to Sh. Manvinderpal Singh, Executive Engineer and Sh. Sukhdev Singh, Sub Divisional Engineer regarding irregular operation and non maintenance of STP and worst condition of sludge drying beds, which were not found used for the last so many days, because these sludge drying beds were found full of wild grass.

In view of the recommendations of the Executive Committee, it is requested that suitable action on the violations as observed by the Committee alongwith issuance of show-cause-notice and advisory letters to the concerned officers by their respective departments, may be taken.

Action taken report may kindly be sent within 15 days.

  
(Dr. Babu Rani)  
Member,  
Executive Committee

# ANNEXURE-8

Directorate of Environment & Climate Change

Proceedings of the 2<sup>nd</sup> Meeting of NGT Monitoring Committee under the 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 on 24.04.2019 at 2.30 pm in Conference Room of PSCST, MGSIPA Complex, Chandigarh.

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## Item No. 1 Leave of Absence

1. The following Members of the Committee attended the Meeting

Members of the Committee	Sh. Subodh Agrawal
	Dr. Babu Ram
	Sh. Balbir Singh Seechewal

2. Sh. J.Chandra Babu, CPCB and Sh. NirajMathur, RPCB, members of NGT Monitoring Committee could not attend the meeting because of their pre-occupations.

3. The following Officers from various Departments attended the meeting.

Department of Science, Technology & Environment	Sh. Rakesh Kumar Verma, IAS, Principal Secretary, Sh. Saurabh Gupta, IFS, Additional Director Sh. Pardeep Garg, Joint Director Sh. Gurharminder Singh, SSO Ms. Manak Bola, JRF
Department of Local Government	Sh. Ajoy Sharma, IAS, Secretary, Sh. MukulSoni, Chief Engineer, Sh. K.P. Goyal, EIC/TA Sh. Jitin Vasudeva, EE
Municipal Corporation, Ludhiana	Sh. Sanyam Aggarwal, IAS, Additional Commissioner Sh. Ravinder Garg, SE(O&M)
Municipal Corporation, Jalandhar	Sh. Kishor Bansal, SE (O&M)
Punjab Pollution Control Board	Sh. S. S. Marwaha, Chairman Sh. Krunesh Garg, Member Secretary, Sh. Gulshan Rai, CEE
Department of Water Resources	Sh. Sanjiv Gupta, Chief Engineer, Sh. R.P. Singh, Superintending Engineer,
Department of Water Supply & Sanitation	Sh. Paramjit Singh, PCS, Additional Secretary, Sh. R.P. Gupta, SE,
Department of Housing & Urban Development	Sh. TarunAggarwal, DE (PH), GLADA Sh. BhagwanDass, DE (PH), GMADA
Department of Rural Development & Panchayats	Sh. Jaskaran Singh Gill, IAS, Director, Sh. Devinder Kumar, SE,

Department of Soil & Water Conservation	Sh. G.S. Dhillon, Soil Conservation Officer,
Department of Industries & Commerce	Sh. S.K. Sharma, XeN, PSIEC
Central Ground Water Board	Sh. M.L. Angurala, Scientist-D, Sh. Rakesh Rana, Scientist-D,
Department of Health & Family Welfare	Sh. Vijay Kumar Sharma, EE (PHSC)

**Item No. 2 Review of Monitoring of Water Quality of Rivers**

1. Member Secretary, PPCB presented the status of water quality of river Sutlej, Beas & Ghaggar.
2. It was informed that the Board has identified the following locations for installation of Real Time Water Quality Monitoring Stations:

River	Proposed Location
Sutlej	Ropar Headworks
	D/S Budha Nallah
	D/S East Bein
	Harike Lake (Rajasthan feeder)
Beas	Mukerian
	Tanda
	Harike Lake (Ferozepur Feeder)
Ghaggar	Bhankharpur Bridge
	D/S Patiala Nadi
	D/S Sagarpara Drain
	Sardulgarh

3. The Board is further interacting with various suppliers for finalizing the technical specifications for preparing the tender documents. The proposal includes operation and maintenance for 5 years.
4. The Committee noted the progress and directed that
  - (i) The quality of river water for the month under report should be compared 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 should also be stated.
  - (ii) It was also decided that the flow of the river shall also be taken into account while comparing the data of water quality of the rivers.

- (iii) PPCB to install the real time water quality monitoring stations expeditiously as real time continuous data will give useful information to monitor and respond to the challenges of water pollution in rivers in real time. It will also help analyze the causes of pollution of river water.

**Item No. 3      Review of Monitoring of Functioning of Existing STPs in the catchment area**

1. Secretary, Local Government presented the progress w.r.t. functioning of existing STPs falling in the catchment area of river Sutlej, Beas & Ghaggar. Following points were made:

- (i) Existing STPs at Jamalpur and Bhattian were not be able to achieve the prescribed standards as the receiving sewage is mixed with industrial effluents of textile dyeing industries.
- (ii) The efforts are being made by the Department to improve the functioning of the remaining STPs
- (iii) Payment to the Contractors is being made regularly by PWSSB for the STPs being maintained by them even if the concerned MCs are not releasing funds to PWSSB in time.
- (iv) PPCB may consider taking composite samples instead of grab samples for monitoring the quality of treated sewage of STPs. Even their contract with Operators of STPs provides for composite sampling.
- (v) Regarding F.Coli, it was informed that measures are being taken to bring the same within norms by chlorination and other requisite measures.
- (vi) Online monitoring is being done at some STPs and online systems will be installed on other STPs also expeditiously.

2. Chairman, PPCB informed that

- (i) The Board carried out surprise surveillance of existing STPs wherein out of 76 STPs, 13 STPs were found to have their bypass system in operation.
- (ii) The STP operators are not maintaining any record of the Sludge, which is crucial for monitoring the performance of the STPs.
- (iii) Similarly there was no chemical, no technical and no non-technical staff at many STPs as brought out in the Agenda.
- (iv) Composite sampling will require more staff from the PPCB, which are already short staffed keeping in view multifarious duties.

3. The Committee deliberated on various issues and decided as under:

(i) O&M Manual

The Department of Local Government needs to take proactive steps to ensure that each STP is operating as per the design standards and take steps to meet the prescribed standards, if the same have become stringent than the design standards over period of time. The Department of Local Government must prepare a comprehensive manual for O&M of all STPs and towards ensuring compliance with the prescribed norms. A copy of the manual may be sent to the Department of Environment and PPCB to provide feedback and suggestions.

(ii) Action against the Contractors

Financial penalties must be imposed on Contractors maintaining STPs, which don't meet the standards and suitable provisions must be built in the contracts, if required. All O&M contracts must have in built mechanism for meeting the standards and levying of penalties in case of failure. The Department must submit a compliance report along with action taken against the contractors.

(iii) Fixing the Responsibility of the Supervisory staff

Supervisory Staff shall also be held responsible and accountable if there is no improvement in the functioning of the STPs. Their role and responsibilities shall be clearly documented and the same shall also be linked to their performance assessment.

(iv) Sealing of Bypass mechanism

It was decided that the Department will get all Bypass System sealed in presence of the Board officials. In case of emergency, the Department will break the seal and use the Bypass system and simultaneously inform the Board officials, who would inspect the site and seal the Bypass system again after the emergency is over. Proper record will be maintained by the Department of Local Government duly countersigned by the Board official visiting the site. Any unauthorized use of Bypass system will invite penalties.

(v) Monitoring of Sludge

Sludge is an important parameter for monitoring the performance of STP. The Board has evolved a proforma and the Department of Local Government will ensure that all ULBs provide the necessary information in the prescribed format to PPCB for analysis.

(vi) Composite samples

Composite sample would be taken by the Board for STPs in Ludhiana and Jalandhar for the time being keeping in view the shortage of Staff at present with the Board.

(vii) Hiring of the Staff

The Board shall expedite hiring of the requisite field staff after the election code of conduct is over. The Chairman assured that he has done internal preparations and would start the recruitment process immediately after the election code of conduct.

(viii) Measuring of Quantity and Quality of Treated Industrial Effluents being discharged into Municipal Sewer

The Department of Local Government and Municipal Corporation, Ludhiana which has given permission to the Industry to discharge specific quantities of treated effluent only in the municipal sewer, are entitled to measure both the amount and quality of treated industrial effluents being discharged into municipal sewer. In fact, it is obligatory on their part as they are responsible to ensure that waste water being carried through Municipal Sewer is treated and then discharged into Buddha Nallah.

(ix) Online Continuous Monitoring System

The online continuous monitoring system on STPs shall be made accessible to the members of the Monitoring Committee, PPCB and DECC to see the compliances.

(x) Environmental Compensation

If the STPs continue to default except on account of industrial effluents, which are to be taken care of by the Board, then the concerned ULBs will be liable to pay environmental compensation for polluting the rivers.

**Item No. 4 Review of Monitoring of Functioning of CETPs in the catchment area**

1. Member Secretary, PPCB informed that out of the 4 CETPs, the CETP for Jalandhar Leather Complex was not meeting the prescribed discharge standards. However, its performance has improved after constant supervision and guidance from the Board.

2. The matter regarding CETP for electroplating industries located at Ludhiana had also come up for discussion. It was apprehended that industries may not be handing over the entire effluents for treatment or the tankers transporting effluent might be disposing it off at some places instead of taking it to CETP.
3. The Committee after discussion on the matter decided as follows:
  - (i) It was decided that monitoring of all tankers, which bring untreated industrial effluent to CETP from various locations shall be done effectively so that there is no possibility of untreated effluents being discharged without bringing it to CETP. This can be done by developing suitable mobile application and GPS.
  - (ii) The leather CETP should be monitored effectively and environmental compensation levied for exceeding the prescribed standards.

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

1. The Committee noted the inspections carried out by the Board. It was noted that the Board has not reported the inspections carried out by Senior Environmental Engineers, Chief Environmental Engineers and Chairman as directed earlier. The toxicity and risk of the inspected units discharging untreated effluents directly or indirectly through municipal sewer in Buddha Nallah or other drains or rivers has also not been given.
2. Following issues came up for discussion regarding monitoring of functioning of ETPs installed by industries
  - (i) As per CPCB's direction, Real time Continuous Monitoring Systems have been installed in 17 categories of highly polluting industries.
  - (ii) As per Action Plan prepared by the State Government in compliance with the directions of NGT, all water polluting industries discharging more than 40 KLD have been directed to install Continuous Online Monitoring Systems.
  - (iii) The Board has however not laid down any mechanism for monitoring the data and system and taking action on the basis of reports from the Continuous monitoring system.
  - (iv) Since the STP at Jamalpur is completely dysfunctional due to mixing of industrial discharge, there is need to focus on ETPs of Industries in the catchment of Jamalpur STP.
  - (v) Similarly there is direct discharge into Buddha Nallah at Amrit Kanda and the industries connected to this line need special attention.

3. The Committee accordingly directed the following:

(i) Effective Use of Continuous Monitoring System

The Board shall set up a dedicated team to monitor the data of continuous monitoring system and detect any non-compliance and take action. The data should be carefully analysed to detect any attempts to compromise the system. A report shall be submitted by the Board in this regard, which will be reviewed in the next meeting. The online system interface may also be made available to the members of monitoring committee and the DECC so that they can also see the compliances online.

(ii) Risk based Inspections

The Board will pay special attention to monitoring of industries in the catchment of Jamalpur Industry and connected to Since the STP at Jamalpur is completely dysfunctional due to mixing of Industrial discharge, the Board should carry out special monitoring of ETPs of Industries in the catchment of Jamalpur STP.

(iii) Inspections by Senior Officers of the Board and Independent Inspections

Reiterating the directions given by the Monitoring Committee in 1<sup>st</sup> meeting held on 20.03.19, the Chairman was directed to personally inspect some of the high risk industries, apart from ensuring that other Senior Officers also visit certain percentage of ETPs inspected Regional Officers (Environmental Engineer). This is required as the local officers, at times, may not be in a position to carry out their duties in a free and fair manner due to various local factors.

(iv) Third Party analysis

The samples of at least 10% of ETPs to be got collected and analysed from third party by Department of Environment.

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

The Committee was informed that progress of Setting up of New / Up-gradation and Rehabilitation of STPs was being reviewed at the level of Chief Secretary and progress of same will be presented in the next meeting.

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

1. Member Secretary, PPCB apprised the Committee that CETP of 15 MLD at Bhadurke Road and 40 MLD capacity at Focal Point will be commissioned by 30.06.19 & 31.10.19, respectively. However, progress of 50 MLD STP at Tajpur

Road was found to be slow. PSSTE also expressed apprehension that the CETPs are unlikely to be operational in the timelines shown by PPCB.

2. Secretary, Local Government expressed apprehension that the design parameters of CETPs are not in order and CETPs will not be effectively
3. The Committee noted the current status of CETPs and after due deliberations, directed as under:
  - (i) PPCB to closely supervise the time schedule given by the SPVs for timely commissioning of CETP. The Board shall impose environmental compensation after the due date.
  - (ii) The Board shall also put in place a legally binding mechanism for successful operation of these CETPs.
  - (iii) The Board shall also analyze the design parameters of the CETPs to ensure that they would be able to treat the industrial effluents of the respective industrial clusters.
  - (iv) The conveyance systems for carrying the industrial effluents to CETPs shall also be ensured.

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

The Committee noted the progress. It was informed by MC, Ludhiana that Haibowal Biogas Plant set up PEDA has been closed. It was decided that Department of Environment may held separate meeting with PEDA in this regard.

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

The matter was discussed in detail. Principal Secretary, Department of Environment informed that Terms of Reference for joint monitoring to ascertain the quantity and quality of wastewater by PPCB & MC Ludhiana are being finalized. The same will be discussed in the next meeting.

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

Chief Engineer (Drainage), Department of Water Resources informed that Rs. 6 Crore has been tied up for execution of Holy Bein project under 550th Prakash Utsav Celebrations of Guru Nanak Dev Ji for release of 350 cusecs of water into Holy Bein. Regarding release of 200 cusec of water into Buddha Nallah through Nilon Drain, the project will be prepared within one month and will be executed within 6 months after financial closure of the project estimated to be Rs. 10-15 crores.

The Committee directed the Department of Water Resources to submit a Roadmap to Department of Environment for implementation of both the projects.

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

The Committee noted the progress. The various options for reuse of treated wastewater were discussed in detail. It was also informed to the Committee that a separate Action Plan on Reuse of treated wastewater is being prepared by Department of Environment as per directions of NGT.

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

MC Ludhiana presented the progress. The Committee directed MC Ludhiana to initially undertake 500 meter stretch of Buddha Nallah to prevent dumping of solid waste by taking various measures such as installation of CCTV Cameras, manual monitoring with the involvement of social welfare organizations and hiring of manpower. The Committee further directed that offenders be challenged regularly.

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

The Committee noted the progress. The Committee was informed that appropriate technology for treatment of rural sullage will be finalized by the Committee constituted under Chairman, PPCB.

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

It was discussed that the scattered units either plan for separate CETP or achieve ZLD.

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

The Committee noted the progress.

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

The Chairman, Monitoring Committee directed Department of Health and Family Welfare to carry out epidemiological studies to study the effect of water borne diseases on human health in the catchment areas of rivers.

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

The Committee noted the progress presented by MC, Ludhiana and directed other departments to also organize the capacity building and awareness activities.

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

The Committee was informed that subject matter will be discussed in meeting of Chief Secretary to be held on 29.04.2019 and progress in this regard be presented in the next meeting of Monitoring Committee.

**Any Other Item**

1. The Chairman appreciated that all the regulatory and development agencies are now fully sensitized to the problem of pollution in our water bodies including rivers.
2. The Chairman, however, cautioned the Departments that the situation on ground has to improve. He specifically mentioned that during his visit to some of the industries in Panchkula and Chandigarh, he found the pollution control measures in those industries not being functional. He made it clear that disciplinary action will be recommended against the Officers/ officials found negligent in their duties.
3. Mr. Subodh Agrawal, Senior Member of the Committee observed that we should follow 80:20 approach where our efforts shall be focused on activities and interventions, which will lead to 80% outcomes. He emphasised that focus on 5 STPs and 3 CETPs in Ludhiana can take care of major challenge of cleaning Buddha Nallah as well as Sutlej river.
4. The Chairman decide that the meeting of the Committee shall be held on every 2<sup>nd</sup> Thursday of the month.
5. The Chairman also decided that the Monitoring Committee will visit Ludhiana on 1<sup>st</sup> May 2019 for assessment of ground situation and meeting with various stakeholders.

# ANNEXURE - 9

Report on visit to the Pollution sources into Budha Nallah and sewage treatment system provided by Municipal Corporation, Ludhiana on 01.05.2019 by the Monitoring Committee constituted by the Hon'ble National Green Tribunal vide order dated 28-02-2019 in the matter of O.A. No. 916 of 2018 titled as Sobha Singh & Ors. V/s State of Punjab & Ors.

The following were present during the visit:-

a) **Members of the Monitoring Committee:**

Sr. No.	Name & Designation	Designation in the Committee
1)	Justice Pritam Pal, Former Judge, Punjab & Haryana High Court	Chairman
2)	Sh. S C Aggarwal, Former Chief Secretary, Punjab	Senior Member
3)	Dr. Babu Ram, Former Member Secretary, Punjab Pollution Control Board	Member
4)	Sant Balbir Singh Seechewal	Member

b) **Punjab Pollution Control Board:**

- 1) Sh. Gulshan Rai, Chief Environmental Engineer, Ludhiana
- 2) Sh. Sandeep Behl, Senior Environmental Engineer, Zonal Office-2, Ludhiana
- 3) Sh. A.K. Kalsi, Senior Environmental Engineer, Zonal Office-1, Ludhiana
- 4) Sh. Paramjeet Singh, Environmental Engineer, Regional Office-3, Ludhiana.
- 5) Sh. G.S. Gill, Environmental Engineer, Regional Office-4, Ludhiana.

c) **Municipal Corporation, Ludhiana**

- 1) Smt. K.P. Brar, IAS, Commissioner,
- 2) Sh. Sayam Aggarwal, IAS, Additional Commissioner
- 3) Sh. Ravinder Kumar Garg, Superintending Engineer
- 4) Sh. Rajinder Singh, Superintending Engineer

d) **Officers of Other Departments:**

Sr. No.	Name & Designation	Department
1)	Sh. Harjot Singh, Executive Engineer	Deptt. of Water Resources
2)	Sh. Rajinder Pal Bansal, Executive Engineer	Deptt. of Rural Development & Panchayat
3)	Sh. Kulbir Singh, Manager	PEDA

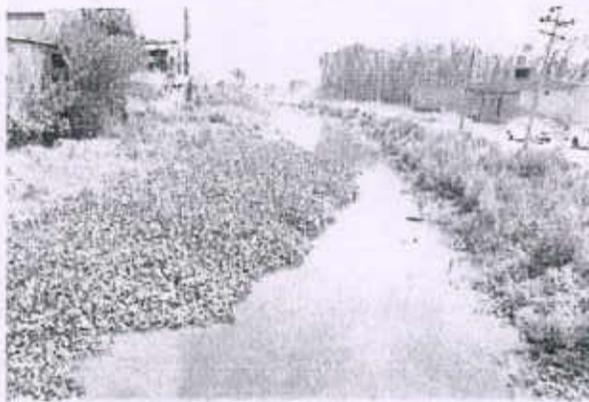
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## **1.0 Visit along Budha Nallah**

### **1.1 Budha Nallah at Bhamian Kalan**

The Monitoring Committee along with officers of the various departments, started its visit to the Budha Nallah from Bhamian Kalan, the point where it enters into Ludhiana. At this point, the quality of water in Budha Nallah was found deteriorated due to the discharge of M.C. Sahnewal and Machhiwara. It was informed that these municipal councils have installed their Sewerage Treatment Plants (STPs).

**The committee desired that STPs of these municipal councils be monitored by Punjab Pollution Control Board to check their performance. The discharge in Budha Nallah at this point is shown in plate-1.**



**Plate 1: Budha Nallah at Bhamian Kalan**

### **1.2 Sewage Treatment Plant Jamalpur:**

The capacity of the STP Jamalpur is 48 MLD. The officers of Punjab Pollution Control Board and Municipal Corporation, Ludhiana informed that presently, the discharge into this STP is about 111 MLD which is due to discharge from industries of Tajpur Road and Focal Point and residents of nearby colonies. During visit to STP by the committee, it was observed that the STP was not operation and the officers of Municipal Corporation, Ludhiana informed that this STP is lying defunct and non-functional.

The officers of Municipal Corporation, Ludhiana informed that STP shall be rehabilitated based on technology to be adopted keeping in view of the discharge of sewage along with treated industrial effluent as per the timeline mentioned in the Action Plan. During the visit,

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the committee member asked the officers of Punjab Pollution Control Board to analyze the quality of sewage entering into STP because today i.e. on the day of visit, the industries of Tajpur Road were lying closed which were told to be closed due to labour day. Similarly, it was also desired by the Committee that the quality of sewage at inlet and outlet of all STPs in Jalandhar and Ludhiana may also be analyzed to check their performance because due to labour day, it is quite possible that the discharge from the industries into STPs may not be there.

**The Committee directed the Municipal Corporation, Ludhiana to rehabilitate the STP based on appropriate technology and sewage flow entering into STP in view of future increase in discharge due to growth in population.**

### **1.3 Dairy Complex, Tajpur Road:**

The wastewater from Dairy Complex, Tajpur Road (5MLD) is discharged into Budha Nallah without any treatment which deteriorates its quality. The officers of Municipal Corporation, Ludhiana informed that there is a proposal to shift these dairies to the designated area. Alternatively, there is a proposal to install STP of capacity 10 MLD but still no concrete proposal has been finalized so far.

**The committee desired that the Municipal Corporation, Ludhiana shall prepare concrete and firm proposal for treatment of wastewater from Dairy Complex, Tajpur Road. In case, these dairies are to be shifted to designated area, the firm timelines must be submitted so that the discharge from these dairies may be cut off from entering into Budha Nallah. The discharge from dairy complex into Budha Nallah is shown in plate-2.**



**Plate 2: Untreated Discharge from Dairy complex, Tajpur Road into Budha Nallah**

#### **1.4 Transport Nagar outlet into Budha Nallah Near Gurdwara Gaughat:**

Lot of discharge of wastewater (60 MLD) coming from Transport Nagar was found entering into Budha Nallah (Plate-3). It was informed by the Municipal Corporation, Ludhiana that the said outlet shall be connected to main sewerage system leading to STP Bhattian.

**The connectivity of this outlet to the STP shall be made as per the timelines mentioned in the Action Plan.**

#### **1.5 Common Effluent Treatment Plant (CETP) Bahadurke Road, Ludhiana**

To treat the effluent of 23 dyeing industries of Bahadurke Road dyeing complex, Ludhiana, 1.5 MLD CETP is under construction, which is almost on completion stage. The representative of SPV Bahadurke Road informed that the CETP shall be commissioned within 3 months. Photograph showing CETP under construction is shown as per Plate no.3:



**Plate 3: under construction CETP at Bahadurke Road, Ludhiana**

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**The committee desired that the CETP must be completed by 30.06.2019.**

#### **1.6 Qasabad (confluence of STP Bhattian outlet with River Sutlej) and STP Bhattian**

At Bhattian, Municipal Corporation, Ludhiana has installed two STPs of capacity 111 MLD and 50 MLD based on UASB and SBR Technology, respectively. The combined treated sewage of both these STPs is discharged into river Sutlej. During visit, it was observed that the color of the treated sewage entering into river Sutlej was black in colour which indicates that the performance of STP is not satisfactory.

After the visit of confluence point, the committee also visited STP's of capacity 111 MLD and 50 MLD. The colour of final outlet of 50 MLD STP was physically seen by the Committee

and it was observed that the color was almost clear but with slight pink tinge. **Therefore, the committee desired that the treated sample must be analyzed from a reputed laboratory for its chemical analysis to identify the reasons for color in the treated sewage.**

The quality of treated sewage from outlet of 111 MLD UASB based STP was also seen physically by the committee and it was observed that the color was black which indicated that the treated sewage was contaminated and it was felt that the STP is not functioning properly and it needs upgradation/rehabilitation as per the time schedule mentioned in the Action Plan. Plates 4, 5 and 6, showing the colour of treated sewage of 50 MLD STP, 111 MLD STP and confluence of outlet of STP Bhattian with river Sutlej, are mentioned as under:



**Plate-4: Treated sewage from 50 MLD STP based on SBR technology**



**Plate-5: Treated sewage from 111 MLD STP based on UASB technology**



**Plate-6: Confluence of combined partially treated sewage of STP Bhattian with river Sutlej**

**The Committee members took serious view about the discharge of partially treated sewage into river Sutlej, resulting in deterioration in the quality of river water. The officers of Municipal Corporation, Ludhiana were directed to improve the performance of STP.**

Further, the committee noted that the final polishing tank of UASB plant is choked with sludge as it has never been cleaned since the commissioning of the plant. It was explained by MC officers that cleaning in running water was not possible.

**The committee desired that the corporation should explore the possibility of wet dredging in consultation with experts from the relevant department.**

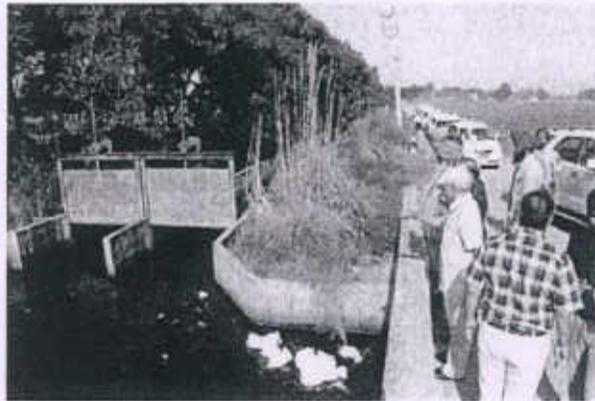
#### **1.7 Press Conference:**

Afternoon, the press reporter held interaction meet with the members of the Monitoring Committee. The Chairman of the Committee informed that the Hon'ble National Green Tribunal has constituted the monitoring committee to monitor the works executed/to be executed by the various departments of the State Govt./other stakeholders to improve the quality of the rivers namely Sutlej, Beas and Ghaggar. The target of the committee is to rejuvenate/restore the quality of waters of these rivers. With this objective, the committee planned their visit to Budha Nallah to check the various pollution sources entering into it and the steps taken by Government of Punjab to control these pollution sources. The various major outlets, carrying untreated sewage of city and dairy outlets falling into Budha Nallah and STPs installed for treatment of sewage of the city have been visited by the committee. Besides, the committee has also visited the CETP of 15 MLD capacity, which is likely to be commissioned within next 3 months.

Overall the observations of the committee w.r.t quality of effluent, falling into Budha Nallah, is that technological and quantitative upgradation/rehabilitations is required to be made by the Municipal Corporation, Ludhiana to improve the quality of effluent falling into Budha Nallah. Lastly, the Chairman of the Committee asked the Press reporters to give full cooperation and bring awareness among mass to improve the quality of rivers of the State.

#### 1.8 Sewage Treatment Plant Balloke of capacity 257 MLD

The capacity of STP Balloke is 257 MLD. Two STPs of capacity 152 MLD and 105 MLD have been installed which are based on UASB and SBR Technology, respectively. The quality of treated sewage coming from both these STPs was seen physically by the committee and it was observed that the color of treated sewage was quite black (photograph showing partially treated black coloured sewage at outlet of STP as per Plate-7) which indicate that the sewage is not being treated properly and effectively. It was felt that there is need to upgrade/rehabilitate the STP based on UASB technology as per the timeline given in the Action Plan.



**Plate-7: Partially treated black coloured sewage at outlet of STP, Balloke**

#### 1.9 Disposal of effluent from Dairy Complex, Haibowal into Budha Nallah and Bio-gas Plant, Haibowal

There is a dairy complex at Haibowal. From this Dairy Complex, about 400 TPD animal dung is generated, out of which 180 TPD is given to Bio-Gas Power Plant Haibowal and rest of the animal dung is sold by the dairy owners in the market at the rate higher than the rates given by the management of PEDDA who has installed Bio-Gas Power Plant of capacity 1 Megawatt. During visit, it was observed that the plant was not functioning and it was

informed by the manager of PEDA that the plant shall be made operational by the end of May, 2019. The power plant based on Bio-Gas shall be operated at capacity 0.5 Megawatt and from rest of the Bio-Gas to be generated using animal dung, shall be converted into CBG, which shall be sold in open market.

The liquid effluent (10 MLD) in the form of washings and urine of animals is directly discharged into Budha Nallah (photograph as per plate-8).



**Plate-8: Drain carrying effluent from dairy complex, Haibowal, meeting with Budha Nallah**

The officers of Municipal Corporation, Ludhiana informed that there is a proposal to install 10 MLD ETP for this dairy complex. Alternatively, the Corporation has also proposal to shift these dairies to the designated area for which concrete decision is yet to be taken.

**The committee desired that the Municipal Corporation, Ludhiana shall prepare concrete and firm proposal for treatment of wastewater from Dairy Complex, Haibowal. In case, these dairies are to be shifted to designated area, the firm timelines must be submitted so that the discharge from these dairies may be cut off from entering into Budha Nallah.**

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#### **1.10 Budha Nallah at Barnhara Bridge**

The members of the committee also visited the Budha Nallah at Barnhara Bridge. It was observed that lot of wild grass and other plants were grown in the Budha Nallah and the

effluent was passing under the layer of these wild grass and other plants. The quality of effluent falling into Budha Nallah was quite black and was giving stinking odour.

**The committee took a serious note in this regard and decided as under:**

- 1) **Department of Water Resources shall take immediate steps to desilt the Budha Nallah at this location and desilting process be completed within 15 days.**
- 2) **Department of water resources shall desilt Budha Nallah within city area within 2 months i.e. before monsoon.**

#### **1.11 Confluence point of Budha Nallah with river Sutlej**

Finally, the committee visited the place (Village Walipur) where with the Budha Nallah meets with river Sutlej. The colour of effluent flowing in Budha Nallah before meeting with river Sutlej is shown in Plate-9. The quality of effluent flowing into Budha Nallah was quite dark which indicate that the water flowing into Budha Nallah was contaminated with high level of organic parameters such as BOD, COD and TSS etc. The confluence of Budha Nallah in river Sutlej was showing different coloured streams of Budha Nallah and river Sutlej. The photograph of Budha Nallah mixing with river Sutlej at this location is mentioned as per Plate 10. The residents of the nearby villages made complaint against the industries falling in Hambran area specially paper mills, which were previously discharging their wastewater into Budha Nallah, but with their intervention, now the discharge into Budha Nallah by these industries has been stopped. But now they have apprehension that these industries might be discharging their wastewater into borewell or unknown places.



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**Plate 9: The colour of effluent flowing in Budha Nallah before meeting with river Sutlej**



**Plate 10: Budha Nallah mixing with river Sutlej at Village Walipur**

**The Chairman of the committee desired that these industries must be checked by Punjab Pollution Control Board within 7 days to verify their treatment systems and mode of disposal and submit the report to the committee.**

The residents of the nearby villages also made complaint that they are suffering with serious diseases like hepatitis-c, because of seepage of Budha Nallah water.

**The Chairman of the committee desired that Medical Health Camp be organized in these villages, he may also be invited in the camp. It was also desired that the Punjab Pollution Control Board should conduct ground water sampling at 5-6 locations in Village Walipur in the presence of Sarpanch of the village to assess the quality of the Ground water.**

#### **2.0 Verification of complaint made by Sh. Nitin Dhiman, Press reporter of Punjab Group of Kesari Newspaper**

*Ref*  
In the press conference, Sh. Nitin Dhiman, Press reporter of Punjab Kesari Group of Newspaper raised an issue regarding discharge of trade effluent by some industries and which has been freshly closed, in view of the visit of monitoring committee. As per his information, there are five outlets which are directly discharged into Budha Nallah without any treatment. He further informed that the pipelines have been covered with fresh soil. Accordingly, Chairman of the committee directed Punjab Pollution Control Board and M.C. Ludhiana to visit the site with the press reporter and submit the report to the committee.

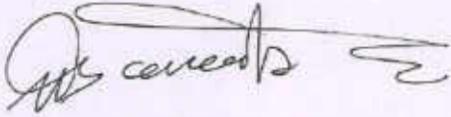
Sh. Parmjit Singh, Environmental Engineer of Punjab Pollution Control Board and Sh. Ranbir Singh, Executive Engineer, Municipal Corporation Ludhiana visited the area and it was observed that out of five outlets, two outlets were not in existence. Out of remaining three outlets, two were from scattered dairies and 5<sup>th</sup> outlet was found maintained as overflow of the main sewer, laid to the proposed CETP of 50 MLD at Tajpur Road, Ludhiana into Budha Nallah. In this sewer, a manhole has been kept from where two pipelines of 12" diameter each leading to Budha Nallah, were found laid. Sh. Ranbir Singh, Executive Engineer of Municipal Corporation, Ludhiana informed that the said sewer line has been laid by the Punjab Dyers Association on its own. During visit, this pipeline was plugged by the Municipal Corporation, Ludhiana.

**The committee took a serious view in this regard and directed as under:**

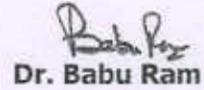
- 1) Chairman Punjab Pollution Control Board shall take legal action under the provisions of the Water Act, 1974 against the Municipal Corporation Ludhiana and Punjab Dyers Association, Ludhiana which has maintained unauthorized direct outlets into Budha Nallah through the sewerage system and Municipal Corporation has not checked these unauthorized outlets, whereas, such discharges are not allowed into Budha Nallah.**
  - 2) Chairman PPCB shall take disciplinary action against the Assistant Environmental Engineer, who is looking after the area of Tajpur Road, for not reporting the existence of said unauthorized outlet into Budha Nallah.**
  - 3) Chairman PPCB shall direct Municipal Corporation Ludhiana to remove all the outlets carrying industrial wastewater directly into Budha Nallah. Officers of PPCB shall coordinate in the matter.**
  - 4) Municipal Corporation should be more vigilant in future so that no such illegal discharges are allowed into Budha Nallah.**
- 3.0 Quantity of water consumption for domestic usage and treatment of sewage.**

*Ranbir*  
The Punjab Pollution Control Board claims that there is about 610 MLD discharge in Budha Nallah from Municipal Corporation Ludhiana, whereas, the total capacity of sewage treatment plants is 466 MLD. As such, there is a gap of about 150 MLD of sewage, which is required to be treated by installing more sewage treatment plants. Municipal Corporation Ludhiana states that total discharge of sewage of municipal corporation Ludhiana is 350 MLD. Thus, the present treatment capacity is sufficient to treat whole of the domestic wastewater of Ludhiana. Therefore, keeping in view the conflict between two departments, the Committee decided as under:

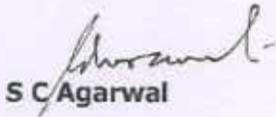
Both the departments i.e. Punjab Pollution Control Board and Municipal Corporation Ludhiana shall jointly carry out the studies w.r.t. consumption of water for domestic usage in Ludhiana and discharge of sewage into Budha Nallah and conclude the issue within one month.



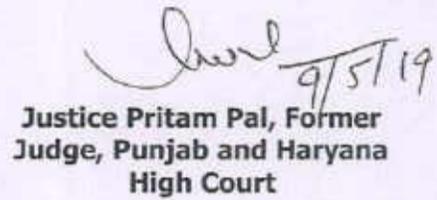
Sant Balbir Singh Sicheval



Dr. Babu Ram



S C Agarwal



Justice Pritam Pal, Former  
Judge, Punjab and Haryana  
High Court

## OFFICE OF THE MONITORING COMMITTEE

Constituted by the Hon'ble National Green Tribunal in Original Application no.138 and 139 of 2016, OA No.916/2018 (earlier OA No.101 of 2014) OA No.606 of 2018 and OA No.1040 of 2018

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex,  
Sector 68, SAS Nagar) Tel. No. 0172-2298091  
Email: sutlejbeasriver@gmail.com

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To

1. The Chairman,  
Punjab Pollution Control Board,  
Patiala.
2. The Commissioner,  
Municipal Corporation,  
Ludhiana
3. The Chief Engineer (Drainage),  
Department of Water Resources,  
Sector 68, Mohali

No. CEC/2019/93  
Dated: 15.5.2019

**Subject: Report on visit to the Pollution sources into Budha Nallah and sewage treatment system provided by Municipal Corporation, Ludhiana on 01.05.2019 by the Monitoring Committee constituted by the Hon'ble National Green Tribunal in order dated 28-02-2019 in the matter of O.A. No. 101/2014 titled as Sobha Singh & Ors. V/s State of Punjab & Ors.**

\*\*\*\*

It is intimated that the Monitoring Committee constituted by the Hon'ble National Green Tribunal in OA No. 916 of 2018 titled as Sobha Singh and others Vs. State of Punjab and others has visited the pollution sources of Budha Nallah and Sewage Treatment systems provided by the M.C, Ludhiana area on 1.5.2019. The copy of the inspection report is enclosed herewith.

o/c

The Committee has made the following recommendations based on its observations:

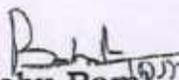
- i) STPs of the Municipal Council, Sahnewal and Machhiwara be monitored by Punjab Pollution Control Board to check their performance.
- ii) Municipal Corporation, Ludhiana shall rehabilitate the STP Jamalpur based on appropriate technology and sewage flow entering into STP in view of future increase in discharge due to growth in population.
- iii) Municipal Corporation, Ludhiana shall prepare concrete and firm proposal for treatment of wastewater from Dairy Complex, Tajpur Road and Habbowal. In case, these dairies are to be shifted to designated area, the firm timelines must be submitted so that the discharge from these dairies may be cut off from entering into Budha Nallah.
- iv) Municipal Corporation, Ludhiana shall make the connectivity of Transport Nagar outlet, presently falling into Budha Nallah, to the STP as per the timelines mentioned in the Action Plan.
- v) The treated sample of 50 MLD STP Bhattian must be analyzed by PPCB from a reputed laboratory for its chemical analysis to identify the reasons for color in the treated sewage.
- vi) Discharge of partially treated sewage of 111 MLD STP into river Sutlej, resulting in deterioration in the quality of river water. The officers of Municipal Corporation, Ludhiana were directed to improve the performance of STP.
- vii) During visit, the committee noted that the final polishing tank of 11 MLD UASB Plant is choked with sludge and as it has never been cleaned since the commissioning of the plant. M.C officers explained that cleaning in running water was not possible, Therefore, the Committee desired that Municipal Corporation should explore the possibility of wet dredging in consultation with experts from the relevant department.

- viii) The Department of Water Resources shall take immediate steps to desilt the Budha Nallah at Barnhara Bridge and desilting process be completed within 15 days.
- ix) The Department of Water Resources shall desilt Budha Nallah within city area within 2 months i.e. before monsoon.
- x) The industries of Humbran area especially paper mills must be checked by Punjab Pollution Control Board within 7 days to verify their treatment systems and mode of disposal and submit the report to the committee.
- xi) Medical Health Camp be organized in the villages near confluence point of Budha Nallah into river Sutlej (Walipur), It was also desired that the Punjab Pollution Control Board should conduct ground water sampling at 5-6 locations in Village Walipur in the presence of Sarpanch of the village to assess the quality of the Ground water.
- xii) Chairman Punjab Pollution Control Board shall take legal action under the provisions of the Water Act, 1974 against the Municipal Corporation Ludhiana and Punjab Dyers Association, Ludhiana which has maintained unauthorized direct outlets into Budha Nallah through the sewerage system and Municipal Corporation has not checked these unauthorized outlets, whereas, such discharges are not allowed into Budha Nallah.
- xiii) Chairman PPCB shall take disciplinary action against the Assistant Environmental Engineer, who is looking after the area of Tajpur Road, for not reporting the existence of said unauthorized outlet into Budha Nallah.
- xiv) Chairman PPCB shall direct Municipal Corporation Ludhiana to remove all the outlets carrying industrial wastewater directly into Budha Nallah. Officers of PPCB shall coordinate in the matter.

- xv) Municipal Corporation should be more vigilant in future so that no such illegal discharges are allowed into Budha Nallah.
- xvi) Punjab Pollution Control Board and Municipal Corporation Ludhiana shall jointly carry out the studies w.r.t. consumption of water for domestic usage in Ludhiana and discharge of sewage into Budha Nallah and conclude the issue within one month.

In view of the recommendations of the Monitoring Committee, it is requested that suitable and appropriate action on the various points as mentioned above alongwith any other point, if any, left but highlighted in the visit report be taken please.

Action taken report may kindly be sent within 15 days.

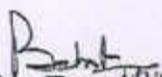
  
(Dr. Babu Ram)  
Member,  
Monitoring Committee

Endst. No. CEC/2019/94-96

Dated: 15.5.2019

A copy of the above is forwarded to the following for information and necessary action please:

1. The Principal Secretary to Government of Punjab, Department of Science Technology and Environment
2. The Principal Secretary to Government of Punjab, Department of Irrigation
3. The Principal Secretary to Government of Punjab, Department of Local Government.

  
(Dr. Babu Ram)  
Member,  
Monitoring Committee

# ANNEXURE - 11

Report on Visit to Industries, Sewage Disposal points into Kala Singhia Drain and STPs of Jalandhar Area by the Monitoring Committee constituted by the Hon'ble National Green Tribunal in O.A No. 916 Of 2018 in the matter of Sobha Singh and others Vs State of Punjab and others on 08.05.2019.

The following were present during the visit:

a) Members of the Monitoring Committee

Sr No	Name and Designation	Designation in the Committee
1.	Justice Pritam Pal, Former Judge, Punjab and Haryana High Court	Chairman
2.	Dr. Babu Ram, Former Member Secretary, PPCB	Member
3.	Sant Baba Balbir Singh Seechewal	Member

b) Punjab Pollution Control Board

1	Er. G.S Majithia, CEE
2	Er. Harbir Singh, SEE
3	Er. Arun Kakkar, EE

c) Punjab Water Supply and Sewerage Board

1	Er. Mukhtiar Singh, Chief Engineer
2	Er. Jatin Vasudeva, Executive Engineer

d) Municipal Corporation Jalandhar

1	Sh. Kishor Bansal, Supdtt Engineer
2	Sh.Gurcharan Singh, Executive Engineer
3	Sh. Gagan Luthra, Sub Divisional Engineer

e) Punjab Small Industries & Export Corporation limited (PSIEC)

1	Sh. Ajay Sharma
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f) Punjab Mandi Board

1	Sh.Gurtez Singh Brar
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**1.0. Visit to the Industries, Sewage disposal points into Kala Singhia drain and STPs of Jalandhar area:**

**1.1. Disposal points of sewage of Focal Point maintained by PSIEC**

The Committee alongwith officers visited following two disposal points of focal point maintained by Punjab Small Industries & Export Corporation (PSIEC)

**a) Disposal point located in Beant Singh Park**

This disposal point has been connected with MC sewer. At this disposal point, lot of oil and grease (as mentioned in **Plate-1**) was observed in the collection sump.



**Plate-1-Oil & Grease in the collection sump**

**b) Second disposal point near M/s Jagran Prakashan Ltd.**

The overflow of this disposal point exists in Kala Singhian drain, but during visit it was observed that this outlet was covered with fresh soil (as mentioned in **plate-2**), but the condition indicated that the outlet is being regularly operated by Punjab Small Industries & Export Corporation (PSIEC) and the same is discharged into Kala Singhian drain (as mentioned in **Plate-3**)

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**Plate-2- Outlet of PSIEC into Kala Singhian drain but covered with fresh soil**



Plate-3: Outlet covered with fresh soil but apprehended to be operated regularly by PSIEC

### Recommendations of the Committee:

- i) Punjab Small Industries & Export Corporation (PSIEC) should install separate STP, keeping in view the quantum of the discharge and the quality of the effluent being discharged into sewerage system / Kala Singhian drain.
- ii) Punjab Small Industries & Export Corporation limited (PSIEC) should cut off the discharge from Kala Singhian Drain within 10 days and get its connectivity with sewerage system.

### 1.2. Visit to the Industries

#### 1.2.1. M/s Victor Forgings A-3-4 Focal Point (Extn), Jalandhar.

*But*  
The industry is medium scale unit engaged in the manufacturing of hand tool items. It has installed electroplating machinery and is disposing off trade effluent to Common Effluent Treatment Plant at Ludhiana for which it has been granted consent to operate under Water (Prevention & Control of Pollution) Act 1974 valid upto 31.03.2020. Further it has made agreement with the CETP operator for the lifting of electroplating effluent @4000ltr/day. As per the record maintained by it, it has been found that it is regularly getting lifted the wastewater @3800-3900 ltr/day for storage of effluent for which, it has constructed effluent storage tank of capacity 5000ltr.

The committee alongwith other officers also visited barreling section of the industry, where it was observed that the effluent from the said section is settled in 02 overhead steel tanks with hopper mechanism for settlement of sludge. The sludge is drained out into the sludge drying beds through valve system (sludge

drying beds are shown in **Plate-4**). The industry claimed that the sludge after drying is disposed off on low lying area.



**Plate-4- Sludge drying beds for drying of sludge generated from treatment of barreling section effluent**

**Recommendations of the Committee:**

- i) **PPCB shall get analyze the quality of sludge w.r.t. parameters as expected in the sludge.**
- ii) **PPCB shall verify the actual discharge of electroplating effluent generated by the industry and it shall match with the quantity lifted by CETP operator and shall ensure that no untreated effluent is discharged into sewerage system.**

**1.2.2 M/s Vishal Tools & Forging Pvt. Ltd, B-9 Focal Point (Extn), Jalandhar.**

The industry is small scale unit engaged in the manufacturing of hand tools. It has installed electroplating machinery and is disposing off trade effluent to Common Effluent Treatment Plant at Ludhiana. The industry also has installed barreling process and effluent from barreling section is reused in process through sedimentation mechanism.

**Recommendations of the Committee:**

- i) **PPCB shall get analyze the quality of sludge w.r.t. parameters as expected in the sludge.**
- ii) **PPCB shall verify the actual discharge of electroplating effluent generated by the industry and it shall match with the quantity lifted by CETP operator and shall ensure that no untreated effluent is discharged into sewerage system.**

**1.2.3. M/s Proxima Steel Forge Pvt Ltd, B 14-15, Focal Point Extn, Jalandhar.**

The industry is small scale unit engaged in the manufacturing of hand tools. It has installed oil fired reheating furnaces, powder coating plant, induction hardening. The industry has removed its electroplating machinery as informed by the person available at site.

**Recommendations of the Committee:**

- i) **PPCB shall get cancel the MoU made by the industry with CETP, Ludhiana, for the lifting of the effluent so that in future it may not operate the electroplating process.**
- ii) **PPCB shall cancel the consents granted to the industry under the Water Act, 1974.**
- iii) **PPCB shall issue directions under the provisions of the Water Act, 1974 to the industry to dismantle the electroplating machinery to ensure its non operation.**

**1.2.4. M/s Talbro Forging, C-88, Focal Point Jalandhar**

The industry is engaged in the manufacturing of finished tools with electroplating process. The effluent generated from electroplating process is get lifted to CETP at focal point Ludhiana for which the industry has made agreement with CETP operator for the effluent about 12000 ltr/month.

During inspection, it was observed that the industry has closed its electroplating process and now there is no machinery within its premises.

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**Recommendations of the Committee:**

- i) **PPCB shall cancel its consents granted to the industry under the Water Act, 1974 and Air Act, 1981 immediately.**
- ii) **PPCB shall direct CETP operator to cancel his agreement.**
- iii) **PPCB shall get disconnect its electric connection from the concerned department, so that it may not operate its electroplating process and other polluting machinery.**

**1.2.5. M/s Doaba Co-operative The Doaba Cooperative Milk Producers Union Ltd, G.T Road, Bye Pass, Jalandhar.**

The industry is large scale unit engaged in the manufacturing of Milk products by processing milk. For the treatment of effluent generated from the industry it has installed ETP based on Activated Sludge Process (ASP). During visit, ETP was in operation but the physical appearance of the sludge drying beds (photograph shown as per **Plate-5**) indicated that the industry has not extracted the sludge from secondary clarifier which indicate that the system is not being operated properly and appropriate MLSS, MLVSS & DO level are not maintained appropriately in the aeration tank.



**Plate-5- Sludge drying beds with no fresh sludge indicating no sludge is extracted from secondary clarifier**

Therefore, the Committee directed Punjab Pollution Control Board officers, present at site, to get the effluent samples of final outlet as well as aeration tank (for MLSS study) be analysed. Accordingly, effluent sample was collected and sent to Punjab Pollution Control Board lab for analysis. The analysis results are mentioned as under: -

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Sr. No.	Parameters	Outlet	Aeration Tank
1	pH	8.0	-
2	Total Suspended Solids mg/l	119	-
3	Chemical Oxygen Demand mg/l	198	-
4	Bio Chemical Oxygen Demand mg/l	71	-
5	*Oil & Grease mg/l	HDL	-
6	*Mixed Liquid Suspended Solids mg/l	-	6260

**1.2.5.1 Discussion on the analysis results: -**

The analysis results indicate that the values of parameters namely TSS, COD and BOD were observed as 119 mg/l, 198 mg/l, 71 mg/l, respectively. The values of TSS and BOD are higher than the permissible limits of 100 mg/l

and 30 mg/l, respectively. The concentration of MLSS is observed as 6260 mg/l which is much excess than the desired value of 3500-4000 mg/l.

In view of the observations of the Committee and analysis profile of the effluent sample collected from final outlet of ETP, the Committee made the following recommendations:-

**Recommendations of the Committee:**

1. **PPCB shall impose Environmental compensation on the industry amounting to Rs.10 lakh. This amount shall be spent on the rejuvenation of the quality of water of river Sutlej and maintain flora and fauna in the river.**
2. **PPCB shall issue directions under the provisions of the Water Act, 1974 to the industry for the upgradation/modification to be made in the existing effluent treatment plant within 3 months to achieve the various parameters of the treated effluent within the prescribed limits.**

**1.3. Disposal of Sewage of Kalia Colony, Jalandhar:**

The committee visited one disposal of discharge of un-treated sewage of Kalia Colony, Near Gouri Shankar Mandir, GT Road, Jalandhar which goes directly into Kala Singhian Drain without any treatment.

Also, the main hole at the other end of the Kala Singhian Drain at this point was inspected and it was found that the sewer line was found broken and the effluent of focal point is discharged directly into Kala Singhian Drain for which MC Jalandhar is responsible for above points.

**Recommendations of the Committee:**

The committee directed MC Jalandhar authority to connect these outlets to the sewerage system and disconnect their discharge from Kala Singhian drain within 07 days. PPCB shall take legal action against the Municipal Corporation and other Govt. agencies in case the discharge into Kala Singhian Drain is not cut off by these agencies.

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#### **1.4. Disposal Points near Sabji Mandi, Maqsudan Road, Jalandhar:**

During visit, it was observed that the Punjab Water Supply Sewerage Board has constructed one manhole for connecting the sewage of this area with sewer line of STP Peer Dad but it was found that the connection was made with flexible pipe fitted with pump, which was not acceptable to the committee.

Further, a sewer outfall of MC Jalandhar originating from zone-1 was found discharged into Kala Singhian Drain which is supposed to be diverted to Pholriwal, STP.

Another manhole which was under construction but was found submerged with sewage because of non operation of lifting pumps.

#### **Recommendations of the Committee:**

- i) **The officers of PWSSB and MC Jalandhar shall make joint efforts to connect all the outlets with the sewerage system, within one month and ensure that no untreated sewage should be discharged into Kala Singhian Drain.**
- ii) **PPCB shall take legal action against the municipal corporation Jalandhar and Punjab Water Supply and Sewerage Board in case these outlets are not cutoff from entering into Kala Singhian drain.**
- iii) **MC Jalandhar shall clean / de silt the sewer line of Zone-1, so that the sewage of the area may enter and treat into designated STP.**

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#### **1.5. Disposal Points of Sh. Bhagat Singh Colony, Jalandhar:**

During visit, it was observed that the Punjab Water Supply Sewerage Board has constructed two manholes through which the sewage of the area is connected to the sewer line leading to STP Peer Dad. But the old mild steel pipe laid towards the Kala Singhian drain plugged with flange still exists (photograph shown as per **Plate-6**) for which the committee raised its objections.

Disposal Point Monitoring Committee

The committee recommended as under:

- i) MC Jalandhar shall remove the underground MS pipe so as to rule out any possibility of discharge of untreated sewage into Kala Singhian Drain.



Plate-6: Old MS pipe plugged with flange but exists towards Kala Singhian drain

#### 1.6. Disposal Points of Industrial Area, Jalandhar:

During visit, it was observed that the Punjab Water Supply Sewerage Board has constructed two manholes through which the sewage of the area is connected to the sewer line leading to STP Peer Dad. But, the pipeline after 1<sup>st</sup> manhole was found broken and the sewage was found being discharged into Kala Singhian Drain. The officers of the Punjab Water Supply Sewerage Board informed that on 07.05.2019, the local residents of the locality has broken the sewer line because the sewage started flowing back and entering into their houses.

#### Recommendations of the Committee:

**PWSSB shall make necessary arrangements for disconnection of sewage outlet into Kala Singhian drain and sewage must flow to STP, Peer Daad. This work must be completed within 10 days.**

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#### 2.0. Meeting with Deputy Commissioner Jalandhar

The Committee held meeting with DC Jalandhar apprising him of the factual position as observed by the committee. The committee directed DC Jalandhar to immediately to call a meeting of Punjab Water Supply Sewerage Board, MC Jalandhar and Punjab Pollution Control Board Jalandhar and ask these authorities to coordinate with each other so that all the above said unplugged points be properly got connected with STP sewerage system and to ensure that no untreated sewage may enter into Kala Singhian drain.

**Deputy Commissioner, Jalandhar assured that soon after the election, the compliance of the above direction shall be made.**

Disposal points into Kala Singhian Drain  
Monitoring Committee

### 3.0. Common Effluent Treatment Plant (CETP) at Leather Complex, Jalandhar:

For the treatment of effluent from leather tanning unit of Jalandhar, which are located in Leather Complex, CETP has been installed which consists of Primary treatment system, aerobic biological system followed by secondary clarifier. The capacity of CETP is 5 MLD. The effluent after CETP is discharged into Kala Singhian Drain.

#### 3.1. Inspection & Observations of the Committee:

- i) During visit, final outlet of CETP was inspected and it was observed that the colour of the treated effluent was light brownish. The reading of the Online Continuous Emission Monitoring System (OCEMS), installed at the outlet displayed the readings as BOD:36mg/l, COD: 300 mg/l and TSS: 100 mg/l. As per the reports shown by Punjab Pollution Control Board, the analysis results indicate that the value of these parameters were observed as BOD: 40mg/l, COD: 320 mg/l and TSS: 59 mg/l (sample collected on 08.04.19). Chief Environmental Engineer Jalandhar informed that though the parameters are not within the prescribed norms i.e. BOD: 30mg/l and COD: 250mg/l but lot of improvements have been observed in the functioning of CETP from the last 3-4 months. Punjab Effluent treatment society (PETS) is trying its level best to bring these parameters within the prescribed limits per the directions of the committee, PPCB officers collected the sample of treated effluent from final outlet and the same has been sent to PPCB lab for analysis.

*Ball*

The analysis results are mentioned as under: -

Sr. No.	Parameters	Outlet
1	pH	8.06
2	Total Suspended Solids mg/l	130
3	Total Dissolved Solids mg/l	13585
4	Bio-chemical Oxygen Demand	45
5	Chemical Oxygen Demand mg/l	320
6	*Sulphate mg/l	410
7	Chloride mg/l	7260
8	Total Alkanity mg/l	944
9	Total Chromium mg/l	BDL
10	*Oil & Grease mg/l	14

### 3.1.1 Discussion on the analysis results : -

The analysis results indicate that the values of parameters namely TSS, TDS, BOD, COD and Chloride and were observed as 130 mg/l, 13585 mg/l, 45 mg/l, 320 mg/l and 7250 mg/l, respectively. The values of these parameters are higher than the permissible limits of 100 mg/l, 2100 mg/l, 30 mg/l, 250 mg/l and 1000 mg/l, respectively.

- ii) In order to handle sludge from CETP as well as individual tannery units, 02 filter press houses have been constructed. Fresh sludge was found stored in these houses. Also, in the old sludge drying beds, constructed in open area, sludge was found being sun dried and some portion of sludge was found lifted by PETS to TSDF, Nimbua. Also, cemented garland drain was found constructed around these sludge drying beds to contain the filtered effluent and to carry back to collection/equalization tank.
- iii) There were two illegal storm water drains through which the untreated sewage of leather complex was being discharged into Kala Singhian drain. The committee asked Punjab Small Industries & Export Corporation (PSIEC) officers to get approval from MC Jalandhar regarding the diversion of discharge of this domestic sewage into their sewerage system leading to STP, Peer Daad and to plug the above two illegal outlets of storm water drains within 15 days.
- iv) Chief Environmental Engineer, Punjab Pollution Control Board, Jalandhar informed that a DPR for the upgradation/ modification of existing CETP has been prepared by PETS and the tendering process of the work allotment will be made after the election code is over so that it may achieve all the parameters prescribed by Punjab Pollution Control Board.
- v) The committee further observed as under:
  - (i) No EMF meter has been installed at the outlet of the CETP.
  - (ii) The pH measuring sensor is yet to be installed into the OCEMS.
  - (iii) The OCEMS needs to be connected with CPCB as well as SPCB servers.
  - (iv) Regular lifting of sludge by PETS must be ensured.

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### 3.2. Recommendations of the Committee:

- i. **PPCB shall issue directions under the provisions of the Water Act, 1974 to Punjab Effluent Treatment Society (PETS) to**

upgrade the CETP within the time schedule as mentioned in the action plan prepared by the State Government, Department of Environment to achieve all the parameters within the prescribed limits.

- ii. PPCB shall get performance guarantee of Rs 25 Lakh from PETS for effective operation of equipments to be installed for upgradation of existing CETP to ensure the achievement of standards as prescribed by the Board.
- iii. PPCB shall issue directions under the provisions of the Water Act, 1974 to PETS to install and commission the following systems within one month for effective monitoring of CETP.
  - a) Electromagnetic flow meter at the outlet of CETP.
  - b) pH measuring sensor to be installed in OCEMS.
  - c) Connectivity of OCEMS with CPCB and PPCB servers.
  - d) To ensure regular lifting of sludge from CETP and to send it to TSDF Nimbua.
- iv. PPCB shall issue directions under the provisions of the Water ACT 1974 to PSIEC to disconnect all the outlets of storm water drain, presently carrying Sewage of Leather Complex, into Kala Singhian drain within 15 days. These outlets shall only be operated during rainy season in the presence of officials of PPCB.
- v. PPCB shall lay down primary effluent treatment plant standards of waste water to be further treated into common effluent treatment plant within 15 days.
- vi. Municipal Corporation Jalandhar shall close outlet maintained near STP Peer Daad to discharge untreated sewage into Kala Singhian drain within 15 days.

**4.0. M/s Jay Dee Leather Pvt Ltd, Plot no 28, and 29, Leather Complex, Jalandhar:**

The Committee also visited one of the tanning unit of Leather Complex, the brief of which is given as under:

The industry namely M/s Jay Dee Leather Pvt Ltd, is operating in Plot no 28 and 29. In plot no 28, it has processes from wet blue to dyeing process and in Plot no 29, the industry is processing raw hides to manufacture wet blue leather. In

both the units, the industry has provided pre treatment units and discharging pre-treated effluent into open channel leading to CETP. Chief Environmental Engineer Jalandhar claimed that the sludge in the form of slurry is sent to CETP filter house through the tankers, deployed by PETS.

**Recommendations of the Committee:**

- i) **PPCB shall carry out analysis of effluent before and after pre-treatment system to assess its adequacy and efficacy.**
- ii) **The quantification of sludge generated by all the tannery industries and lifted by PETS through designated vehicles must be made by PPCB within 15 days.**

**5.0. STP Pholriwal (100MLD)**

To treat the sewage of part of Jalandhar area, STP based on UASB technology of capacity 100 MLD has been installed at Pholriwal. During visit, the condition of Gas collection system of UASB was not satisfactory as the gas chamber was almost empty and little chances were there for the generation of methane. Moreover there is no mechanism available for flaring of biogas. These facts indicate that the functioning of UASB system is poor. During visit, it was observed that high dosing of chlorine was being given by the Municipal Corporation Officers, which was generating fumes which were irritable to the eyes. The quality of the effluent at final outlet of ETP is just improved by adding high dose of chlorine as disinfectant.

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The committee also observed that the sludge generated from sludge drying beds has not been removed and found stacked near the edges of sludge drying beds very low quantity of fresh sludge was observed in sludge drying beds.

The committee also observed that a nallah carrying untreated sewage of some part of Jalandhar area was flowing near disposal points of STP. The officers of Punjab Water Supply Sewerage Board and MC Jalandhar informed that earlier there was a proposal for replacement of this 100 MLD UASB technology with 100 MLD SBR technology as mentioned in "Action Plan for Clean River Sutlej" but, now this proposal has been revised and there is proposal for rehabilitation of existing 100 MLD UASB technology to make it capable to achieve the prescribed standards.

### **5.1. Recommendations of the committee:**

- i. **Municipal Corporation Jalandhar shall upgrade/rehabilitate the existing UASB Technology system strictly as per the time schedule as mentioned in the action plan for "clean river Sutlej."**
- ii. **The existing components of STP must be operated efficiently and regularly so as to achieve the various parameters. PPCB shall make surprise inspection of STP w.r.t. its performance at least once in a month regularly.**
- iii. **Municipal Corporation Jalandhar shall install additional STP's as per the quantity of discharge of MC Jalandhar and ensure that no untreated sewage is discharged into any drain/Nallah leading to river Sutlej.**
- iv. **MC Jalandhar shall maintain adequate concentration of biomass in anaerobic biological treatment systems (UASB) in the range as prescribed in the design of UASB system. The necessary arrangements for flaring of biogas shall be made by the Municipal Corporation Jalandhar within one month.**

### **6.0. Other Issues:**

The following issues were also raised within the committee:

#### **6.1. Restricted Supply of fresh water for domestic usage to the residents of the city as per prescribed norms:**

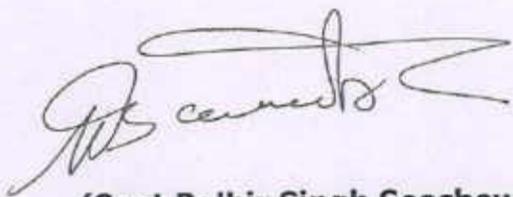
After visiting all pollution sources entering into Kala Singhian drain and other problems relating to excess discharge of sewage than the capacity of STP. The committee decided that PPCB shall issue necessary directions to the Deptt. of Local Government to impose restriction on the excess use of water by the residents of Jalandhar area. The water supply given by the Government agency or through private mechanism, must be restricted to 135 lpcd. The department must adopt appropriate mechanism to reduce the water consumption from present use of 250-300 lpcd to 135 lpcd.

By adopting the said mechanism, the major advantages shall be as under:

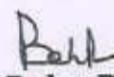
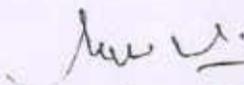
- i) The capacity of existing STPs may be sufficient to handle whole of the sewage of Jalandhar area.
- ii) There shall be lot of saving in ground water abstraction.
- iii) No need for installation of new STP's resulting in saving of crores of rupees of the State Government.

- iv) Lot of saving in terms of money in operation of STPs, less sludge handling and less quantity of chemical to be used.
- v) Lot of improvement in the quality of water of river Sutlej.

**The committee further desired that the restricted water consumption mechanism must be adopted for other big cities like Ludhiana and Jalandhar in the first phase. Later on, it can be replicated for the other towns of the State.**



**(Sant Balbir Singh Seechewal)**

  
**( Dr. Babu Ram )**  
**( Justice Pritam Pal )  
Former Judge,  
Punjab and Haryana High  
Court**

**OFFICE OF THE MONITORING COMMITTEE**

Constituted by the Hon'ble National Green Tribunal in Original Application no.138 and 139 of 2016, OA No.916/2018 (earlier OA No.101 of 2014) OA No.606 of 2018 and OA No.1040 of 2018

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex, Sector 68, SAS Nagar) Tel. No. 0172-2298091

Email: [sutlejbeasriver@gmail.com](mailto:sutlejbeasriver@gmail.com)

To

1. The Chief Executive officer,  
Punjab Water Supply & Sewerage Board,  
Chandigarh.
2. The Managing Director,  
Punjab Small Industries & Export Corporation  
Chandigarh.
3. The Chairman,  
Punjab Pollution Control Board,  
Patiala.
4. The Commissioner,  
Municipal Corporation,  
Jalandhar.

No. CEC/2019/168-171

Dated: 30.05.2019

**Subject: Report on visit to Industries, Sewage Disposal points into Kala Singhia Drain and STPs of Jalandhar Area by the Monitoring Committee constituted by the Hon'ble NGT in OA no. 916 of 2018 in the matter of Sobha Singh & Others V/s State of Punjab and others on 08.05.2019.**

\*\*\*\*

It is intimated that the Monitoring Committee constituted by the Hon'ble NGT in OA-no. 916 of 2018 in the matter of Sobha Singh & Others V/s State of Punjab and others has visited the industries, Sewage Disposal points of Municipal Sewage and PSIEC into Kala Singhia drain leading to river Sutlej has visited on 08.05.2019.

The report prepared by the Committee is enclosed herewith. The recommendation on each point have been made by the Committee, the same may kindly be perused.

It is therefore, requested that appropriate action on the recommendations made by the Committee by the respective Departments shall be taken and action taken report be submitted to the Committee within 15 days.

DA/as above

*Justice Pritam Pal*  
(Justice Pritam Pal)

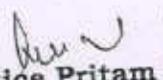
Former Judge Punjab & Haryana  
High Court & Chairman of  
Executive Committee

Endst. No. CEC/2019/172-173

Dated: 30.5.2019

A copy of the above is forwarded to the following for information and necessary action please:

1. The Principal Secretary to Government of Punjab, Department of Science Technology and Environment
2. The Deputy Commissioner, Jalandhar

  
**(Justice Pritam Pal)**  
Former Judge Punjab & Haryana  
High Court & Chairman of  
Executive Committee

# ANNEXURE-13

Report on visit to the STPs, sewage/sullage disposal points into drains leading to Holy Bein (Kali Bein or West Bein) by the Monitoring Committee constituted by the Hon'ble National Green Tribunal in OA no. 916 of 2018 in the matter of Sobha Singh & Other Vs State of Punjab & Others on 22.05.2019.

The following were present during the visit:

a) Members of the monitoring Committee

Sr no.	Name and Designation	Designation in the committee
1.	Dr. Babu Ram, Former Member Secretary, Punjab Pollution Control Board	Member
2.	Sant Baba Balbir Singh Seechewal	Member

b) Punjab Pollution control Board

1.	Er. Bhisham AEE, Regional Office, Jalandhar.
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c) Department of Local Govt.

1.	Er. Shanti Saroop, AME, Kapurthala.
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d) Department of Rural Development and Panchayat.

1.	Er. Rakesh Kumar, SDO, Kapurthala.
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e) Department of Water Resources (Drainage)

1.	Er. Gurpreet Singh, JE, Kapurthala.
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## 1. STP Sultanpur Lodhi

STP of capacity 2.6 MLD, based on Waste Stabilization Pond (WSP) Technology, for the treatment of sewage of Sultanpur Lodhi town has been installed by Punjab water Supply and sewerage Board. The Monitoring Committee visited STP site on 22.05.2019 and the following observations were made.

- I. All the ponds of the STP have been found filled with sludge (**shown in Plates -- 1, 2 and 3**) and the same have not desludged so far.
- II. For lifting the sewage to be treated through STP, three lifting pumps have been installed, of which only one was in operation and remaining 02 no. pumps were found out of order.
- III. About 50% of the sewage was entering into STP and remaining about 50 % was being directly discharged into Sultanpur drain leading to Holy Bein.

Therefore, the Committee recommends that PPCB shall take legal action against the MC, Sultanpur Lodhi and other responsible officers/officials for not operating the STP effectively and discharging the untreated sewage into Sultanpur drain leading to holy Bein.

- IV. Physical appearance of components of STP indicate that the performance of the STP may be poor due to filling of these ponds with sludge.

During the visit, the Sh Ajay Kavar, Chief Engineer, Local Govt., was contacted telephonically and he was apprised about the condition of STP and its other components. He assured as under:

- i) 02 pumps, presently not in operation, shall be replaced with 2 new lifting pumps and be made operational within 03 months.
- ii) He also assured that the ponds of STP shall be de-sludged within 03 months.



**Plate- 1 : Ponds of STP filled with sludge**



**Plate- 2 : Ponds of STP filled with Sludge**



**Plate - 3: Ponds of STP filled with sludge**

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## **2. Disposal of Sewage/ Sullage of Village Kheda Donna.**

The disposal point of sewage of village Kheda Dona was visited by above mentioned team in the presence of Er. Rakesh Kumar, SDO, Panchayati Raj. About 0.3 MLD untreated sewage of the village Kheda Donna is being discharged into Holi Bein (**shown in Plate-4**). In order to facilitate the treatment of sewage of the village, the Department of Rural Development and Panchayat has provided pumping facility (**shown in Plate-5**) alongwith pipeline to carry the sewage to the pond, constructed by the Department. But the system could not be made operational due to non operation of pumping system. SDO, Department of Panchayati Raj informed that they have handed over the pond and pumping system to the village Panchayat Kheda Dona. Now for the operation and maintenance of pond, it is the responsibility of village Panchayat.

Thereafter, S. Tajinder Singh, Sarpanch of the village, who was also present at site, informed that they were not aware about this project. He assured that now they will regularly operate the lifting pump, provided, to discharge the domestic effluent of the village into the pond and shall not discharge untreated domestic effluent into the Holy Bein.

The committee directed the SDO, Department of Rural Development and Panchayati Raj and Sarpanch of the Village Khera Donna to make the system operational on 27.05.2019.



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**Plate- 4: Untreated sewage of Village Kheda Donna being discharged into Holy Bein**



**Plate - 5: Pumping system provided by Department of Rural Development and Panchayat to lift the sewage of the village to treat the same in the pond (presently not in use)**

### **3. STP Kapurthala (25 MLD)**

For treatment of sewage of Kapurthala town, STP of capacity 25 MLD, based on UASB Technology, has been installed by Punjab water Supply and sewerage Board. STP was visited on 22.05.2019 and following observations have been made.

- I. The UASB reactors were found choked with sludge resulting in least generation of biogas **(shown in Plates- 6 and 7)**.
- II. Polishing tanks were also filled with sludge and needs to be cleaned immediately.
- III. During visit, some quantity of untreated domestic effluent was been bypassed into the drain leading to Holy Bein.
- IV. Physical appearance of the components of the STP indicates that the performance of the STP is poor.
- V. The partial treated sewage was partly being discharged onto land for irrigation and partly into drain leading to Holy Bein.
- VI. Municipal Council, Kapurthala was not adding the dose of chlorine in the chlorination tank. The unused chlorine cylinders were found stored in the shed **(shown in Plate - 8)**.
- VII. During visit, the committee asked the concerned officer of Municipal Council, Kapurthala to raise the baffle walls provided in the chlorination tank and channelize the same to the pipe line leading to irrigation area.



**Plate-6: USAB reactor choked with sludge**



**Plate-7: USAB reactor choked with sludge**



**Plate-8: Unused Chlorination tank lying in the shed**

#### **4. Bhulana Drain leading to Holy Bein**

Bhulana Drain carries untreated domestic effluent of Rawal & its Colonies. The quantity of flow is about 1 MLD which is major source of pollution into Holy Bein. During the visit, it was observed that substantial quantity of untreated effluent was being discharging into Holy Bein through Bhulana Drain.

During discussion, it was apprised that STP of capacity 1 MLD has been proposed to be installed for the treatment of domestic effluent of these colonies for which Jalandhar Development Authority (JDA) has already released the funds amounting to Rs. 2.0 crore but till date, no steps have been taken to install STP for treatment of sewage of these colonies.

#### **5. Disposal point into Wadala Drain leading to Holy Bein**

During the visit, one disposal point at Kanjali Road, Kapurthala was found discharging untreated domestic effluent into Wadala Drain leading to Holy Bein **(shown in Plate- 9)**. It was informed to the committee that this domestic sewage is from some localities of Kapurthala town. The Officer of the Drainage Department informed that this point falls under the jurisdiction of M.C Kapurthala, therefore, M.C Authorities be directed to plug this point and it may be connected to main sewerage system of the area leading to STP.

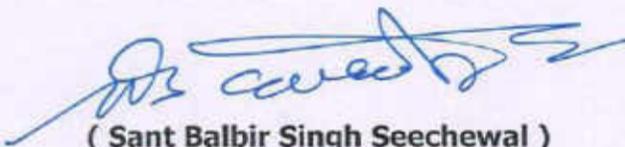


**Plate-9: Wadala Drain carrying untreated domestic effluent of some localities of Kapurthala town**

#### **6. Recommendation of the committee**

1. Punjab Pollution Control Board shall issue directions under the provisions of Water (Prevention & Control of Pollution) Act, 1974 to the Department of Local Govt. to de-sludge the ponds of the STP, Sultanpur Lodhi and to replace 02 no. lifting pump with new one to lift the sewage to the STP within 02 months.

2. Department of Rural Development & Panchayat be directed to make the pumping system operational so as to carry the sewage of Village Kheda Donna to the pond provided to treat the sewage and utilize the same for irrigation and plug the outlet into holy Bein.
3. Department of Local Govt. be directed to ask Municipal Council, Kapurthala to operate the existing STP regularly and efficiently and no effluent should be bypassed. The treated sewage should be utilized for irrigation and no treated/untreated effluent should be allowed to be discharged into any drain leading to Holy Bein. The necessary upgradation in ETP shall be made within the time schedule as mentioned in the Action Plan "**Clean River Sutlej.**"
4. PPCB shall issue directions to Jalandhar Development Authority to arrange suitable chunk of land for installation of STP to treat the sewage of Rawal and its Colonies as it a major source of pollution in Holy Bein and it may be directed to install STP within 06 months.
5. Department of Local Govt. be directed to ask the Municipal Council Kapurthala to disconnect the outlets of some localities of Kapurthala town falling into Wadala Drain and same should be diverted to main sewerage system leading to STP.



( Sant Balbir Singh Seechewal )  
Member,  
Monitoring Committee



( Dr. Babu Ram )  
Member,  
Monitoring Committee

**OFFICE OF THE MONITORING COMMITTEE**

Constituted by the Hon'ble National Green Tribunal in Original Application no.138 and 139 of 2016, OA No.916/2018 (earlier OA No.101 of 2014) OA No.606 of 2018 and OA No.1040 of 2018

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex, Sector 68, SAS Nagar) Tel. No. 0172-2298091

Email: sutlejbeasriver@gmail.com

To

1. The Principal Secretary to Govt. of Punjab, Department of Rural Development & Panchayat, Chandigarh.
2. The Principal Secretary to Govt. of Punjab, Department of Local Government, Chandigarh.
3. The Deputy Commissioner, Jalandhar.
4. The Chairman, Punjab Pollution Control Board, Patiala.
5. The Executive Officer, Municipal Council, Kapurthala.
6. The District Development & Panchayat Officer, Department of Rural Development & Panchayat, Kapurthala.

No. CEC/2019/161-166

Dated: 29.05.2019

**Subject: Report on visit to the STPs, sewage/ Sullage disposal points into drains leading to Holy Bein (Kali Bein or West Bein) by the Monitoring Committee constituted by the Hon'ble NGT in OA no. 916 of 2018 in the matter of Sobha Singh & Others V/s State of Punjab and others on 22.05.2019.**

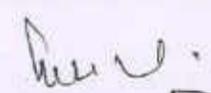
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It is intimated that the Monitoring Committee constituted by the Hon'ble NGT in OA no. 916 of 2018 in the matter of Sobha Singh & Others V/s State of Punjab and others has visited the STPs, sewage/ Sullage disposal points into drains leading to Holy Bein (Kali Bein or West Bein) further leading to river Sutlej on 22.05.2019.

The report prepared by the Committee is enclosed herewith. The recommendation on each point have been made by the Committee, the same may kindly be perused.

It is therefore, requested that appropriate action on the recommendations made by the Committee shall be taken by the respective Departments and action taken report be submitted to the Committee within 15 days.

DA/as above

  
(Justice Pritam Pal)

Former Judge Punjab & Haryana  
High Court & Chairman of  
Executive Committee

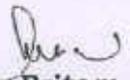
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A copy of the above is forwarded to the following for information and necessary action please:

1. The Principal Secretary to Government of Punjab, Department of Science Technology and Environment

  
(Justice Pritam Pal)

*J/c* Former Judge Punjab & Haryana  
High Court & Chairman of  
Executive Committee