

# OFFICE OF THE MONITORING COMMITTEE

Constituted by the Hon'ble National Green Tribunal in OA No.916/2018 (earlier OA No.101 of 2014) OA No.606 of 2018

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To

The Registrar,  
Hon'ble National Green Tribunal,  
Faridkot House, Copernicus Marg,  
New Delhi, Delhi 110001

No.CMC/SB/2020/240

Dated: 13.10.2021

**Subject: Report on verification of the recommendations made by the Monitoring Committee, constituted by Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & others w.r.t. remedial action to be taken to control water pollution in Fazilka area by the concerned departments.**

It is submitted that the Hon'ble National Green Tribunal in its order dated 17.12.2019 in OA No. 596 of 2019 in the matter of Vikram Ahuja Vs. State of Punjab & Others, directed the Monitoring Committee to look into the matter and submit the report. Accordingly, the Monitoring Committee visited the sites of Fazilka area on 6.1.2020 and held meeting with the District Level Officers of all the 5 Districts namely Fazilka, Ferozepur, Faridkot, Moga and Sri Muktsar Sahib on 7.1.2020 and prepared its report and submitted to the Hon'ble National Green Tribunal on 29.4.2020.

The Hon'ble National Green Tribunal considered the report of the Monitoring Committee on 29.6.2020 and accepted the same and directed that the recommendations of the Monitoring Committee be complied with which may be overseen by the Chief Secretary, Punjab and a compliance report be filed by 31.10.2020. On the next date of hearing on 25.11.2020, the Hon'ble Tribunal considered the compliance report of the recommendations of the Monitoring Committee, submitted by the Punjab Pollution Control Board on behalf of State of Punjab on 21.11.2020 and passed the detailed order, the operating Para No. 6 of which is reproduced as under.

## **Para 6**

***"In view of above, there is need to further monitor the compliance of the required remedial measures for protection of the environment and public health in Fazilka District, Punjab. The concerned authorities may continue further action and the Monitoring Committee headed by Justice Jasbir Singh, former Judge of Punjab and Haryana High Court may also verify the compliance status from the concerned Departments and furnish a further status report with appropriate recommendations before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF".***

***List for further consideration on 14.4.2021.***

In order to comply with the orders of the Hon'ble National Green Tribunal, the Monitoring Committee had held its meeting with District Level Officers of five Districts namely Fazilka, Ferozepur, Faridkot, Moga and Sri Muktsar Sahib w.r.t compliance of order dated 25.11.2020 in OA No. 596 of 2019 in the matter of Vikram Ahuja Vs. State of Punjab & Others on 4.3.2021 in the Meeting Hall, District Administration Complex, Moga and submitted its report to the Hon'ble National Green Tribunal vide No. CMC/SB/2020/1679 dated 10.3.2021.

The report submitted by the Monitoring Committee vide no. CMC/SB/2020/1679 dated 10.3.2021 was considered by the Hon'ble National Green Tribunal vide its order dated 9.6.2021 and directed in para no. 5, which is reproduced as under.

**Para 5**

***"None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we direct the State of Punjab to take further remedial action in terms of the above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the next date by e-mail at [judicialngt@gov.in](mailto:judicialngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of monitoring Sutlej River, the Committee may continue to function for monitoring other compliances in terms of specific orders of this Tribunal".***

***The case has been further listed on 26.10.2021.***

In compliance to order dated 9.6.2021, as mentioned in para 5 above, the Monitoring Committee visited the sewage treatment plants/ remediation systems of wastewater of the Municipal Councils/Nagar Panchayats of five districts namely Moga, Sri Muktsar Sahib, Faridkot, Ferozepur and Fazilka on 9.7.2021, 18.8.2021, 31.8.2021, 7.9.2021 and 21.9.2021 & 22.9.2021, respectively and Moga area again on 5.10.2021 and has prepared its report after verification of compliance of the recommendations made by the Monitoring Committee in its report dated 10.3.2021 as mentioned in order dated 9.6.2021 of the Hon'ble National Green Tribunal and the same is enclosed herewith and is sent through email at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) for kind consideration of Hon'ble National Green Tribunal.

DA/As above

  
**( Justice Jasbir Singh )**  
Former Judge,  
Punjab & Haryana High Court  
and now as  
Chairman of the  
Monitoring Committee

# **Report**

**on verification of the recommendations  
made by the Monitoring Committee,  
constituted by**

**Hon'ble National Green Tribunal,**

**as mentioned in order dated 9.6.2021**

**in OA No. 596 of 2019 in the  
matter of Vikram Ahuja Vs State  
of Punjab & others**

**w.r.t. remedial action to be taken to control  
water pollution in Fazilka area by the  
concerned departments.**

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

**13<sup>th</sup> October, 2021**

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**Report on verification of the recommendations made by the Monitoring Committee, constituted by Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & others w.r.t. remedial action to be taken to control water pollution in Fazilka area by the concerned departments.**

**1.0 Background**

The grievances in the application is that STPs/ETPs/CTPs are being obstructed in Distt. Fazilka and required remedial action for protection of environment and public health. It was stated that polluted water is affecting the environment and public health as shown by the samples of water. Accordingly, the Hon'ble National Green Tribunal in OA No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & others, considered it necessary to require a factual and action taken report in the matter by a Joint Committee comprising the District Magistrate, Fazilka, Punjab Pollution Control Board, Director Local Bodies, Punjab and Punjab Water Supply and Sewage Board. The matter was listed for further consideration on 22.10.2019.

The Joint Committee comprising the District Magistrate, Fazilka, Punjab Pollution Control Board, Director Local Bodies, Punjab and Punjab Water Supply and Sewage Board submitted factual and action taken report in the matter on 21.10.2019 before the Hon'ble National Green Tribunal, wherein, it was mentioned that meeting was held under the chairmanship of District Magistrate, Fazilka on 10.8.2019, wherein, the following decisions were taken.

- a) All the 26 nos. ULBs, villages and drains falling in five districts of Fazilka, Ferozepur, Faridkot, Moga and Sri Muktsar Sahib have been covered in the Sutlej Action Plan and time lines have been given for completion of each work.
- b) PPCB Faridkot will provide copy of Clean River Sutlej action Plan to every Department at District Level along with the proceedings of the meeting.
- c) Scope of work be as per Sutlej Action Plan at district level and all the Departments will carry out the completion works as per the time lines for their district and submit action taken report in this regard after consulting their respective Head Office Government Level and getting the funds approved to execute the works, which will ultimately lead to redressal of the issues raised by the petitioner in the matter of O.A. No.596 of 2019."

 The Joint Committee further reported to the Hon'ble Tribunal that part of pollution is on account of old Fazilka drain flowing from Pakistan and water quality was found to be class-E. Therefore, the Hon'ble Tribunal directed that further remedial measures be taken and progress report be submitted to the Hon,ble Tribunal.

The Hon'ble National Green Tribunal considered the report dated 21.10.2019 of the Joint Committee on 17.12.2019 and stated that part of the pollution is on account of old Fazilka drain flowing from Pakistan. The detailed study has to be undertaken w.r.t. water quality. The water quality was found to be Class-E or even worst and accordingly it was directed to take further remedial measures and progress report be filed before the next date of hearing.

The Hon'ble National Green Tribunal also directed the Monitoring Committee (constituted by Hon'ble Tribunal in OA No. 916 of 2018 in the matter of Sobha Singh and others v/s State of Punjab and other) to look into the matter.

The next date of hearing before the Hon'ble National Green Tribunal was fixed on 22.4.2020. However, the report of the Monitoring Committee could not be prepared due to lock down and curfew in the State of Punjab and Chandigarh due to COVID 19 situation and accordingly based on the visit to Fazilka area by the Monitoring Committee on 6.1.2020 and meeting held with the District Level Officers of 05 districts (Moga, Sri Muktsar Sahib, Ferozepur, Faridkot and Fazilka) on 7.1.2020, the status report was filed before the Hon'ble National Green Tribunal vide No. CMC/2020/spl.13 dated 29.4.2020.

## **2.0 Consideration of report dated 29.4.2020 of the Monitoring Committee by the Hon'ble National Green Tribunal in its order dated 29.6.2020**

The report dated 29.4.2020 of the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, was considered by the Hon'ble National Green Tribunal in its order dated 29.6.2020 and it was observed (as mentioned in para 5 of said order) that since the report has been furnished to the concerned authorities and there were no objections against the same and directed that the recommendations of the Monitoring Committee to be complied with which may be overseen by the Chief Secretary, Punjab. The case was further listed for consideration on 25.11.2020. On the next date of hearing on 25.11.2020, the Hon'ble National Green Tribunal considered the compliance report of the recommendations of the Monitoring Committee, submitted by Punjab Pollution Control Board on behalf of State of Punjab on 21.11.2020 and passed the detailed order, the operating para No. 6 of which is reproduced as under.

### **Para 6**

*"In view of above, there is need to further monitor the compliance of the required remedial measures for protection of the environment and public health in Fazilka District, Punjab. The concerned authorities may continue further action and the Monitoring Committee headed by Justice Jasbir Singh, former Judge of Punjab and Haryana High Court may also verify the compliance status from the concerned Departments and furnish a further status report with appropriate recommendations before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.*

The matter was further listed for consideration on 14.4.2021.

## **3.0 Meeting of the Monitoring Committee with District Level Officers of five Districts (Moga, Sri Muktsar Sahib, Ferozepur, Faridkot and Fazilka) in compliance to order dated 29.6.2020 of Hon'ble National Green Tribunal on 4.3.2021 w.r.t verification of the facts as mentioned in report dated 21.11.2020 of Punjab Pollution Control Board filed on behalf of State of Punjab**

In order to comply with the orders of the Hon'ble National Green Tribunal, the Monitoring Committee had held its meeting with District Level Officers of five Districts namely Fazilka, Ferozepur, Faridkot, Moga and Sri Muktsar Sahib w.r.t compliance of order dated 25.11.2020 in

OA No. 596 of 2019 in the matter of Vikram Ahuja Vs. State of Punjab & Others under the Chairmanship of Justice Jasbir Singh, former Judge, Punjab & Haryana High Court and now as Chairman of the Monitoring Committee on 4.3.2021 in the Meeting Hall, District Administration Complex, Moga and submitted its report to the Hon'ble National Green Tribunal vide No. CMC/SB/2020/1679 dated 10.3.2021.

**3.1 The executive summary of the works done by the various departments as mentioned in the report submitted to the Hon'ble National Green Tribunal on 10.3.2021 by the Monitoring Committee.**

The Monitoring Committee held its meeting with District Level Officers of Districts, namely; Moga, Sri Muktsar Sahib, Ferozepur, Faridkot and Fazilka w.r.t. Compliance of order dated 25.11.2020 and compared the progress made by the various departments of these districts as on 21.11.2020 and 4.3.2021. The executive summary of the works done by these departments, as mentioned in the report submitted to the Hon'ble National Green Tribunal on 10.3.2021 vide letter No. CMC/SB/2020/1679 dated 10.3.2021, is reproduced as under.

Sr. No.	Activity	Progress as on 21.11.2020	Progress as on 04.03.2021
<b>A). Status of sewage treatment plants (STPs)</b>			
1	<b>STP Ferozepur (18 MLD)</b>	The STP Ferozepur of capacity 18 MLD has been commissioned. As per the monitoring of the STP conducted by Punjab Pollution Control Board on 08.09.2020, the concentration of various parameters at the outlet of the STP has been found within prescribed norms.	Punjab Pollution Control Board has carried out the monitoring of 18 MLD Ferozepur in the last four months (Nov'2020 to Feb'2021) and the concentration of various parameters at the outlet of the STP has been found within prescribed norms.
2	<b>STP Gidderbaha (7 MLD):</b>	The STP Gidderbaha of capacity 7 MLD has been commissioned. As per monitoring of the STP done by Punjab Pollution Control Board on 08.10.2020, the concentration of various parameters at the outlet of the STP has been found within prescribed limits	Punjab Pollution Control Board has carried out monitoring of 7 MLD STP Gidderbaha in the last four months (Nov'2020 to Feb'2021) and the concentration of various parameters at the outlet of the STP has been found within prescribed limits.
3	<b>STPs Malout (2 Nos. of capacity 10MLD and 3 MLD)</b>	STPs of capacity 10 MLD and 3 MLD for the town Malout town were not meeting with the prescribed norms.	Both the STPs of capacity 10 MLD and 3 MLD for Malout town are now meeting with the prescribed norms as per

			analysis study conducted by PPCB during the period Jan, 2021 and Feb, 2021.
4.	<b>STP Jaitu</b>	STP Jaitu was under stabilization as sewage was not reaching to the STP due to rising main issue.	Rising main has been laid and STP Jaitu has been stabilized and shall be commissioned by 15.04.2021.
5.	<b>STP Kotkapura</b>	STP 8 MLD capacity: construction work was started.  STP 6 MLD capacity: construction work was started.	8 MLD capacity STP has been completed, only electric work is pending. 6 MLD capacity STP has been completed, mechanical & electric works are pending.
6	<b>STP Faridkot</b>	STP Faridkot : 14 MLD - Land issue to be resolved.	For installation of 14 MLD STP, Faridkot, land issue has been resolved and tendering process has been completed.
7.	<b>STP Arniwala</b>	No proposal for treatment of sewage.	For treatment of wastewater of Arniwala town, work order for installation of in-situ remediation technology and treatment of pond wastewater based on Seechewal model has been placed and shall be completed by 30.6.2021.
8 to 14.	<b>STPs Mallanwala, Mamdot, Mudki, Nihal Singh Wala, Badhni Kalan, Kot Ise Khan, Fatehgarh Panjtoor</b>	No proposal for treatment of sewage.	For treatment of wastewater of Mallanwala, Mamdot, Mudki, Nihal Singh Wala, Badhni Kalan, Kot Ise Khan, Fatehgarh Panjtoor towns, work order for treatment of pond wastewater based

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			on Seechewal model has been placed and shall be completed by 30.6.2021.
<b>B) Other activities</b>			
<b>1.</b>	<b>Ground water quality of handpumps</b>	In Ground water sampling carried out by Monitoring Committee on 06.01.2020, 04 ground water samples were found contaminated.	04 ground water samples, which were found contaminated, have been sealed. In 21 villages, RO systems have been installed to supply safe drinking water. Further, a scheme for supply of canal water to 205 villages has been prepared and its implementation will be started soon.
<b>2.</b>	<b>Improper functioning of STP Fazilka</b>	08 MLD STP Fazilka, based on WSP technology installed at Fazilka, was not functioning properly and not meeting with the prescribed norms.	PWSSB has prepared proposal costing Rs. 15.43 crore for installation of new STP of capacity 13 MLD for Fazilka town for which tenders have been called and likely to be started by 30.06.2021.
<b>3.</b>	<b>Laying of irrigation network for utilization of treated sewage for irrigation</b>	25 MLD STP installed for treatment of sewage of Abohar town, is working efficiently and meeting with the prescribed norms.	The Department of Soil & Water Conservation has prepared irrigation scheme costing Rs. 15 Crore for utilization of treated sewage of STP Abohar (25 MLD capacity) for irrigation and funds are being arranged.
<b>4.</b>	<b>Closing of regulator at Sabuana to divert the drain water</b>	The regulator installed at Sabuana was not closed resulting in discharge of drain wastewater into Fazilka drain	Department of Water Resources has closed the regulator with gunny bags and the drain water

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	<b>into Sutlej creek instead of in a big pond.</b>	further forming a big pond.	has been diverted to Sutlej creek and presently, no drain water is leading to big pond.
<b>5.</b>	<b>Clearing of weeds in Mauzzam DCW (Fazilka drain)</b>	Lot of weeds were found grown in the Mauzzam DCW (Fazilka drain) which had obstructed the natural flow of water.	Weeds from the Mauzzam DCW (Fazilka drain) have been removed and it is removed periodically to ensure free flow of water.

**3.2 Recommendations of the Monitoring Committee based on its earlier report 29.4.2020, compliance status submitted by Punjab Pollution Control Board on 21.11.2020 before Hon'ble National Green Tribunal and latest action taken by the concerned department on each activity as submitted in the meeting of the Monitoring Committee held on 4.3.2021 and further report submitted by the Monitoring Committee to the Hon'ble National Green Tribunal on 10.03.2021**

The Monitoring Committee had held detailed discussion on each recommendation made by the Monitoring Committee in its earlier report dated 29.4.2020, compliance status submitted by Punjab Pollution Control Board on behalf of State Government on 21.11.2020 and latest action taken by the concerned departments on each activity as mentioned in the meeting held on 4.3.2021 and made its further recommendations which are mentioned as under.

- 1) **Punjab Water supply and Sewage Board (PWSSB) shall operate sewage treatment plants for the towns namely Jalalabad (W) (8 MLD), Abohar (25 MLD), Talwandi Bhai (4 MLD), Zira (8 MLD), Makhu (4 MLD), Moga (27 MLD), Dharamkot (4 MLD), Ferozepur (18 MLD), Gidderbaha (7 MLD) and Malout (02 STPS of capacity 3 MLD and 10 MLD) and Sri Mukhtar Sahib (2 STPs of capacity 8.7 MLD and 5.7 MLD) effectively and efficiently to ensure achievement of prescribed standards for all the times and all the Municipal Councils/Corporation shall ensure to pay operation and maintenance charges regularly to the operating agency.**
- 2) **Sewage treatment plant for treatment of sewage of Jaitu town may be completed by 15.4.2021 and Punjab Pollution Control Board shall conduct the performance of STP in the last week of April 2021.**
- 3) **PWSSB shall start the construction work of STP of capacity 18 MLD for Faridkot town by 15.04.2021 and the same shall be completed by 31.12.2021 as committed by PWSSB.**
- 4) **Both the in-situ remediation technology as well as pond wastewater treatment system, based on Sechewal model, for Arniwala Sheikh subhan town shall be completed by 30.06.2021 by Municipal Council, Arniwala Sheikh subhan as per commitment made by it.**

- 5) For treatment of wastewater of Mallanwal town, pond wastewater treatment system based on Seechewal model shall be completed by MC Mallanwala by 30.06.2021 as per commitment made by it.
- 6) For treatment of wastewater of Mudki town, pond wastewater treatment system based on Seechewal model as well as in-situ remediation technology shall be completed by MC Mudki by 30.06.2021 as per commitment made by it.
- 7) Treatment mechanism for treatment of wastewater of all the 06 ponds of Mamdot town shall be completed by MC Mamdot by 30.06.2021.
- 8) Treatment of wastewater of the town Nihal Singh Wala, based on Seechewal model, shall be completed by 30.06.2021.
- 9) Treatment system for treatment of wastewater of Badhni Kalan shall be completed by 30.09.2021 as committed by MC.
- 10) For treatment of wastewater of Kot Ise khan, treatment system based on Seechewal model, shall be completed by 31.07.2021 as per the submission made by MC.
- 11) MC Fatehgarh Panjtoor shall provide treatment system based on Seechewal model by 30.09.2021 as per the commitment made by MC.
- 12) MC Bariwala shall install treatment system based on Seechewal model by 30.09.2021 as per the commitment made by MC and simultaneously it shall also take up the matter with the Dept. of Local Govt. for arrangements of funds at the earliest as to enable it to install STP at the earliest.
- 13) In order to check the performance of effluent treatment plant (ETP) of the industry namely M/s Kathpal Dairies (Unit-2), village Kokri Phoola Singh, Tehsil and District Moga, PPCB shall monitor the ETP of the industry within 15 days and shall continue to monitor its performance as per the frequency prescribed by PPCB / CPCB.
- 14) The Monitoring Committee noted the observations, findings and recommendations made by the experts engaged by PPCB and directed as under :
  - i) The officers of Punjab Pollution Control Board (PPCB) and Department of Water Supply and Sanitation (DWSS) shall monitor ground water of 10 hand pumps of the area within 15 days and in case, contamination is observed in the ground water samples, the ground water sources may be sealed and display board mentioning that the ground water source is not fit for drinking purposes may be erected at the sites.
  - ii) The ground water sources, which were found contaminated during the sampling of ground water sources of Fazika area by the Monitoring Committee on 6.1.2020, have been sealed and these residents are being supplied potable water. Further, the department of Water Supply & Sanitation has provided R.O. systems in 21 villages to supply safe drinking water.

The Monitoring Committee recommends as under.

- Safe drinking water, based on canal water supply scheme, may be given to the inhabitants of the area by the Dept. of Water Supply & Sanitation. The Dept. of Water Supply & Sanitation shall also implement the water supply scheme prepared for 205 villages, based on canal water at the earliest.
  - The Dept. shall also continue to monitor ground water sources, whose water is supplied to the inhabitants for drinking purpose from time to time and data in this regard may be sent to PPCB.
- iii) PPCB shall continue to monitor the water quality of the drains and pond wastewater to assess any improvement in the quality of water in these water bodies with the installation of STPs in the area.
- iv) The Dept. of Soil & Water Conservation shall lay a irrigation network in the nearby fields of Abohar area to utilize the treated sewage of 25 MLD STP Abohar and shall start the work of laying of pipeline in the first week of June 2021 and shall be completed by 31.12.2021.
- 15) For installation of new STP of capacity 13 MLD for treatment of sewage of Fazilka town, replacing the existing STP of 8 MLD based on WSP technology, the funds amounting to Rs. 15 crore have been arranged. The Monitoring Committee directed that the funds amounting to Rs. 15 crores should be entirely used for installation of 13 MLD new STP and no funds may be diverted for any other purpose keeping in view the environment status of the area. The Deputy Commissioner, Fazilka shall personally monitor the issue.
- 16) In order to ensure no discharge of drain water into Fazilka drain and further into big pond to control seepage and avoid ground water contamination, as per earlier directions of the Monitoring Committee, PPCB had taken up the matter with the Dept. of Water Resources to close the regulator installed at Sabuana drain but it was not closed permanently. The Executive Engineer, Dept. of Water Resources has now informed that the regulator has been closed temporarily with gunny bags because the department has to open the regulator to discharge the excess flow. Accordingly, the Monitoring Committee has directed that the temporarily closed regulator may be opened only during exigency and proper record alongwith reasons mentioned therein shall be maintained by the department and the same may brought in the notice to Deputy Commissioner, Fazilka immediately.
- 17) In order to treat wastewater of Fazilka drain, PPCB shall initiate the process of installation of in-situ remediation technology in Fazilka drain for which it shall get prepare proposal from the reputed agency and the same shall be implemented within 03 months.

- 18) For the up gradation of existing STP of Jalalabad town of capacity 8 MLD to cater excess hydraulic load of 4 MLD, funds amounting to Rs. 2 crores are available with the MC Jalalabad and more funds shall be required for up gradation of the same.

The Monitoring Committee has directed that the funds amounting to Rs. 2 crore may be kept in custody of MC, Jalalabad and it may not be diverted for any other work and in the meantime, efforts may be made to get more funds from the Dept. of Local Govt. for upgradation of existing STP timely.

- 19) Keeping in view the situation of Fazilka area, canal water is supplied through seasonal canal for 6 months in a year for irrigation of agriculture fields. However, taking note of the situation and to ensure proper cropping in the area, the Monitoring Committee directed that in the remaining 6 months (December to May) period, sufficient quantity of canal water may be supplied for irrigation of agriculture fields atleast once in a month. Deputy Commissioner, Fazilka shall ensure the compliance of the same.
- 20) The Monitoring Committee noted the crop yield data of Fazilka area for the last 03 years and observed that there was very less variation with respect to yield of crop in the border area as compared to the crop yield data of the remaining area of the district. The Monitoring Committee has directed that Chief Agriculture Officer of Fazilka area shall continue to monitor crop yield data of both the seasons of the year and its impact on yield, if any and data of the same may be maintained. The monitoring process may be continued in every season for next 03 years.
- 21) In order to make free flow of water of Fazilka drain into river Sutlej, which has been closed at borderlines of the countries, by opening the same, Chief Secretary, Punjab has written D.O letter dated 19.11.2020 to the Secretary to Govt. of India, Department of Water Resources, Ministry of Jal Shakti, New Delhi to look into the matter at personal level for ensuring compliance. The Monitoring Committee noted the compliance and directed that Chief Secretary, Punjab shall again take up matter with the Ministry of Water Resources, Government of India, New Delhi to further take up the matter with the concerned Ministry of Government of Pakistan through Ministry of External Affairs, Govt. of India to open the Fazilka drain, which is presently has been closed at the borderline of the countries, to make free flow in the river Sutlej.
- 22) For effective operation of STPs of Sri Mukatsar Sahib and Jalalabad towns, in the earlier recommendations of the Monitoring Committee, it was recommended that operation and maintenance work of STPs of these towns may be given to PWSSB, being expert agency in STPs operation. The Monitoring Committee has taken a serious view for not handing over the operation & maintenance work of STP Sri Muktsar Sahib and Jalalabad to PWSSB and directed that Deputy Commissioners of the concerned districts

shall hold a meeting with MCs Jalalabad and Sri Muktsar Sahib, PWSSB and DWSS within 02 days and issue regarding operation & maintenance of both the STPs by Punjab Water Supply & Sewage Board may be resolved and these STPs may be handed over to PWSSB.

- 23) Civil Surgeon, Fazilka and Civil Surgeons of the other districts shall continue to conduct health check up camps and the persons affected with water borne diseases, if any, may be identified and the list of the same may be sent to the District Administration of further action.
- 24) Deputy Directors of Dept. of Animal Husbandry, Fazilka and other districts shall continue to conduct health survey of animals and the animal affected with any diseases may be identified and reported to the District Administration of further action.
- 25) With regard to laying of Sewage network, water supply schemes and installation of STPs as long term measures for control of pollution in 9 ULBs namely Arniwala, Mallanwala, Mudki, Mamdot, Nihal Singh Wala, Badni Kalan, Kot Ise Khan, Fatehgarh Panjtoor and Beriwala, Punjab Water Supply and Sewage Board has submitted that detailed project reports (DPRs) costing Rs 31 crores, Rs 37.34 crores, Rs 23 crores, Rs 40.22 crores, Rs 49.13 crores, Rs 20.50 crores, Rs 43.48 crores, Rs 8.0 crores and Rs 27 crores, respectively, have been prepared and the same have been sent to the State Govt. for approval. The funds for these towns are being arranged.

The Monitoring Committee recommends that Principal Secretary, Deptt. of Local Govt. shall look into the matter and detailed project report may be approved and funds from department of finance may be arranged at the earliest so that Sewage system, water supply lines and sewage treatment plants for the above said towns may be laid/setup in a time bound manner.

#### **General Recommendations of the Monitoring Committee**

##### **A) Regular payment of operation & maintenance charges of STPs :**

 The Monitoring Committee has observed that normally the operation & maintenance charges of STPs are not paid regularly by the Municipal Councils / Corporations to the contractor responsible for operation of STPs, resulting in poor performance of STPs because of their irregular operation. The concerned MCs are to be ensured that operation & maintenance charges are paid regularly to the contractor so that STPs may be operated effectively and efficiently by the contractor for all the times.

**Monitoring Committee recommends that all the MCs, PWSSB, DWSS or any other concerned department operating the STPs and Dept. of Local Govt. may note the observations for compliance.**

##### **B) Quantification of sludge generation and its disposal :**

The Monitoring Committee has observed that in most of the STPs, the quantity of sludge generated during operation of STP is not measured and no proper record is maintained

for the same. Further, the disposal of sludge in an environmentally sound manner is not made by most of the Municipal Councils/Corporations.

Therefore, there is need to quantify the sludge generated during operation of STPs especially based on aerobic biological treatment system. The technological issues like maintaining required level of MLSS and MLVSS in the aeration chamber and the amount of sludge recycled back into the system to maintain biomass in the aeration chamber are not checked properly, which results into poor settling of sludge or sludge bulking in the clarifier. Further, the sludge generated from the system needs to be dried through centrifuging/mechanical decanting system instead of drying in the sludge drying beds occupying large area. After drying of sludge, it may be stored at a dedicated storage room and thereafter, it may be utilized for gardens / parks / green belts / agriculture areas as manure. The record of operational hours of STP, sludge generation per day and its disposal by the above methods may be maintained by the operator of the STP.

**The Monitoring Committee recommends that all the MCs, Dept. of Local Govt, PWSSB and Dept. of Water Supply & Sanitation and any other Govt. agency, operating the STPs may note above observations and immediate action may be taken in the matter for effective performance of STPs.**

**C) Treatment of sewage and utilization of treated sewage for irrigation**

The Monitoring Committee has observed that treated sewage of STPs, even based on new technology, is presently being discharged into drains leading to river system and wasting the best quality treated effluent. The farmers may be more benefited in case the treated sewage is utilized for irrigation purposes and bio-sludge from STPs may be utilized as manure in the agriculture fields, which may not only save the ground water / canal water but also save the energy and cost of manure.

**The Monitoring Committee recommends that the concerned departments may implement above the suggestions in time bound manner.**

**3.3 Consideration of the report dated 10.3.2021 of the Monitoring Committee (submitted vide No. CMC/SB/2020/1679 dated 10.3.2021) by the Hon'ble National Green Tribunal in its order dated 9.6.2021**

The Hon'ble National Green Tribunal vide its order dated 9.6.2021 considered the report of the Monitoring Committee submitted to Hon'ble Tribunal vide No. CMC/SB/2020/1679 dated 10.3.2021 and directed in para No. 5, as under.

- 5. None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we direct the State of Punjab to take further remedial action in terms of the above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the next date by e-mail at [judicialngt@gov.in](mailto:judicialngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in**

the form of Image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of monitoring Sutlej River, the Committee may continue to function for monitoring other compliances in terms of specific orders of this Tribunal.

The case has been further listed for 26.10.2021.

A copy of the order dated 9.6.2021 of the Hon'ble National Green Tribunal is annexed as per Annexure-A.

**4.0 Verification of the compliance made by the various Municipal Councils, Nagar Panchayats and other departments on the recommendations made by the Monitoring Committee in its report dated 10.3.2021 and further directions by the Hon'ble National Green Tribunal in its order dated 9.6.2021**

In compliance to order dated 9.6.2021, as mentioned in para 5 above, the Monitoring Committee visited the sewage treatment plants/ remediation systems of wastewater of the Municipal Councils/Nagar Panchayats of five districts namely Moga, Sri Muktsar Sahib, Faridkot, Ferozepur and Fazilka on 9.7.2021, 18.8.2021, 31.8.2021, 7.9.2021 and 21.9.2021 & 22.9.2021, respectively, and Moga area again on 5.10.2021. The brief status w.r.t sewage treatment plants/ remediation systems of wastewater of 26 ULB's falling under five districts, which are in operation, under construction or planning stage is mentioned as under:

**4.1 Sewage treatment plants/ in-situ remediation systems of wastewater of each Municipal Council/Nagar Panchayat of each district.**

Sr. No	Name of the District	Date of visit by the Monitoring Committee	Sewage treatment plants/ remediation system of wastewater of the towns	Status of STP/ remediation of wastewater w.r.t operational status, under construction or planning stage
1.	Moga (7MCs/NPs)	9.7.2021	i) STP Moga: 27 MLD	STP was in operation
			ii) STP Baghapurana: 4 MLD	STP of capacity 4 MLD, based on MBBR technology has been installed but the same is under trial and has not commissioned so far.
			iii) Remediation of wastewater of Nagar Panchayat (NP), Nihal Singh Wala	The total discharge of sewage of the town is 1.6 MLD and no sewerage system has been provided in the town. An amount of Rs. 25 lakh has been allotted for construction of remediation system and likely to be completed by 30.9.2021 As per latest visit on 05.10.21, NP has constructed one pond; however one of the wall of pond was found damaged. It was informed that pond shall be converted into six chambers by constructing brick walls in the pond to work as six ponds treatment system and it will take another 1½ month.
			iv) Remediation of wastewater of Nagar Panchayat (NP), Badhni Kalan	The total discharge of sewage is 1 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Badhni Kalan submitted that Rs. 23 lakhs has been allotted for the construction of remediation system

				<p>for wastewater as treatment mechanism based on pond system. As per latest visit on 05.10.2021, NP has constructed one pond whose walls were katcha and it was found filled with rain water as informed by the representative of NP. <u>The pond shall be converted into six chambers to work as 6 ponds system and will made operational within 01 month, as claimed by NP.</u></p>
			v) STP DharamKot: 4 MLD	<p>The total discharge of sewage is 3 MLD and for treatment of sewage, STP of capacity 4 MLD, based on SBR technology, has been installed, which was in operation at the time of visit.</p>
			vi) Remediation of wastewater of NP, Fatehgarh Panjtoor	<p>The total discharge of sewage is 0.76 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Fatehgarh Panjtoor submitted that necessary funds have been allotted for the construction of remediation system based on pond system. At the time of visit, the machinery was in operation to dewater the pond but no significant progress was observed at site.</p> <p>It appears that the work of dewatering of pond was started only after receiving information about the visit of the Monitoring Committee to the site.</p> <p>As per latest visit dated 05.10.2021, NP has started the excavation work of pond system on the adjoining land to the existing pond from where dewatering was done earlier. The treatment based on Seechewal model shall be constructed within 01 month, as claimed by NP.</p> <p>It appears that excavation work of pond was started after receiving the notice of visit of the Monitoring Committee.</p>
			vii) Remediation of wastewater of NP, Kot Ise Khan	<p>The total discharge of sewage is 1.88 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Kot Ise Khan submitted that necessary funds have been allotted for the construction of system for remediation of wastewater based on pond system. During visit, it was observed that excavation work of pond system was going on and machinery was in operation.</p> <p>As per the latest visit dated 05.10.2021, NP has constructed brick masonry circular tanks so called treatment system based on Seechewal model and will make operational within 01 month, as</p>

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				claimed by representative of NP.
2.	Sri Muktsar Sahib (4MCs/NPs)	18.8.2021	i) STP of capacity 7 MLD at Gidderbaha	For treatment of sewage of Gidderbaha town, MC Gidderbaha has installed STP of capacity 7 MLD, which was in operation at the time of visit.
			ii) STP of capacity 10 MLD (MBBR) and 3 MLD (WSP) at Malout	STP of capacity 10 MLD is based on MBBR technology, which consists of primary treatment system, anoxic tank and MBBRs (2 nos. in parallel) followed by secondary clarifier and all the components of STP were in operation. 3 MLD capacity STP, based on WSP technology, was in operation.
			iii) 3 STPs of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD for treatment of sewage of Sri Muktsar Sahib	<b>The Monitoring Committee observed that all the 3 STPs of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD are lying defunct and the untreated sewage of 2 STPs (8.7 MLD &amp; 3.5 MLD) is being discharged into sullage carrier leading to Chand Bhan drain, whereas, untreated sewage of 5.7 MLD STP, is being discharged into Sarainaga drain.</b>
			iv) Treatment of sewage of Nagar Panchayat, Bari Wala	<b>The total discharge of sewage is about 2 MLD. Presently, no STP / treatment system or in-situ remediation has been installed by the Nagar Panchayat, Bariwala and untreated sewage is being discharged into Sarainaga drain.</b>
3.	Faridkot (3MCs)	31.8.2021	i) Proposed STP of capacity 14 MLD for treatment of sewage of Faridkot town.	Total discharge of sewage of the town is 9 MLD. For installation of STP of capacity 14 MLD, based on SBR technology, land has been purchased. <b><u>Only boundary wall on two sides have been constructed and excavation/ foundation work of utility rooms has been started. No construction work of any component of STP has been started so far.</u></b> <b>It appears that the construction work of boundary wall and utility room was started after receiving the notice of visit of the Monitoring Committee to the site.</b> PWSSB informed that STP shall be completed by 30.6.2022. Presently, the untreated sewage is discharged into Langana drain. Pipeline of diameter 1400 mm and 300 mtrs. length has been laid. Total length of pipeline to be laid is 1100 mtrs.
			ii) Sewage treatment plant of capacity 8 MLD (SBR) and 6 MLD (SBR) at Kot	STP of capacity 8 MLD, based on SBR technology, consists of primary treatment system, aeration chamber and chlorine contact tank-cum-

			kapura.	<p>treated effluent collection tank, has been completed. No electric connection has been released by PSPCL for operation of STP. Presently, untreated sewage of the town is discharged into Deviwala drain.</p> <p>Now it has been informed by PPCB that electric connection has been released by PSPCL but STP has not been made operational.</p> <p>STP of capacity 6 MLD, based on SBR technology, consists of primary treatment system, aeration chamber and chlorine contact tank-cum-treated effluent collection tank, has been completed. However, electrical fittings of STP are yet to be completed. No electric connection has been released by PSPCL for operation of STP. The Executive Engineer, PSPCL claimed that MC, Kotkapura has not released the pending payment of the PSPCL. Presently, untreated sewage of the town is discharged into Warring link drain.</p>
			ii) Sewage treatment plant of capacity 6 MLD (SBR) at Jaitu.	STP of capacity 6 MLD, based on SBR technology, has been installed and commissioned.
4.	Ferozpur (8MCs/NPs)	7.9.2021	i) Sewage Treatment Plant of capacity 4 MLD at Talwandi Bhai.	Total discharge of sewage of the town is 2.5 MLD. STP of capacity 4 MLD, based on SBR technology, has been installed and commissioned.
			ii) Treatment System for treatment of sewage of Mudki town.	Total discharge of sewage of the town is 1 MLD. No sewerage system has been provided in the town. For the treatment of sewage of the town, Municipal Council, Mudki has provided 4 tanks, which have been closed from the top due to which the operational mechanism could not be observed by the Monitoring Committee. Municipal Council, Mudki claimed that out of 4 tanks, in the first tank, screening system has been provided. These tanks are interconnected to each other and finally the effluent from the last tank is discharged into Mudki drain. The Monitoring Committee observed that the present treatment system is required to be modified to make it functional as aerobic biological treatment system.
			iii) Sewage Treatment Plant of Capacity 8 MLD for Zira Town.	Total discharge of sewage of the town is 6 MLD. STP of capacity 8 MLD, based on MBBR technology, has been installed and commissioned.
			iv) Sewage Treatment Plant of Capacity 4 MLD for Makhu Town.	Total discharge of sewage of the town is 2.5 MLD. STP of capacity 4 MLD, based on SBR technology, has been installed and commissioned.

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			v) Treatment System for treatment of sewage of Mallanwala Khas.	Total discharge of sewage of the town is 1.5 MLD. No sewerage system has been provided in the town. For the treatment of sewage of the town, Municipal Council, Mallanwala Khas has provided 4 chambers, having interconnectivity to each other, as components of treatment system based on Seechewal Model. The treatment mechanism has not been commissioned.
			vi) Sewage Treatment Plant of capacity 18 MLD at Ferozepur.	Total discharge of sewage of the town is 16 MLD. STP of capacity 18 MLD, based on SBR technology, has been installed and commissioned.
			vii) Treatment System for treatment of sewage of Mamdot town.	Total discharge of sewage of the town is 1 MLD. No sewerage system has been provided in the town. Presently, wastewater of the town is discharged into ponds. For the treatment of sewage of the town, Municipal Council, Mamdot has provided 4 chambers, having interconnectivity to each other, as components of treatment system based on Seechewal Model. The Monitoring Committee observed that the interconnectivity of the chambers 3 and 4 is not as per the treatment technology and it requires necessary modification. The Executive Officer, Municipal Council, Mamdot informed that the said technology has also been provided at 03 other locations of the town for treatment of sewage.
			viii) Sewage treatment plants of capacity 1 MLD and 4 MLD at Guruharsahai town.	<u>STP of capacity 1 MLD is under construction. Most of components of STP at foundation stage except the construction of walls of SBR basin to its about 75% of actual height. PWSSB informed that about 25% of construction work of STP of capacity 1 MLD has been completed and STP shall be completed by 31.03.2022.</u> <u>The components of STP of capacity 4 MLD are almost at foundation stage and PWSSB informed that about 10% of construction work of STP has been completed and STP is likely to complete by 31.03.2022.</u>
5.	Fazika (4MCs/NPs)	21.9.2021 & 22.9.2021	i) Sewage Treatment Plant of capacity 25 MLD at Abohar.	Total discharge of sewage of the town is 23 MLD and the same is discharged in Abul Khurana drain through sullage carrier. STP of capacity 25 MLD, based on SBR technology, has been installed and commissioned.
			ii) Treatment system for treatment of sewage of Arniwala Shiekh Subhan town.	Total discharge of sewage of the town is 1.25 MLD and the same is discharged in Baam drain. No sewerage system has been provided in the town. For the treatment of sewage of the town, Municipal

			<p>Council, Arniwala Shiekh Subhan has provided so called in-situ remediation technology by providing chambers separated by wire mesh filled with stones. However, the said system needs modification by providing additional mechanism to achieve its better performance of the system. PWSSB informed that for laying of sewerage network and installation of sewage treatment plant of capacity 2 MLD, tender has been called and work shall be allotted within 01 month.</p>
		<p>iii) Existing STP of Capacity 8 MLD and installation of 13 MLD new STP replacing existing 8 MLD capacity STP for Fazilka Town.</p>	<p>Total discharge of sewage of the town is 11 MLD and the same is discharged into Fazilka drain. STP of capacity 8 MLD, based on waste stabilization pond, has been installed and commissioned. The treated sewage is discharged into Fazilka drain. <u>PWSSB has started the construction work of STP of capacity 13 MLD for which SBR tanks (2 nos.) are at foundation stage and it was claimed that STP shall be completed by May, 2022.</u></p>
		<p>iv) Sewage Treatment Plant of Capacity 8 MLD for Jalalabad Town.</p>	<p>Total discharge of sewage of the town is 12 MLD and the same is discharged into Jalalabad drain. STP of capacity 8 MLD, based on MBBR technology, has been installed and commissioned and there is gap of 4 MLD sewage which is required to be treated by providing separate STP by MC Jalalabad. STP, consisting of primary treatment unit, MBBR (2 nos. in series), secondary clarifier, final treated effluent collected tank, has been provided.</p> <p><b>During the visit, the Monitoring Committee observed that though the aeration system in the MBBR tanks was in operation but no aerobic biological activity was seen being happened in the aeration chamber resulting in no improvement in the quality of wastewater effluent. No primary and secondary sludge was found removed from the treatment system which indicates that the STP was lying non-operational. It appears that STP was made operational only after receiving the information about the visit of the Monitoring Committee in the area and the capacity of the STP is 8 MLD, whereas, 12 MLD sewage was being passed through the STP, which has resulted into ineffective performance of STP. No primary and secondary</b></p>

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				<b>sludge was observed at the site. Centrifugal system of the STP was not being operated.</b>
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The reports on verification of compliance of the recommendations made by the Monitoring Committee as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja V/s State of Punjab & Ors w.r.t status of STPs/ remediation of wastewater of each Municipal Council/Nagar Panchayat of District Moga on 9.7.2021 & 05.10.2021, District Sri Muktsar Sahib on 18.8.2021, District Faridkot on 31.8.2021, District Ferozepur on 7.9.2021 and District Fazilka on 21.9.2021 & 22.9.2021, are annexed as per **Annexure B/B-1, C, D, E and F**

**5.0 Verification on the compliance made by the various departments on the recommendations made by the Monitoring Committee in its report dated 10.3.2021 and mentioned in order dated 9.6.2021 of the Hon'ble National Green Tribunal**

Based on the visit of the Monitoring Committee to the Municipal Councils/Nagar Panchayats of five districts namely Moga, Sri Muktsar Sahib, Faridkot, Ferozepur and Fazilka on 9.7.2021 & 05.10.2021, 18.8.2021, 31.8.2021, 7.9.2021 and 21.9.2021 & 22.9.2021, respectively, w.r.t sewage treatment plants, in-situ remediation/treatment facilities for treatment of sewage of the town, mode of disposal of effluent and its further utilization for irrigation and other action points related to the concerned departments, the Monitoring Committee has verified the compliance status and point-wise compliance status is submitted as under.

**5.1 Recommendation No. 1**

**Punjab Water Supply and Sewage Board (PWSSB) shall operate sewage treatment plants for the towns namely Jalalabad (W) (8 MLD), Abohar (25 MLD), Talwandi Bhai (4 MLD), Zira (8 MLD), Makhu (4 MLD), Moga (27 MLD), Dharamkot (4 MLD), Ferozepur (18 MLD), Gidderbaha (7 MLD) and Malout ( 02 STPS of capacity 3 MLD and 10 MLD) and Sri Mukhtar Sahib (2STPs of capacity 8.7 MLD and 5.7 MLD) effectively and efficiently to ensure achievement of prescribed standards for all the times and all the Municipal Councils/Corporation shall ensure to pay operation and maintenance charges regularly to the operating agency.**

**5.1.1 Compliance status : Jalalabad (W) STP of capacity 8 MLD)**

**5.1.1.1 Observations of the Monitoring Committee made during its visit to STP Jalalabad of capacity 8 MLD on 21.9.2021.**

1. Total discharge of sewage of the town is 12 MLD and the same is discharged into Jalalabad drain.
2. STP of capacity 8 MLD, based on MBBR technology, has been installed and commissioned and there is gap of 4 MLD sewage which is required to be treated by providing separate STP by MC Jalalabad.
3. STP, consisting of primary treatment unit, MBBR (2 nos. in series), secondary clarifier, final treated effluent collected tank, has been provided.
4. During the visit, the Monitoring Committee observed that though the aeration system in the MBBR tanks was in operation but no aerobic biological activity was seen being

happened in the aeration chamber resulting in no improvement in the quality of wastewater effluent. No primary and secondary sludge was found removed from the treatment system which indicates that the STP was lying non-operational. It appears that STP was made operational only after receiving the information about the visit of the Monitoring Committee in the area and the capacity of the STP is 8 MLD, whereas, 12 MLD sewage was being passed through the STP, which has resulted into ineffective performance of STP.

5. No primary and secondary sludge was observed at the site. Centrifugal system of the STP was not being operated.
6. Department of Soil & Water Conservation has laid the irrigation network for the utilization of treated effluent.
7. PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The analysis results of the effluent samples collected on 21.09.2021 from STP 8 MLD capacity are mentioned as per Table-1 given below.

**Table-1: Analysis results of effluent samples collected from 8 MLD capacity STP, Jalalabad.**

Sr. No.	Parameters	Inlet of STP	Aeration Tank	Outlet of STP
1.	pH	7.3	--	7.4
2.	TSS, mg/l	278	--	49
3.	BOD, mg/l	115	--	26
4.	COD, mg/l	384	--	96
5.	F.Coli, MPN/100 ml	120000	--	910
6.	MLSS, mg/l	--	2460	--
7.	MLVSS, mg/l	--	1780	--

The analysis results as mentioned in the Table-1 indicate that all the parameters are within the norms and these analyses results seem to be erratic as STP was not functioning properly as observed in point no.4 of the observations. Therefore, these analysis results are not accepted. It is mentioned here that during the visit, the Monitoring Committee had observed that though the aeration system in the MBBR tanks was in operation but no aerobic biological activity was seen in the aeration chamber resulting in no improvement in the quality of wastewater effluent. No primary and secondary sludge was found removed from the treatment system which indicates that STP was lying non-operational. It appears that STP was made operational only after receiving the information about the visit of the Monitoring Committee in the area.

The capacity of the STP is 8 MLD, whereas, 12 MLD sewage was being passed through it, which has resulted into ineffective performance of STP. However, the analysis of the effluent sample collected from the outlet of STP indicated that all the parameters are within the norms, which are erratic. Punjab Pollution Control Board may fix the responsibility of the officer who has analyzed the effluent samples of STP, Jalalabad. Even the analysis of the effluent samples collected from the STP in the previous months (June, 2021 to September, 2021) are within the

prescribed norms. It requires enquiry into the matter as the condition of various components of STP indicate that it had not been operated properly for the past long time and effluent is only entering at inlet of STP and just passing through the various components of STP without any biological activity and removal of solid waste, primary and secondary sludge.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 8 MLD Jalalabad on 21.9.2021, the Monitoring Committee has made following further recommendations.

#### **5.1.1.2 Further recommendations**

- i) MC/PWSSB shall upgrade/rehabilitate the components of STP within 01 month so that it may meet with the prescribed standards.**
- ii) MC/PWSSB shall prepare DPR for providing additional STP of adequate capacity to treat whole of the quantity of sewage of Jalalabad area, within 01 month and funds for the same may be arranged within 02 months. The work of additional STP may be started within 03 months and the same may be completed in a time bound manner.**
- iii) Department of Soil & Water Conservation shall continue to operate its existing irrigation network to utilize treated sewage of 8 MLD capacity STP for irrigation. The department shall also prepare irrigation scheme within 02 months to utilize treated sewage of additional STP of adequate capacity to be provided by MC/ PWSSB.**
- iv) MC/PWSSB shall make the centrifugal system provided for dewatering of secondary sludge in operation within 15 days and if required, upgradation of the same may be made within 01 month. For the storage of secondary sludge, MC/PWSSB shall provide dedicated storage shed/room and shall maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner. The secondary sludge may be utilized for parks/green belts/agriculture areas as manure and proper record in this regard may be maintained.**
- v) MC/PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.**
- vi) MC/PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.**
- vi) MC/PWSSB shall install online continuous effluent monitoring system at the outlet of STP within 02 months.**
- vii) PWSSB shall ensure that bye-pass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of PPCB.**
- viii) It is mentioned here that during the visit, the Monitoring Committee had observed that though the aeration system in the MBBR tanks was in operation but no aerobic biological activity was seen in the aeration chamber resulting in no improvement in the quality of wastewater**

effluent. No primary and secondary sludge was found removed from the treatment system which indicates that STP was lying non-operational. It appears that STP was made operational only after receiving the information about the visit of the Monitoring Committee in the area. The capacity of the STP is 8 MLD, whereas, 12 MLD sewage was being passed through it, which has resulted into ineffective performance of STP. However, the analysis of the effluent sample collected from the outlet of STP indicate that all the parameters are within the norms, which are erratic. Punjab Pollution Control Board may fix the responsibility of the officer who has analyzed the effluent samples of STP, Jalalabad. Even the analysis of the effluent samples collected from the STP in the previous months (June, 2021 to September, 2021) are within the prescribed norms. It requires enquiry into the matter as the condition of various components of STP indicate that it had not been operated properly for the past long time and effluent is only entering at inlet of STP and just passing through the various components of STP without any biological activity and removal of solid waste, primary and secondary sludge.

#### **5.1.2 Abohar STP of capacity 25 MLD**

##### **5.1.2.1 Observations of the Monitoring Committee during its visit to STP Abohar made on 21.9.2021**

1. Total discharge of sewage of the town is 23 MLD and the same is discharged in Abul Khurana drain through sullage carrier.
2. STP of capacity 25 MLD, based on SBR technology, has been installed and commissioned.
3. STP, consisting of primary treatment unit, secondary treatment and chlorine contact tank-cum-final treated effluent collection tank, was in operation.
4. For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed but the same was not in operation and the wastewater in slurry form after sludge thickener was being taken at the inlet of the STP, resulting inefficient performance of SBR system. During the visit, it was observed that treated wastewater after decanting stage of SBR was found turbid.
5. No secondary sludge from centrifugal system was being disposed of.
6. Turbid treated sewage was being discharged into Abul Khurana drain through sullage carrier. As per the analysis results of treated effluent samples, collected by PPCB during the months of April & May 2021, the parameters (pH: 7.1 – 7.4, BOD: 7-8 mg/l, COD: 21-30 mg/l, TSS: 9-14 mg/l, F.Coli: 180-370 MPN/100 ml) were within the permissible limits, whereas, the effluent sample collected in the month of June & July 2021, the parameter namely F.Coli (1300-3400 MPN/100 ml) was found beyond the permissible limits of 1000 MPN/100 ml.
7. The Department of Soil & Water Conservation informed that in order to utilize the treated sewage for irrigation, detailed irrigation scheme costing Rs. 22 Crore in command area of 700 hectares has been prepared but the funds have not been received.

8. PWSSB has installed OCEMS for monitoring the required parameters of treated sewage.
9. PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The analysis results of the effluent samples collected from various points of STP of capacity 25 MLD, Abohar are mentioned as per table-2 given below.

**Table-2: Analysis results of effluent samples collected from various points of 25 MLD capacity STP, Abohar**

Sr. No.	Parameters	Inlet of STP	Aeration Tank	Outlet of STP
1.	pH	7.4	--	7.4
2.	TSS, mg/l	273	--	34
3.	BOD, mg/l	122	--	32
4.	COD, mg/l	408	--	102
5.	F.Coli, MPN/100 ml	120000	--	1100
6.	MLSS, mg/l	--	2810	--
7.	MLVSS, mg/l	--	2070	--

The analysis results as mentioned in the Table-2 given above, indicate that the parameters namely BOD and F.Coli, which are found as 32 mg/l, 1100 MPN/100 ml, respectively, are higher than prescribed limits of 30 mg/l and 1000 MPN/100 ml.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 25 MLD Abohar on 21.9.2021, the following further recommendations have been made.

#### 5.1.2.2 Further recommendations

- i) **Department of Soil & Water Conservation shall take up the matter with the Deputy Commissioner, Fazilka regarding release of funds for laying of irrigation network to utilize the treated sewage of STP Abohar for irrigation within 15 days. Further, the Deputy Commissioner shall raise the issue with the Department of Finance for early release of funds and the Department of Soil & Water Conservation shall follow up the matter. The irrigation network to utilize treated sewage for irrigation may be completed by 31.12.2021.**
- ii) **PWSSB shall make centrifugal system in operation within 07 days and ensure that no wastewater in slurry form is taken back into the influent collection tank and only the effluent after dewatering/decanting of sludge in the centrifugal system may be taken at the inlet chamber of STP.**
- iii) **PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level in case secondary sludge is not dried properly by existing centrifugal system. The dewatered/decanted sludge in dry form may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t.**



generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.

- iv) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- v) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.
- vi) PWSSB shall ensure that bye-pass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of Punjab Pollution Control Board.
- vii) During the visit to the STP Abohar, it was observed that turbid treated sewage was being discharged into Abul Khurana drain through sullage carrier, as such the analysis results of the effluent sample collected from outlet of the STP indicate that the values of parameters namely BOD and F.Coli were found as 32 mg/l and 1100 MPN/100ml, respectively. The reasons for ineffective performance of STP were identified as the entry of wastewater in slurry form after sludge thickener at the inlet of the STP. PWSSB shall look into the matter and make the treatment system effective so as to make it capable to meet with the prescribed standards at all the times.

### **5.1.3 Talwandi Bhai STP of capacity 4 MLD**

#### **5.1.3.1 Observations of the Monitoring Committee made during its visit to STP Talwandi Bhai of capacity 4 MLD on 7.9.2021**

1. Total discharge of sewage of the town is 2.5 MLD.
2. STP of capacity 4 MLD, based on SBR technology, has been installed and commissioned.
3. STP, consisting of primary treatment unit, secondary treatment and chlorine contact tank-cum-final treated effluent collection tank, was in operation.
4. For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and in the dewatered sludge, lot of moisture content was found available. For further drying of the sludge, PWSSB is required to provide additional dewatering mechanism so as to dry the sludge to its optimum level in order to make it acceptable to the farmers for its utilization as manure in the agriculture fields.
5. The treated sewage is discharged into Talwandi Bhai drain. As per the analysis results of treated effluent samples, collected by PPCB during the months of April to July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 8-12 mg/l, 7-19 mg/l and 200-920 MPN/100ml, respectively, which are within the prescribed limits.
6. The Department of Soil & Water Conservation informed that in order to lay irrigation network to utilize treated sewage for irrigation, an estimate amounting to Rs. 1.41 crore has been sanctioned by the department and tender has been allotted to an agency and irrigation scheme shall be completed by 31.12.2021.

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7. During the visit, it was informed to the Monitoring Committee that M.C.Talwandi Bhai has to pay the pending payment of Rs. 87 Lakh as operation & maintenance charges of STP to the operating agency.
8. PWSSB has installed OCEMS for monitoring the required parameters of treated sewage.
9. PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The analysis results of the effluent samples collected from various points of STP of capacity 4 MLD, Talwandi Bhai on 7.9.2021 are mentioned as per Table-3 given below.

**Table-3: Analysis results of effluent samples collected from various points of STP of capacity 4 MLD, Talwandi Bhai**

Sr. No.	Parameters	Inlet of STP	Aeration Tank	Outlet of STP
1.	pH	7.3	--	7.8
2.	TSS, mg/l	148	--	12
3.	BOD, mg/l	90	--	8
4.	COD, mg/l	--	--	32
5.	F.Coli, MPN/100 ml	94000	--	360
6.	MLSS, mg/l	--	958	--
7.	MLVSS, mg/l	--	418	--

The analysis results as mentioned in the Table-3 given above, indicate that all the parameters are within the norms as prescribed by the PPCB. However, the values of MLSS and MLVSS are erratic because with the low concentration of MLSS and MLVSS, the value of BOD, COD and TSS cannot be reduced to such a level of TSS: 12 mg/l, BOD: 8 mg/l and COD: 32 mg/l. Therefore, Punjab Pollution Control Board may collect the effluent samples of STP within 15 days. These samples may be analysed for all the relevant parameters including the parameters MLSS and MLVSS.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 4 MLD Talwandi Bhai on 7.9.2021, the Monitoring Committee has made the following further recommendations

#### **5.1.3.2 Further recommendations**

- i) **Department of Soil & Water Conservation shall lay irrigation network to utilize the treated sewage of STP by 31.12.2021.**
- ii) **PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.**
- iii) **PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.**

- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.
- vii) PWSSB shall ensure that bypass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of Punjab Pollution Control Board.
- viii) The Municipal Council, Talwandi Bhai shall ensure that the pending payment of operation and maintenance charges of STP to the operating agency is made within 6 months. Municipal Council, Talwandi Bhai shall also continue to make regular payment of operation and maintenance charges of STP to the operating agency.
- ix) PPCB shall collect the effluent samples of STP within 15 days. These samples may be analysed for all the relevant parameters including MLSS and MLVSS.

#### **5.1.4 STP of capacity 8 MLD at Zira**

##### **5.1.4.1 Observations of the Monitoring Committee made during its visit to STP of capacity 8 MLD at Zira on 7.9.2021**

1. Total discharge of sewage of the town is 6 MLD.
2. STP of capacity 8 MLD, based on MBBR technology, has been installed and commissioned.
3. STP, consisting of primary treatment unit, aeration system (MBBR) and secondary clarifier, has been installed and the same was in operation.
4. For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and in the dewatered sludge, lot of moisture content was found available. For further drying of the sludge, PWSSB is required to provide additional dewatering mechanism so as to dry the sludge to its optimum level in order to make it acceptable to the farmers for its utilization as manure in the agriculture fields.
5. The treated sewage is discharged into Zira link drain. As per the analysis results of treated effluent samples, collected by PPCB during the months of April to July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 7-12 mg/l, 7-16 mg/l and 200-910 MPN/100ml, respectively, which are within the prescribed limits.
6. The Department of Soil & Water Conservation informed that in order to lay irrigation network to utilize treated sewage for irrigation, an estimate amounting to Rs. 3.04 crore has been sanctioned by the department and tender has been allotted to an agency and irrigation scheme shall be completed by 31.12.2021.
7. During the visit, it was informed to the Monitoring Committee that the operating agency has to get the pending payment amounting to Rs. 2.0 crore as operation & maintenance charges of STP from Municipal Council, Zira.
8. PWSSB has installed OCEMS for monitoring of the required parameters of treated sewage. CCTV camera and flow meter at outlet of STP have also been provided.

9. PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The analysis results of the effluent samples collected from various points of STP of capacity 8 MLD, Zira on 7.9.2021 are mentioned as per Table-4 given below.

**Table-4: Analysis results of effluent samples collected from various components of STP of capacity 8 MLD, Zira**

Sr. No.	Parameters	Inlet of STP	Aeration Tank	Outlet of STP
1.	pH	7.3	--	7.7
2.	TSS, mg/l	158	--	9
3.	BOD, mg/l	125	--	8
4.	COD, mg/l		--	28
5.	F.Coli, MPN/100 ml	110000	--	560
6.	MLSS, mg/l	--	910	--
7.	MLVSS, mg/l	--	410	--

The analysis results as mentioned in the Table-4 given above, indicate that all the parameters are within the norms as prescribed by the PPCB. However, the values of MLSS and MLVSS are erratic because with low concentration of MLSS and MLVSS as 910 mg/l and 410 mg/l, the values of the parameters TSS: 9 mg/l, BOD: 8 mg/l and COD: 28 mg/l cannot be reduced to such a lower level. Therefore, Punjab Pollution Control Board may collect the effluent sample of STP Zira within 15 days. These effluent samples may be analysed for all the relevant parameters including the parameters MLSS and MLVSS.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 8 MLD Zira on 7.9.2021, the Monitoring Committee has made the following further recommendations.

#### 5.1.4.2 Further recommendations

- i) **Department of Soil & Water Conservation shall lay irrigation network to utilize the treated sewage of STP by 31.12.2021.**
- ii) **PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.**
- iii) **PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.**
- iv) **PWSSB shall also install electromagnetic flow meter at the inlet of STP within 01 month.**
- vii) **PWSSB shall ensure that bye-pass arrangement, presently lying sealed, shall only be opened to discharge the excess flow during exigency or**

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excessive rains only after the prior intimation to PPCB and the same may be sealed in the presence of the officer of PPCB .

- viii) **The Municipal Council, Zira shall ensure that the pending payment of operation and maintenance of STP to the operating agency is made within 6 months. Municipal Council, Zira shall also continue to make regular payment of operation and maintenance charges of STP to the operating agency.**
- ix) **PPCB shall collect the effluent samples of STP within 15 days. These samples may be analysed for all the relevant parameters including MLSS and MLVSS.**

#### **5.1.5 STP of capacity 4 MLD at Makhu**

##### **5.1.5.1 Observations of the Monitoring Committee made during its visit to STP of capacity 4 MLD at Makhu on 7.9.2021**

1. Total discharge of sewage of the town is 2.5 MLD.
2. STP of capacity 4 MLD, based on SBR technology, has been installed and commissioned.
3. STP, consisting of primary treatment unit, secondary treatment system and chlorine contact tank-cum-final treated sewage storage tank, has been provided and the same was in operation.
4. For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and in the dewatered sludge, lot of moisture content was found available. For further drying of the sludge, PWSSB is required to provide additional dewatering mechanism so as to dry the sludge to its optimum level in order to make it acceptable to the farmers for its utilization as manure in the agriculture fields.
5. The treated sewage is discharged into Makhu drain. As per the analysis results of treated effluent samples, collected by PPCB during the months of April to July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 7-10 mg/l, 8-18 mg/l and 180-680 MPN/100ml, respectively, which are within the prescribed limits.
6. The Department of Soil & Water Conservation informed that survey work for laying irrigation network has been completed.
7. During the visit, it was informed to the Monitoring Committee that Municipal council, Makhu has to pay pending payment about Rs. 82 Lakh as operation & maintenance charges of STP to the operating agency.
8. PWSSB has installed OCEMS for monitoring of the required parameters of treated sewage.
9. PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

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The analysis results of the effluent samples collected from various points of STP of capacity 4 MLD, Makhu are mentioned as per Table-5 given below.

**Table-5: Analysis results of effluent samples collected from various points of STP of capacity 4 MLD, Makhu**

Sr. No.	Parameters	Inlet of STP	Aeration Tank	Outlet of STP
1.	pH	7.3	--	7.9
2.	TSS, mg/l	178	--	10
3.	BOD, mg/l	75	--	8
4.	COD, mg/l		--	26
5.	F.Coli, MPN/100 ml	110000	--	200
6.	MLSS, mg/l	--	1340	--
7.	MLVSS, mg/l	--	750	--

The analysis results as mentioned in the Table-5 given above, indicate that all the parameters are within the norms as prescribed by the PPCB. However, the values of MLSS and MLVSS determined as 1340 mg/l and 750 mg/l, respectively, are erratic because with low concentration of MLSS and MLVSS, the values of TSS, BOD and COD cannot be reduced to 10 mg/l, 8 mg/l and 26 mg/l, respectively. Therefore, Punjab Pollution Control Board may collect the effluent samples of various components of STP within 15 days. These effluent samples may be analysed for all the relevant parameters including the parameters MLSS and MLVSS.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 4 MLD, Makhu on 7.9.2021, the following recommendations have been made.

#### 5.1.5.2 Further recommendations

- i) Department of Soil & Water Conservation shall get the DPR prepared from the authorized agency and shall take up the matter with higher authorities for release of funds for laying of irrigation network to utilize the treated sewage of STP by 31.10.2021. The said department shall complete the project for laying of irrigation network to utilize the treated sewage for irrigation by 31.12.2021.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.
- v) PWSSB shall ensure that bye-pass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or

excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of PPCB.

vi) PPCB shall collect the effluent samples of STP within 15 days. These samples may be analysed for all the relevant parameters including MLSS and MLVSS.

vii) The Municipal Council, Makhu shall ensure that the pending payment of operation and maintenance of STP to the operating agency is made within 6 months. Municipal Council, Makhu shall also continue to make regular payment of operation and maintenance charges of STP to the operating agency.

#### 5.1.6 STP of capacity 27 MLD at Moga

##### 5.1.6.1 Observations of the Monitoring Committee made during its visit to STP of Moga on 7.9.2021

- i. For treatment of sewage of Moga town, MC Moga has installed STP of capacity 27 MLD, which was in operation at the time of visit.
- ii. The treated effluent is discharged into Moga drain.
- iii. As per the analysis results of effluent samples collected by PPCB from March 2021 to June 2021, parameters namely pH, TSS, BOD & F.Coli. are within the prescribed norms.
- iv. Sludge generated from the secondary clarifier is de-watered in centrifugal system, which was found in semi dried form containing 70-75 % moisture content.
- v. Primary sludge, containing inorganic constituents, produced from bar screen, grid chamber and other primary components, was found loading in tractor trolleys, which is further disposed of in low lying area.
- vi. The backwash water from centrifugal system was being discharged on the semi dried sludge, whereas, it should have been diverted to influent collection chamber.

The analysis results of the effluent samples collected from various points of STP of capacity 27 MLD, Moga on 7.9.2021 are mentioned as per Table-6 given below.

**Table-6: Analysis results of effluent samples collected from various points of STP of capacity 27 MLD, Moga**

Sr. No.	Parameters	Inlet of STP	Outlet of STP
1.	pH	7.4	7.9
2.	TSS, mg/l	147	12
3.	BOD, mg/l	105	9
4.	COD, mg/l	324	38
5.	F.Coli, MPN/100 ml	26000	810

The analysis results as mentioned in the Table-6 given above, indicate that all the parameters are within the norms as prescribed by the PPCB.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 27 MLD, Moga on 7.9.2021, the following recommendations have been made.

##### 5.1.6.2 Further recommendations

- i) **The present generation of sewage of the town is about 31 MLD, whereas, STP has been installed to treat 27 MLD sewage and the remaining 4 MLD untreated sewage is being discharged into Singhwali Sem Nallah. Municipal Corporation,**

Moga needs to provide additional sewage treatment plant of adequate capacity to treat remaining quantity of sewage generated from the entire population of the town, for which proposal may be prepared within 01 month and in the meantime, in-situ remediation technology may be setup in the drain, carrying untreated sewage and not connected to the STP, within 02 months. Additional STP of adequate capacity may be installed in a time bound manner.

- ii) The secondary sludge generated from secondary clarifier of STP is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system contains lot of moisture (70-75 %) and such type of sludge with high moisture content may not be allowed to be disposed of in low lying area as it may contaminate the underground water.

Therefore, the Monitoring Committee recommends that Municipal Corporation Moga shall either provide sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.

- iii) For the utilization of treated sewage for irrigation, during visit, it was submitted that the Department of Soil & Water Conservation has prepared irrigation scheme costing Rs. 13 crore to lay irrigation network of length 30 km covering a command area of 880 hectares. The department has requested its higher authorities for release of funds so as to enable it to lay irrigation network in a time bound manner. It was further informed that the irrigation network shall be laid within 06 months after the release of funds to the department.

The Monitoring Committee recommends that the Department of Soil & Water Conservation shall approach Deputy Commissioner, Moga for early release of funds and the Deputy Commissioner, Moga shall take up the matter with the Department of Finance for early release of funds so that irrigation scheme to utilize the treated sewage of Moga town for irrigation may be laid in a time bound manner.

**5.1.7 STP of capacity 4 MLD at Dharamkot**

**5.1.7.1 Observations of the Monitoring Committee made during its visit to STP Dharamkot of capacity 4 MLD**

- i. The secondary sludge generated from secondary clarifier was being dewatered in centrifuging system (dewatering system) and semi dried sludge was being collected at the bottom of the system and the same was found spread at the site.
- ii. The treated sewage is utilized for irrigation. The farmers present at site, informed that the quality of treated wastewater is suitable for irrigation as it is rich in nutrients and has reduced the cost of fertilizer and energy.
- iii. As per the analysis results of effluent samples collected by PPCB from March 2021 to June 2021, parameters namely pH, TSS, BOD & F.Coli. are within the prescribed norms.

- iv. Punjab Water Supply & Sewerage Board informed that no operation & maintenance charges of STP have been paid to the Board from the last 03 years for which the Monitoring Committee has taken a serious view.

The analysis results of the effluent samples collected from various points of STP of capacity 4MLD, Dharamkot are mentioned as per Table-7 given below.

**Table-7: Analysis results of effluent samples collected from various points of STP of capacity 4 MLD, Dharamkot**

Sr. No.	Parameters	Inlet of STP	Outlet of STP
1.	pH	7.2	7.8
2.	TSS, mg/l	105	12
3.	BOD, mg/l	85	8
4.	COD, mg/l	209	38
5.	F.Coli, MPN/100 ml	40000	780

The analysis results as mentioned in the Table-7 given above, indicate that all the parameters are within the norms as prescribed by PPCB.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 4MLD, Dharamkot, the Monitoring Committee has made the following further recommendations.

#### **5.1.7.2 Further recommendations**

- i. **MC Dharmkot shall release operation and maintenance charges of operation of STP for the last 03 years to Punjab Supply & Sewerage Board within 02 months.**
- ii. **Deputy Commissioner, Moga shall take up the matter with the Department of Local Govt. regarding paying of operation & maintenance charges of STPs regularly to the operator of the STPs so that these may remain in operation at all the times.**
- iii. **PWSSB, Department of Soil & Water Conservation and MC Dharmkot shall hold meeting with the farmers of nearby villages within 15 days apprising them about good quality of treated sewage of Dharmkot and educating them about utilisation of treated sewage of other STPs for irrigation purposes which may save the cost of manure and natural resources.**

#### **5.1.8 STP of capacity 18 MLD at Ferozepur**

##### **5.1.8.1 Observations of the Monitoring Committee made during its visit to STP of capacity 18 MLD at Ferozepur on 7.9.2021**

1. Total discharge of sewage of the town is 16 MLD.
2. STP of capacity 18 MLD, based on SBR technology, has been installed and commissioned.
3. STP, consisting of primary treatment unit, secondary treatment and chlorine contact tank-cum-final treated effluent collection tank, was in operation.
4. For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and in the dewatered sludge, lot of moisture content was found available. For further drying of sludge, PWSSB is required to provide additional

dewatering mechanism so as to dry the sludge to its optimum level in order to make it acceptable to the farmers for its utilization as manure in the agriculture fields.

5. The treated sewage is discharged into Sullage carrier. As per the analysis results of treated effluent samples, collected by PPCB during the months of April to July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 6-11 mg/l, 8-14 mg/l and 200-980 MPN/100ml, respectively, which are within the prescribed limits.
6. The Department of Soil & Water Conservation informed that survey work for laying of irrigation network has been completed.
7. PWSSB has installed OCEMS for monitoring of the required parameters of treated sewage.
8. PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The analysis results of the effluent samples collected from various points of STP of capacity 18 MLD, Ferozepur are mentioned as per Table-8 given below.

**Table-8: Analysis results of effluent samples collected from various components of STP of capacity 18 MLD, Ferozepur**

Sr. No.	Parameters	Inlet of STP	Aeration Tank	Outlet of STP
1.	pH	7.3	--	7.8
2.	TSS, mg/l	211	--	9
3.	BOD, mg/l	110	--	8
4.	COD, mg/l		--	30
5.	F.Coli, MPN/100 ml	130000	--	600
6.	MLSS, mg/l	--	1480	--
7.	MLVSS, mg/l	--	840	--

The analysis results as mentioned in the Table-8 given above, indicate that all the parameters are within the norms as prescribed by the PPCB. However, the values of MLSS and MLSS determined as 1480 mg/l and 840 mg/l are erratic and with this low value of MLVSS, the values of BOD, COD and TSS cannot be reduced to 8 mg/l, 30 mg/l and 9 mg/l, respectively. Therefore, Punjab Pollution Control Board may collect the effluent samples of STP, Ferozepur within 15 days. These effluent samples may be analysed for all the relevant parameters including the parameters MLSS and MLVSS.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 18 MLD, Ferozepur, the following recommendations have been made.

#### 5.1.8.2 Further recommendations

- i) **Department of Soil & Water Conservation shall get the DPR prepared from the authorized agency and shall take up the matter with higher authorities for release of funds for laying of irrigation network to utilize the treated sewage of STP by 31.10.2021. The said department shall**

**complete the project for laying of irrigation network to utilize the treated sewage for irrigation by 31.12.2021.**

- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.**
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.**
- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.**
- v) PWSSB shall ensure that bye-pass arrangement, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of PPCB.**
- vi) PPCB shall collect the effluent samples of STP within 15 days. These samples may be analysed for all the relevant parameters including parameters MLSS and MLVSS.**

#### **5.1.9 STP of capacity 7 MLD at Gidderbaha**

##### **5.1.9.1 Observations made by the Monitoring Committee on 18.8.2021**

For treatment of sewage of Gidderbaha town, MC Gidderbaha has installed STP of capacity 7 MLD, which was in operation at the time of visit.

- ii. The treated effluent is discharged into Babania drain, which further leads to Malout drain.
- iii. As per the analysis results of effluent samples collected by PPCB from March 2021 to July 2021, parameters namely pH, TSS, BOD & F.Coli. are within the prescribed norms except high value of F.Coli (1100 MPN/100 ml against permissible limits of 1000 MPN/100 ml) parameter in the month of June, 2021.
- iv. Sludge generated from the secondary clarifier is de-watered in centrifugal system, which was semi dried containing about 70 % moisture content. The record shown to the Monitoring Committee indicates that quantity of secondary sludge generated from operation of STP is varying from 1 - 1.5 TPD. However, no record was maintained regarding lifting and final disposal of said semi dried sludge.
- v. Primary sludge, containing inorganic constituents produced from bar screen, grit chamber and other primary components, was also found lying on Katcha ground for which, PWSSB was asked to provide Pucca platform for the storage of the primary sludge and thereafter dried primary sludge may be disposed of in an environmentally sound manner.
- vi. The department of Soil & Water Conservation informed that project costing Rs. 3.0 crores has been prepared for utilization of treated sewage of STP for irrigation. The command area of the agriculture land under irrigation shall be 600 acres.

- vii. PWSSB informed to the Monitoring Committee that electricity charges, amounting to Rs. 12.0 crores for operation of STP, have not been paid to PSPCL due to financial problem.
- viii. PPCB has collected the effluent samples of STPs from various points and the same have been sent to the lab. for analysis of various parameters.

The analysis results of the effluent samples collected from various points of STP of capacity 7 MLD, Gidderbaha are mentioned as per Table-9 given below.

**Table-9: Analysis results of effluent samples collected from various points of STP of capacity 7 MLD, Gidderbaha**

Sr. No.	Parameters	Inlet of STP	Outlet of STP
1.	pH	7.4	7.37
2.	TSS, mg/l	238	34
3.	BOD, mg/l	110	22
4.	COD, mg/l	302	66
5.	F.Coli, MPN/100 ml	110000	820

The analysis results as mentioned in the Table-9 given above, indicate that all the parameters are within the norms as prescribed by PPCB.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 7 MLD, Gidderbaha, the Monitoring Committee has made the following recommendations.

#### 5.1.9.2 Further recommendations

- i) **The secondary sludge generated from secondary clarifier of STP is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system contains lot of moisture and such type of sludge with high moisture content may not be allowed to be disposed of in low lying area as it may contaminate the underground water and even the farmers may not like to lift and use such type of sludge into their fields as manure.**

Therefore, the Monitoring Committee recommends that Municipal Council, Gidderbaha shall either provide sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.

- ii) **For the utilization of treated sewage for irrigation, during visit, it was submitted that the Department of Soil & Water Conservation has prepared irrigation scheme costing Rs. 3 crore to lay irrigation network, covering a command area of 600 acres. The department has requested its higher authorities for early release of funds so as to enable it to lay irrigation network in a time bound manner.**

The Monitoring Committee recommends that the Department of Soil & Water Conversation shall approach Deputy Commissioner, Sri Muktsar

Sahib for early release of funds and the Deputy Commissioner, Sri Muktsar Sahib shall take up the matter with the Department of Finance for the same so that irrigation scheme to utilize the treated sewage of Gidderbaha town for irrigation may be laid in a time bound manner.

- iii) Regarding release of funds amounting to Rs. 12.0 crore to be paid to PSPCL, as electricity charges for operation of STP, PWSSB shall take up the matter with the Principal Secretary, Department of Urban Local Body for early release of funds so that the functioning of STP may not be hampered.
- iv) PWSSB, Department of Soil & Water Conservation, MC, Gidderbaha and PPCB shall jointly conduct IEC activities to educate the farmers of nearby villages to utilize the treated sewage for irrigation. Such IEC activities may be carried out atleast twice in a year.
- v) PWSSB shall maintain proper record regarding generation of primary and secondary sludge generated during the operation of STP, registration number of the vehicle used for transportation of sludge and mode of disposal of primary as well as secondary sludge.
- vi) PWSSB shall construct a Pucca platform for storage of primary sludge for its proper management before its final disposal. The said activity may be completed within 15 days.

**5.1.10 Sewage Treatment Plants of capacity 10 MLD (MBBR) and 3 MLD (WSP) at Malout**

**5.1.10.1 (a) Observations of the Monitoring Committee made during visit to 10 MLD capacity STP based on MBBR technology, Malout on 18.8.2021**

- i. STP of capacity 10 MLD is based on MBBR technology, which consists of primary treatment system, anoxic tank and MBBRs (2 nos. in parallel) followed by secondary clarifier and all the components of STP were in operation.
- ii. PPCB has collected the effluent samples of STP and the samples have been sent to PPCB laboratory for analysis of various parameters.
- iii. The treated effluent is discharged into Malout drain, which further leads to Sabuana drain.
- iv. As per the analysis results of effluent samples collected by PPCB from March 2021 to July 2021, parameters namely pH, TSS, BOD & F.Coli. are within the prescribed norms for the month of April, 2021, May, 2021 & July, 2021, whereas, the effluent samples were not meeting with the prescribed standards w.r.t. F.Coli parameter for the month March, 2021 and June, 2021.
- v. Sludge generated from the secondary clarifier is de-watered in centrifugal system, which was containing lot of moisture content and the effluent generated after dewatering system was found stagnating onto land adjoining to centrifuging system, whereas, it should have been discharged into influent collection tank. For further drying of sludge, 4 no. sludge drying beds have been provided, which were insufficient to dry the sludge properly and PWSSB needs to provide more sludge drying beds.
- vi. Primary sludge, containing inorganic constituents, produced from bar screen, grit chamber and other primary components, was also found lying on Katcha ground for which, PWSSB

was asked to provide Pucca platform for the storage of the primary sludge and thereafter dried sludge may be disposed off in an environmentally sound manner.

- vii. The sewage generation of the town is 20 MLD, whereas, STPs of capacity 13 MLD have been installed and there is a gap of 7 MLD for which the DPR costing Rs. 10.78 crore has been prepared by PWSSB. Land for construction of STP has been acquired by the department.
- viii. The approach road leading to STP of capacity 10 MLD was Katcha & uneven and was not stabilized.

**5.1.10.1 (b) Observations of the Monitoring Committee made during visit to 3 MLD capacity STP based on WSP technology at Malout on 18.8.2021**

- i. During the visit 3 MLD capacity STP, based on WSP technology, was in operation.
- ii. The treated sewage from STP is discharged into a link drain leading to Ena Khera drain further leading to Malout drain.
- iii. Most of the ponds of the STP require de-silting, which seems not been done for the long period.
- iv. PWSSB has installed solar based 3 aerators in 2 ponds to enhance the oxidation process of treatment system. The said technology has been set up recently on trial basis.
- v. In order to control F.Coli, it has started imparting chlorine dosing at the final outlet of STP and the said process has also started recently.
- vi. For the utilization of treated sewage for irrigation, the department of Soil & Water Conservation has laid irrigation network in command area of 300 acres. The treated sewage is being lifted from the last pond prior to chlorination dosing, whereas, a separate tank of adequate capacity may be provided for dosing of the chlorine to control F. Coli parameters.

The analysis results of the effluent samples collected from various points of STP of capacity 10 MLD (MBBR) and 3 MLD (WSP) Malout are mentioned as per Table-10 and table 10-A are given below.

**Table-10: Analysis results of effluent samples of STP of capacity 10 MLD based on MBBR technology**

Sr. No.	Parameters	Inlet of STP	Outlet of STP
1.	pH	6.94	7.45
2.	TSS, mg/l	47	16
3.	BOD, mg/l	60	7
4.	COD, mg/l	148	42
5.	F.Coli, MPN/100 ml	38000	680

The analysis results as mentioned in the Table-10 given above, indicate that all the parameters are within the norms as prescribed by PPCB.

**Table-10-A: Analysis results of effluent samples of STP of capacity 03 MLD based on WSP technology**

Sr. No.	Parameters	Inlet of STP	Outlet of STP
1.	pH	7.80	7.34
2.	TSS, mg/l	78	26

3.	BOD, mg/l	50	12
4.	COD, mg/l	160	58
5.	F.Coli, MPN/100 ml	33000	910

The analysis results as mentioned in the Table-10-A given above, indicate that all the parameters are within the norms as prescribed by PPCB.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity 10 MLD (MBBR) and 3 MLD (WSP) Malout, the following recommendations have been made.

#### 5.1.10.2 Further recommendations

- i) The secondary sludge generated from secondary clarifier of 10 MLD capacity STP, based on MBBR technology, is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system was found containing lot of moisture content and the effluent generated from dewatering of sludge was found stagnating adjoining to the system, which may contaminate the underground water. The farmers may not like to lift and use such type of sludge containing lot of moisture content into their fields as manure.

Therefore, the Monitoring Committee recommends as under:

- a) Municipal Council, Malout shall either provide more sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.
- b) The effluent generated from dewatering of secondary sludge may be taken into influent collection tank for its further treatment and the stagnation caused near the dewatering system may be removed within 7 days and photographs in this regard may be sent to PPCB, Regional Office, Bathinda.
- ii) PWSSB shall maintain proper record regarding generation of primary and secondary sludge generated during the operation of STP, registration number of the vehicles used for transportation of the sludge and mode of disposal of primary as well as secondary sludge.
- iii) PWSSB shall construct a Pucca platform for storage of primary sludge for its proper management before its final disposal. The said activity may be completed within 15 days.
- iv) The Monitoring Committee observed that the generation of sewage of Malout Town is about 20 MLD, whereas, STPs (2 Nos.) of capacity 13 MLD have been installed and there is a gap of 7 MLD, which is being discharged into the drain without any treatment and no steps have been taken to provide in-situ remediation technology for treatment of sewage till the STP for treatment of remaining quantity of sewage is installed.

The Monitoring Committee recommended that the PPCB shall impose environment compensation of suitable amount as cost of the damage caused to

the environment due to discharge of untreated sewage into drainage system and affecting ecology and aquatic system.

- v) As per the directions of the Hon'ble National Green Tribunal in OA No. 1069 of 2018 in the matter of Nitin Shanker Deshpande Vs Union of India & Others, it has directed that STPs may be installed to achieve stringent standards w.r.t. BOD, COD, TSS and other parameters. Such stringent standards may be achieved by providing such technology which may bring BOD less than 10 mg/l and probably SBR technology or any other latest best suited technology, which may be one of the best technology to achieve such stringent standards. Therefore, PWSSB may consider such technologies while finalizing the design of the STP.
- vi) PWSSB shall de-silt ponds of 3 MLD capacity STP, based on WSP technology, within 01 month to improve the performance of the system.
- vii) PWSSB shall construct a separate tank of adequate capacity for chlorine dosing to facilitate the department for lifting of treated sewage, conforming to norms for F. Coli parameter, for its utilization in the fields for irrigation.
- viii) For the installation of additional STP of capacity 7 MLD (20 MLD – 13 MLD), Deputy Commissioner, Sri Muktsar Sahib shall hold meeting with PWSSB, MC, Malout and other concerned departments within 15 days and take up the matter with higher authorities for early release of funds for installation of said STP.
- ix) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize its treated sewage of 10 MLD capacity STP and shall approach Deputy Commissioner, Sri Muktsar Sahib for early release of funds so that the same may be implemented in a time bound manner.
- x) MC, Malout shall construct a bituminous / Pucca road, which is leading to STP of capacity 10 MLD in a time bound manner.

Note: As per the facts mentioned above, Municipal Council has caused enormous damage to the environment. There is half heartily compliance as required under the provisions of the Water Act, 1974. Despite the directions issued by the Hon'ble National Green Tribunal vide its order dated 22.8.2019 in OA No. 593 of 2017, no steps have been taken to remedy the same. Even in-situ remediation technology has not been installed in the drain carrying untreated sewage and not connected to STP. Therefore, Punjab Pollution Control Board is bound to impose environmental compensation amounting to Rs. 5 Lakh per month per drain for default in in-situ remediation and Rs. 5 Lakh per STP for default in commencement of setting of the STP as mentioned in order dated 22.8.2019 in OA No. 593 of 2017 so that further damage can be avoided. PPCB, shall also realise the amount of environmental compensation to be imposed on the Municipal Council.

Deputy Commissioner, Sri Muktsar Sahib shall take up the matter with Chief Secretary, Punjab so that necessary scheme can be devised to treat sewage of the town.

**5.1.11 Sewage Treatment Plants of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD installed for treatment of sewage of Sri Muktsar Sahib town**

**5.1.11.1 Observations and recommendations of the Monitoring Committee made on 18.8.2021**

- i) The Monitoring Committee observed that all the 3 STPs of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD are lying defunct and the untreated sewage of 2 STPs (8.7 MLD & 3.5 MLD) is being discharged into sullage carrier leading to Chand Bhan drain, whereas, untreated sewage of 5.7 MLD STP, is being discharged into Sarainaga drain.
- ii) The STP of capacity 3.5 MLD was installed in the year 2008, whereas, the 2 STPs of capacity 8.7 MLD and 5.7 MLD were setup in the year 2013-14. The Chairman of the Monitoring Committee took a serious view when he came to know that all the 03 STPs had stopped functioning/ became defunct in a very short span of period. There appears to be a serious lapse on the part of the establishing / operating agency. Besides, the establishing / operating agency has not bothered to revive the functioning of the STPs and no steps have been taken in this regard so far.

The Monitoring Committee recommends that Deputy Commissioner, Sri Muktsar Sahib shall fix the responsibility of the concerned department / agency for becoming all the 03 STPs in a defunct stage in a very short period and not taking any step for revival of the same in a time bound manner and continue to discharge untreated sewage into drain.

- iii) PPCB shall impose environmental compensation of suitable amount on the establishing / operating agency as a cost of the damage caused to the environment due to discharge of untreated sewage into drains and affecting ecology and aquatic system.
- iv) PWSSB informed that estimate has been prepared for rehabilitation of all the 3 STPs of capacity 8.7 MLD, 5.7 MLD and 3.5 MLD along with operation and maintenance cost for 5 years. The Monitoring Committee recommended that these STPs may be revived in a time bound manner and shall ensure that no untreated sewage is discharged into drains. For this purpose, PWSSB shall submit timelines within 10 days for rehabilitation of all these STPs.
- v) PWSSB shall take up the matter with Deputy Commissioner, Sri Muktsar Sahib for early release of funds for rehabilitation of all the 3 STPs.
- vi) The present discharge of sewage of Sri Muktsar Sahib town is about 20 MLD, whereas, STPs of capacity 17.9 MLD have been installed and there is gap of about 2.5 MLD, for which new STP is required to be installed. PWSSB shall prepare DPR for installation of STP for the gap discharge within 01 month and install additional STP of adequate capacity in a time bound manner.
- vii) The Department of Soil & Water Conversation shall prepare irrigation schemes to utilize treated sewage of 3 STPs of capacity 8.7 MLD, 5.7 MLD and 3.5 MLD

and shall approach Deputy Commissioner, Sri Muktsar Sahib for early release of funds so that the same may be implemented in a time bound manner.

Note: As per the facts mentioned above, Municipal Council has caused enormous damage to the environment. There is totally non-compliance of the provisions of the Water Act, 1974. Despite the directions issued by the Hon'ble National Green Tribunal vide its order dated 22.8.2019 in OA No. 593 of 2017, no steps have been taken to remedy the same. Even in-situ remediation technology has not been installed in the drains carrying untreated sewage and not connected to STPs. Therefore, Punjab Pollution Control Board is bound to impose environmental compensation amounting to Rs. 5 Lakh per month per drain for default in in-situ remediation and Rs. 5 Lakh per STP for default in commencement of setting of the STP as mentioned in order dated 22.8.2019 in OA No. 593 of 2017 so that further damage can be avoided. The Monitoring Committee was informed that CPCB vide its letter dated 28.7.2021 has issued show cause notice under section 5 of EPA, 1986 to impose environmental compensation of Rs. 15 Lakh for non compliance of STPs. Also, PPCB has imposed environmental compensation amounting to Rs. 45 Lakh for non compliance of STPs. PPCB, shall also realize the amount of environmental compensation from the Municipal Council.

Therefore, Deputy Commissioner, Sri Muktsar Sahib shall take up the matter with Chief Secretary, Punjab so that necessary scheme can be devised to treat sewage of the town.

## 5.2 Recommendation No.2

Sewage treatment plant for treatment of sewage of Jaitu town may be completed by 15.4.2021 and Punjab Pollution Control Board shall conduct the performance of STP in the last week of April 2021.

### Compliance status of Recommendation No.2

#### 5.2.1 Sewage treatment plant of capacity 6 MLD (SBT) at Jaitu

The Monitoring Committee visited the sewage Treatment Plants of capacity 6 MLD (SBR) at Jaitu on 31.8.2021 and observations and recommendations of the Monitoring Committee are mentioned as under.

##### 5.2.1.1 Observations of the Monitoring Committee made on 31.8.2021

- i) STP of capacity 6 MLD, based on SBR technology, has been installed and commissioned.
- ii) STP, consisting of primary treatment unit, secondary treatment and chlorine contact tank-cum-final treated effluent collection tank, was in operation.
- iii) For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and it was claimed by PWSSB that the dewatered sludge contains 30% moisture and 70% dry solid, whereas, lot of moisture content is available in the sludge. PWSSB shall make additional arrangements to dry the sludge to its optimum level so that it may be utilized by the farmers as manure in the agriculture fields.
- iv) For management and handling of primary sludge, no dedicated Pucca platform has been constructed.

- v) The treated sewage is discharged into Chand Bhan drain. As per the analysis results of treated effluent samples, collected by PPCB during the months of June & July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 7-8 mg/l, 8-10 mg/l and 200-980 MPN/100ml, respectively, which are within the prescribed limits.
- vi) The Department of Soil & Water Conservation informed that the irrigation scheme for utilization of treated sewage of the town has been prepared and the same has been submitted to its higher authorities for release of funds.
- i) PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The analysis results of the effluent samples collected from various points of STP of capacity 6 MLD (SBR) at Jaitu are mentioned as per table-11 given below.

**Table-11 : Analysis results of effluent samples collected from various points of STP of capacity 6 MLD (SBR) at Jaitu**

Sr. No.	Parameters	Inlet of STP	Aeration Tank	Outlet of STP
1.	pH	7.2	--	8.1
2.	TSS, mg/l	153	--	7
3.	BOD, mg/l	87	--	6
4.	COD, mg/l	-	--	-
5.	F.Coli, MPN/100 ml	63000	--	360
6.	MLSS (mg/l)	--	2310	--
7.	MLVSS (mg/l)	--	1970	--

The analysis results as mentioned in the Table-11 given above, indicate that all the parameters are within the norms as prescribed by PPCB.

Based on the observations raised by the Monitoring Committee during its visit to STP of capacity of 6 MLD (SBR) at Jaitu, the following further recommendations have been made.

#### 5.2.1.2 Further Recommendations

- i) **Department of Soil & Water Conservation shall take up the matter with its higher authorities for early release of funds for laying of irrigation network to utilize the treated effluent of STP for irrigation. The said irrigation network shall be completed within 03 months.**
- ii) **PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.**
- iii) **PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.**
- iv) **PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 02 months.**

- v) PWSSB shall install OCEMS for monitoring of required parameters at the outlet of STP within 03 months.
- vi) PWSSB shall install CCTV cameras at various components of STP within 02 months.
- vii) PWSSB shall close bypass arrangement, made to discharge untreated wastewater in exigency, in the presence of officer of PPCB within 7 days.

### 5.3 Recommendation No.3

PWSSB shall start the construction work of STP of capacity 18 MLD for Faridkot town by 15.04.2021 and the same shall be completed by 31.12.2021 as committed by PWSSB.

#### Compliance status of Recommendation No.3

#### 5.3.1 Visit of STP of capacity 18 MLD at Faridkot by the Monitoring Committee on 31.8.2021

The Monitoring Committee visited the site of STP of capacity 18 MLD at Faridkot on 31.8.2021 and has made the following observations and recommendations.

#### 5.3.1.1 Observations made by the Monitoring Committee on 31.8.2021

1. Total discharge of sewage of the town is 9 MLD.
2. For installation of STP of capacity 14 MLD, based on SBR technology, land has been purchased. Only boundary wall on two sides have been constructed and excavation/ foundation work of utility rooms has been started.
3. No construction work of any component of STP has been started so far.
4. PWSSB informed that STP shall be completed by 30.6.2022.
5. Presently, the untreated sewage is discharged into Langana drain.
6. Pipeline of diameter 1400 mm and 300 mtrs. length has been laid. Total length of pipeline to be laid is 1100 mtrs.

#### 5.3.1.2 Further Recommendations

- i) PWSSB shall start construction work of STP within 7 days and the same shall be completed and commissioned by 31.12.2021 as decided in the earlier meeting held on 04.03.2021.
- ii) PWSSB shall apply for release of electric connection with PSPCL for the operation of STP atleast 04 months before the completion of STP.
- iii) Pipeline of diameter 1400 mm shall be completed by 30.09.2021.
- iv) Department of Soil & Water Conservation shall prepare irrigation scheme for utilization of treated sewage for irrigation within 40 days for which, PWSSB shall supply necessary data w.r.t. STP to the said department within 10 days. Department of Soil & Water Conservation shall get the funds released from the Department of Finance through its Head Quarter for laying of irrigation network.
- v) Municipal Council, Faridkot and PWSSB have, respectively, failed to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commissioning the STP of capacity 14 MLD within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of

2018 and order dated 22.08.2019 in OA no. 593 of 2017, as such Punjab Pollution Control Board may take necessary action accordingly.

- vi) MC, Faridkot shall develop thick green belt with suitable varieties of plants all around the boundary wall especially towards the adjoining house within 02 months.

#### 5.4 Recommendation No.4

Both the in-situ remediation technology as well as pond wastewater treatment system, based on Seechewal model, for Arniwala Sheikh subhan town shall be completed by 30.06.2021 by Municipal Council, Arniwala Sheikh subhan as per commitment made by it.

#### Compliance status of Recommendation No.4

##### 5.4.1 Visit in-situ treatment facility for treatment of sewage of Arniwala Sheikh Subhan by the Monitoring Committee on 21.9.2021.

The Monitoring Committee has visited treatment system for treatment of sewage of Arniwala Shiekh Subhan town on 21.9.2021 and has made the following observations and recommendations

##### 5.4.1.1 Observations

1. Total discharge of sewage of the town is 1.25 MLD and the same is discharged in Baam drain.
2. No sewerage system has been provided in the town.
3. For the treatment of sewage of the town, Municipal Council, Arniwala Shiekh Subhan has provided so called in-situ remediation technology by providing chambers separated by wire mesh filled with stones. However, the said system needs modification by providing additional mechanism to achieve its better performance of the system.
4. PWWSB informed that for laying of sewerage network and installation of sewage treatment plant of capacity 2 MLD, tender has been called and work shall be allotted within 01 month.
5. PPCB has collected the effluent samples from the inlet and outlet of so called in-situ remediation technology provided by the Municipal Council.

The analysis results of the effluent samples collected from inlet and outlet of pond system are mentioned as per Table-13 given below.

**Table-13: Analysis results of effluent samples collected from inlet and outlet of in-situ remediation system.**

Sr. No.	Parameters	Inlet of in-situ remediation system	Outlet of in-situ remediation system
1.	pH	7.9	8.2
2.	TSS, mg/l	124	87
3.	BOD, mg/l	104	69
4.	COD, mg/l	346	268
5.	F.Coli, MPN/100 ml	110000	12000

The analysis results as mentioned in the Table-13 as given above, indicate that with the installation of in-situ remediation technology, there is reduction in the values of parameters

namely TSS, BOD & COD as 29.8%, 33.7% & 22.5%, whereas the value of F.Coli has been found reduced from 110000 MPN/100 ml to 12000 MPN/100 ml.

Based on the observations made by the Monitoring Committee during its visit to pond system for treatment of sewage of Arniwala Shiekh Subhan town on 21.9.2021, the following recommendations are made.

#### **5.4.1.2 Further recommendations**

- i) As demonstration projects for in-situ remediation of wastewater, PPCB has tried some technologies in flowing water but technology is yet to be tried in static effluent/pond effluent. Thus, Municipal Council, Arniwala Shiekh Subhan in consultation with PPCB may modify/upgrade in-situ remediation technology which may work in static effluent/pond effluent to get better performance of the system, within 01 month.**
- ii) PWSSB shall allot the work regarding laying of sewerage network and installation of sewage treatment plant within 02 months and work of the STP may be started within 03 months and the same may be completed in a time bound manner.**
- iii) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 01 month.**
- iv) PPCB shall impose environmental compensation on Municipal Council, Arniwala Shiekh Subhan for its failure to commence STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.**

#### **5.5 Recommendation No.5**

##### **5.5.1 Ponds system based on Seechewal model for treatment of sewage of Mallanwala town**

###### **Compliance status of Recommendation No.5**

For treatment of wastewater of Mallanwala town, pond wastewater treatment system based on Seechewal model shall be completed by MC Mallanwala by 30.06.2021 as per commitment made by it.

The Monitoring Committee visited to treatment System for treatment of sewage of Mallanwala Khas town on 7.9.2021 and has made the following observation and recommendations.

##### **5.5.1.1 Observations**

1. Total discharge of sewage of the town is 1.5 MLD.
2. No sewerage system has been provided in the town.
3. For the treatment of sewage of the town, Municipal Council, Mallanwala Khas has provided 4 chambers, having interconnectivity to each other, as components of treatment system based on Seechewal Model. The treatment mechanism has not been commissioned.
4. Presently, untreated sewage is being discharged into Sukkarnallah drain.

##### **5.5.1.2 Further Recommendations**

- i) Municipal Council, Mallanwala Khas shall commission treatment system within 10 days.**

- ii) **Municipal Council, Mallanwala Khas shall provide additional treatment systems to treat whole of the wastewater of the town by 15.11.2021 and shall ensure that no untreated sewage is discharged into Sukkarnallah drain.**
- iii) **The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 01 month.**
- iv) **PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant for treatment of sewage of the town within 01 month.**
- v) **The Municipal Council, Mallanwala Khas through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP for treatment of sewage of the town within 02 months.**
- vi) **PPCB shall impose environmental compensation on Municipal Council, Mallanwala Khas for its failure to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.**

#### **5.6 Recommendations No.6**

**For treatment of wastewater of Mudki town, pond wastewater treatment system based on Seechewal model as well as in-situ remediation technology shall be completed by MC Mudki by 30.06.2021 as per commitment made by it.**

#### **Compliance status of Recommendation No.6**

##### **5.6.1 Visit to in-situ remediation system for treatment of sewage of Mudki town**

The Monitoring Committee visited treatment system for treatment of sewage of Mudki town on 7.9.2021 and has made the following observations and recommendations.

##### **5.6.1.1 Observations**

1. Total discharge of sewage of the town is 1 MLD.
2. No sewerage system has been provided in the town.
3. For the treatment of sewage of the town, Municipal Council, Mudki has provided 4 tanks, which have been closed from the top due to which the operational mechanism could not be observed by the Monitoring Committee. Municipal Council, Mudki claimed that out of 4 tanks, in the first tank, screening system has been provided. These tanks are interconnected to each other and finally the effluent from the last tank is discharged into Mudki drain. The Monitoring Committee observed that the present treatment system is required to be modified to make it functional as aerobic biological treatment system.
4. In the Mudki drain, most of the untreated sewage of the town is discharged and no in-situ remediation technology has installed into the drain.

5. PPCB has collected the effluent samples from the inlet and outlet of treatment system provided by the Municipal Council.

The analysis results of the effluent samples collected from inlet and outlet of treatment system are mentioned as per Table-14.

**Table-14: Analysis results of effluent samples collected from inlet and outlet of in-situ remediation system**

Sr. No.	Parameters	Inlet of in-situ remediation system	Outlet of in-situ remediation system
1.	pH	7.3	7.9
2.	TSS, mg/l	118	49
3.	BOD, mg/l	65	35
4.	COD, mg/l	219	104
5.	F.Coli, MPN/100 ml	110000	4600

The analysis results as mentioned in the Table-14 as given above, indicate that with the installation of insitu treatment facility, there is reduction in the values of parameters namely TSS, BOD & COD as 58.5%, 46.2% & 52.5%, respectively, whereas, the value of F.Coli has been found reduced from 110000 MPN/100 ml to 4600 MPN/100 ml.

Based on the observations made by the Monitoring Committee during its visit to insitu treatment system for treatment of sewage of Mudki Town on 7.9.2021, the following recommendations have been made.

#### 5.6.1.2 Further recommendations

- i) **Municipal Council, Mudki shall modify its treatment mechanism to make it as biological treatment system within 15 days.**
- ii) **Municipal Council, Mudki shall provide additional treatment system to treat whole of the wastewater of the town by 15.11.2021 and no untreated sewage may be discharged into Mudki drain.**
- iii) **The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 01 month.**
- iv) **PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant for treatment of sewage of the town within 01 month.**
- v) **The Municipal Council, Mudki through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP for treatment of sewage of the town within 02 months.**
- vi) **PPCB shall impose environmental compensation on Municipal Council, Mudki for its failure to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.**

## **5.7 Recommendation No.7**

**Treatment mechanism for treatment of wastewater of all the 06 ponds of Mamdot town shall be completed by MC Mamdot by 30.06.2021.**

### **Compliance status of Recommendation No.7**

#### **5.7.1 Treatment system to treat wastewater of Mamdot town**

The Monitoring Committee visited Treatment System for treatment of sewage of Mamdot town on 7.9.2021 and has made the following observations and recommendations.

##### **5.7.1.1 Observations of the Monitoring Committee made on 7.9.2021**

1. Total discharge of sewage of the town is 1 MLD.
2. No sewerage system has been provided in the town.
3. Presently, wastewater of the town is discharged into ponds.
4. For the treatment of sewage of the town, Municipal Council, Mamdot has provided 4 chambers, having interconnectivity to each other, as components of treatment system based on Seechewal Model. The Monitoring Committee observed that the interconnectivity of the chambers 3 and 4 is not as per the treatment technology and it requires necessary modification. The Executive Officer, Municipal Council, Mamdot informed that the said technology has also been provided at 03 other locations of the town for treatment of sewage.

##### **5.7.1.2 Further recommendations**

- i) **Municipal Council, Mamdot shall make necessary modification in the treatment system provided by it as per the treatment technology and shall be commissioned the same within 15 days.**
- ii) **Municipal Council, Mamdot shall ensure that with the installation of treatment system provided at different locations, no untreated wastewater is discharged into ponds.**
- iii) **The treated sewage of the town shall be utilized for irrigation in the nearby fields.**
- iv) **The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 02 month.**
- v) **PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant for treatment of sewage of the town within 01 month.**
- vi) **The Municipal Council, Mamdot through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP for treatment of sewage of the town within 02 months.**
- v) **PPCB shall impose environmental compensation on Municipal Council, Mamdot for not commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.**

## **5.8 Recommendation No.8**

**Treatment of wastewater of the town Nihal Singh Wala, based on Seechewal model, shall be completed by 30.06.2021.**

### **Compliance status of Recommendation No.8**

#### **5.8.1 Treatment system to treat wastewater of Nihal Singh Wala town based on Seechewal model**

The Monitoring Committee visited treatment system for treatment of sewage through remediation of wastewater of NP Nihal Singh Wala on 9.7.2021 and has made the following observations and recommendations.

##### **5.8.1.1 Observations as on 9.7.2021**

Total discharge of sewage is 1.6 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat (NP) Nihal Singh Wala submitted that Rs. 25 lakhs has been allotted for the construction of remediation system as treatment mechanism, based on 6 ponds system and the same is likely to be completed by 30.09.2021. Presently, the untreated sewage is being discharged into the drain. The excavation work for construction of treatment facility is under progress.

##### **5.8.1.2 Recommendations as on 9.7.2021**

- i. NP, Nihal Singh Wala shall accelerate the construction work of 6 ponds system and it may be completed without further delay.**
- ii. The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of the town for irrigation within 01 month and proposal may be sent to the concerned department for release of funds.**
- iii. Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Nihal Singh Wala because of its failure to install STP and in-situ remediation technology by 31.03.2021 and 31.03.2020, respectively.**

##### **5.8.1.3 Observation as on 5.10.2021**

The Monitoring Committee in the presence of officers of various departments including Punjab Pollution Control Board, again visited the treatment facility to treat the wastewater of NP, Nihal Singh Wala on 05.10.2021 and the following observations were made:-

- i. NP, Nihal Singh Wala has constructed one pond. However, one of the wall of pond was found damaged due to the rain as informed by representative of NP.**
- ii. The Monitoring Committee was informed that the pond shall be bifurcated into six ponds by constructing brick walls in the pond.**
- iii. The representative of the Nagar Panchayat, Nihal Singh Wala informed that six pond systems shall be constructed within 1½ month.**
- iv. Department of Soil & Water Conservation informed that the estimate of the project for laying of irrigation network to utilize the treated sewage for irrigation shall be prepared within 01 month.**

**5.8.1.4 Recommendations of the Monitoring Committee made on 05.10.2021.**

- i. The Nagar Panchayat, Nihal Singh Wala shall expedite the construction work of six ponds system and shall ensure that it may be completed by 31.10.2021.
- ii. Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.
- iii. Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount because of failure of the Nagar Panchayat, Nihal Singh Wala for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.

**5.9 Recommendation No.9**

Treatment system for treatment of wastewater of Badhni Kalan shall be completed by 30.09.2021 as committed by MC.

**Compliance status of Recommendation No.9**

**5.9.1 Visit to in-situ remediation system for treatment of wastewater of Nagar Panchyat, Badhni Kalan.**

The Monitoring Committee visited treatment system for treatment of sewage through remediation of wastewater of NP Badhni Kalan on 9.7.2021 and has made the following observations and recommendations are as under.

**5.9.1.1 Observations of the Monitoring Committee as 9.7.2021**

Total discharge of sewage is 1 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Badhni Kalan submitted that Rs. 23 lakhs has been allotted for the construction of remediation system for wastewater as treatment mechanism based on pond system.

**5.9.1.2 Recommendations of the Monitoring Committee as 9.7.2021**

- i. NP Badhni Kalan shall increase number of machines to clear the site to make it available for construction of pond system to treat the sewage of the town within 10 days.
- ii. NP Badhni Kalan shall connect all the ponds, containing untreated sewage of the town, to the pond system to be developed at the site within 01 month.
- iii. NP Badhni Kalan shall ensure that pond system as remediation of wastewater may be completed by 30.09.2021 as earlier committed by it, failing which PPCB shall impose environmental compensation for delay in execution of treatment system.
- iv. The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation and shall take up the matter with the concerned department for release of funds to lay irrigation network in a time bound manner.
- v. Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Badhni Kalan because of its failure to install STP and in-situ remediation technology by 31.03.2021 and 31.03.2020, respectively.

### **5.9.2 Visit of the Monitoring Committee to in-situ bio remediation system of Nagar Panchayat, Badhni kalan on 5.10.2021**

The Monitoring Committee in the presence of officers of various departments including Punjab Pollution Control Board, again visited the treatment facility to treat the wastewater of NP, Badhni Kalan on 05.10.2021 and the following observations were made:-

#### **5.9.2.1 Observations of the Monitoring Committee as on 5.10.2021**

- i. The Nagar Panchayat has constructed one pond, whose walls were Katcha and it was found filled with rain water as informed by the representative of the Nagar Panchayat.
- ii. It was informed that the pond shall be bifurcated into six compartments to work as six ponds system. The system shall be made operational within one month.
- iii. The department of Soil & Water Conservation informed that the estimate of the project for laying of irrigation network to utilize the treated sewage for irrigation shall be prepared within one month.

#### **5.9.2.2 Recommendations of Monitoring Committee made on 05.10.2021:-**

- i. **The Nagar Panchayat, Badhni Kalan shall expedite the construction work of six ponds system and shall ensure that it may be completed by 31.10.2021.**
- ii. **Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.**
- iii. **Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount because of failure of the Nagar Panchayat, Badhni Kalan for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.**

### **5.10 Recommendation No.10**

**For treatment of wastewater of Kot Ise Khan, treatment system based on Sechewal model, shall be completed by 31.07.2021 as per the submission made by MC.**

#### **Compliance status of Recommendation No.10**

### **5.10.1 Visit to the in-situ bio remediation system to treat wastewater of Kot Ise Khan on 9.7.2021**

The Monitoring Committee visited treatment system for treatment of sewage through remediation of wastewater of NP Kot Ise Khan on 9.7.2021 and has made the following observations and recommendations as under.

#### **5.10.1.1 Observations as on 9.7.2021**

Total discharge of sewage is 1.88 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Kot Ise Khan submitted that necessary funds have been allotted for the construction of system for remediation of wastewater based on pond system. During visit, it was observed that excavation work of pond system was going on and machinery was in operation. The pond system may be constructed by 31.07.2021.

#### **5.10.1.2 Recommendations as on 9.7.2021**

- i. Nagar Panchayat Kot Ise Khan shall construct and commission pond system as remediation of wastewater by 31.07.2021.**
- ii. The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize treated sewage for irrigation within 01 month and proposal may be sent to the concerned department for release of funds.**
- vi. Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Kot Ise Khan because of its failure to install STP and in-situ remediation technology by 31.03.2021 and 31.03.2020, respectively.**

#### **5.10.2 Visit to the in-situ remediation system to treat wastewater of Kot Ise Khan on 5.10.2021**

The Monitoring Committee in the presence of officers of various departments including Punjab Pollution Control Board, again visited the treatment facility to treat the wastewater of NP, Kot Ise Khan on 05.10.2021 and the following observations were made:-

##### **5.10.2.1 Observation as on 5.10.2021**

- i. The Nagar Panchyat, Kot Ise Khan has constructed brick masonry circular tanks so called treatment system based on Seechewal Model. These circular tanks have been constructed on Pucca platform. It was claimed that the treatment system based on Seechewal model shall be made operational within 01 month.**
- ii. The department of Soil & Water Conservation informed that the estimate of the project for laying of irrigation network to utilize the treated sewage for irrigation shall be prepared within one month.**
- iii. Punjab Water Supply & Sewerage Board informed that tender for the installation of main sewerage system and STP has been called and the same shall be opened on 14.10.2021.**

##### **5.10.2.2 Recommendations of the Monitoring Committee made on 05.10.2021:-**

- i. The Nagar Panchayat, Kot Ise Khan shall expedite the construction work of treatment facility and shall ensure that it may be made operational by 31.10.2021.**
- ii. Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.**
- iii. Punjab Water Supply & Sewerage Board shall complete the work of laying of sewerage network and installation of STP to treat the sewage of the town in a time bound manner.**
- iv. Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount on Nagar Panchayat, Kot Ise Khan because of its failure for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.**

### 5.10.3 Other recommendations w.r.t MC, Moga

- i. During discussion with the officers of the departments, it was observed that Municipal Councils / Nagar Panchayats have no technical manpower and as such, the monitoring of the installation of pond system as remediation mechanism may be done at higher level of District Authority with the help of technical personnel of PWSSB and therefore, the Chairman of the Monitoring Committee directed that Additional Deputy Commissioner (Urban Development) shall hold monthly meeting with all the Executive Officers of the Municipal Councils / Nagar Panchayats of the district and other concerned departments and sort out the issues which may obstruct the construction of remediation system as treatment mechanism in a time bound manner. The minutes of the meeting may be sent to the Monitoring Committee as well as concerned Regional Office of PPCB.
- ii. It was informed that 63 villages of district Moga are discharging their untreated wastewater into drains of district Moga, out of which 2 villages have provided treatment system, whereas, in case of 16 villages, the work of construction of treatment systems is in progress.

The Chairman of the Monitoring Committee directed that the Department of Panchayat shall take up the issue for treatment of wastewater of remaining villages of the District with Deputy Commissioner, Moga, within 10 days the Deputy Commissioner, Moga shall hold meeting within 15 days with Department of Panchayat and other concerned officers for early installation of treatment system for the remaining villages of the District and the treated wastewater of villages may be utilized for irrigation purposes. In the meantime, in-situ remediation technology may be set up in the drains carrying untreated wastewater of remaining villages and not connected to any treatment mechanism within 02 months.

- iii. Punjab Pollution Control Board, Regional Office, Faridkot shall collect the effluent samples of STPs of the towns of District Moga in the month of September 2021 and analysis results be submitted to Monitoring Committee before 7.10.2021.

### 5.11 Recommendation No.11

**MC Fatehgarh Panjtoor shall provide treatment system based on Seechewal model by 30.09.2021 as per the commitment made by MC.**

#### Compliance status of Recommendation No.11

##### 5.11.1 Visit to in-situ remediation system for treatment of wastewater of Nagar Panchayat Panjtoor on 9.7.2021

The Monitoring Committee visited the treatment system for treatment of sewage through remediation of wastewater of NP Fatehgarh Panjtoor on 9.7.2021 and has made the following observations and recommendations as under:

##### 5.11.1.1 Observations of the Monitoring Committee made on 9.7.2021

Total discharge of sewage is 0.76 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Fatehgarh Panjtoor submitted that necessary funds have been allotted for the construction of remediation system based on pond system. At the time of visit, the machinery was in operation to dewater the pond and but no significant progress was observed at site. It was informed that the untreated

wastewater of the town is discharged at unknown places as there is no mechanism for discharge of sewage of the town.

**5.11.1.2 Recommendations as on 9.7.2021**

- i. **NP Fatehgarh Panjtoor shall dewater the pond within 07 days.**
- ii. **The construction of pond system as remediation of wastewater may be started within 10 days and the same may be completed by 30.09.2021 as earlier committed by it.**
- iii. **The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize treated sewage for irrigation within 01 month and proposal may be sent to the concerned department for release of funds.**
- vii. **Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Fatehgarh Panjtoor because of its failure to install STP and in-situ remediation technology by 31.03.2021 and 31.03.2020, respectively.**

**5.11.2 Visit to in-situ remediation system for treatment of wastewater of NP Fatehgarh Panjtoor on 5.10.2021**

The Monitoring Committee in the presence of officers of various departments including Punjab Pollution Control Board, again visited the treatment facility to treat the wastewater of NP, Fatehgarh Panjtoor on 05.10.2021 and the following observations were made:-

**5.11.2.1 Observation as on 5.10.2021**

- i. The Nagar Panchyat, Fatehgarh Panjtoor has started the excavation work of pond system in the adjoining area to the existing pond from where dewatering was being done during the last visit made on 09.07.2021. It was informed that the bottom of the pond shall be made Pucca with cement concrete and thereafter treatment system based on Seechewal model shall be constructed for which period of one month is required.
- ii. The department of Soil & Water Conservation informed that the estimate of the project for laying of irrigation network to utilize the treated sewage for irrigation shall be prepared within one month.
- iii. Punjab Water Supply & Sewerage Board informed that tender for the installation of main sewerage system and STP has been opened and is under process.

**5.11.2.2 Recommendations of Monitoring Committee made on 05.10.2021:-**

- i. **The Nagar Panchayat, Fatehgarh Panjtoor shall expedite the construction work of treatment facility and shall ensure that it may be completed by 31.10.2021.**
- ii. **Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.**
- iii. **Punjab Water Supply & Sewerage Board shall complete the work of laying of sewerage network and installation of STP to treat the sewage of the town in a time bound manner.**

- iv. **Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount on Nagar Panchayat, Fatehgarh Panjtoor because of its failure for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.**

#### **5.12 Recommendation No.12**

**MC Bariwala shall install treatment system based on Seechewal model by 30.09.2021 as per the commitment made by MC and simultaneously it shall also take up the matter with the Dept. of Local Govt. for arrangements of funds at the earliest as to enable it to install STP at the earliest.**

#### **Compliance status of Recommendation No.12**

##### **5.12.1 Visit to in-situ remediation system for treatment of wastewater of MC Bariwala on 18.8.2021**

The Monitoring Committee visited treatment system for treatment of sewage of Nagar Panchayat, Bariwala on 18.8.2021 and observations and recommendations made by the Monitoring Committee are mentioned as under:

##### **5.12.1.1 Observations made by the Monitoring Committee on 18.8.2021**

- R
- i) Population of Bariwala town is 0.08 lakh as per census 2011 and present population is approx. 0.10 lakh and total discharge of sewage is about 2 MLD. Presently, no STP / treatment system or in-situ remediation has been installed by the Nagar Panchayat, Bariwala and untreated sewage is being discharged into Sarainaga drain.
  - ii) During the visit, PWSSB has shown map mentioning the location of various sites available for setting up of treatment facility.
  - iii) PWSSB informed that out of 2 sites available for setting up of treatment facility, the most suitable site is at pumping house of Marketing Committee situated at Warring road, Bariwala. However, the said land belongs to Mandi Board and inspite of their best efforts, the PWSSB is unable to avail the said land for setting up of the treatment facility.
  - iv) It was informed that there are total 12 wards of Bariwala Nagar Panchayat including village area, out of which the wastewater of 9 wards is reaching to pumping house of Marketing Committee at Warring road, Bariwala, whereas, the wastewater of remaining 3 wards is collected in a pond situated along Chack Gadha Singh Wala road, which has needs to be treated in the treatment facility.
  - v) PWSSB / NP, Bariwala has taken no steps for installation of in-situ remediation technology as directed by the Monitoring Committee during its last meeting held on 04.03.2021 at Moga.

##### **5.12.1.2 Recommendations as on 18.8.2021**

- i. **Deputy Commissioner, Sri Muktsar Sahib shall hold meeting with officers of Mandi Board, PWSSB, Nagar Panchayat, Bariwala and PPCB within 10 days so as to resolve the matter regarding availability of land for setting up of treatment facility to treat the sewage of Bariwala town.**
- ii. **PWSSB in coordination with Nagar Panchayat, Bariwala shall install in-situ remediation technology in the drain carrying untreated sewage at suitable**

location in a time bound manner as directed in the last meeting of Monitoring Committee held on 04.03.2021 at Moga.

- iii. The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of Nagar Panchayat, Bariwala and the same may be implemented in a time bound manner.
- iv. PWSSB shall separately take up the matter with the Deputy Commissioner, Sri Muktsar Sahib for early release of funds for laying sewerage network and installation of STP of adequate capacity to treat wastewater of Nagar Panchayat, Bariwala within 15 days and further Deputy Commissioner, Sri Muktsar Sahib shall take up the issue with Principal Secretary, Department of Local Government for release of funds for said work within 01 month.
- iv. PPCB shall impose environmental compensation of suitable amount on Nagar Panchayat, Bariwala as a cost of the damage caused to the environment due to discharge of untreated wastewater into drain and affecting ecology and aquatic system and shall realise the same from the concerned MC.

#### **5.13 Recommendation No.13**

In order to check the performance of effluent treatment plant (ETP) of the industry namely M/s Kathpal Dairies (Unit-2), village Kokri Phoola Singh, Tehsil and District Moga, PPCB shall monitor the ETP of the industry within 15 days and shall continue to monitor its performance as per the frequency prescribed by PPCB / CPCB.

##### **5.13.1 Compliance Status as on 05.10.2021**

Punjab Pollution Control Board has reported that the industry was visited by officers of the Board on 10.03.2021 and it was observed that the industry was in operation of processing of milk. During visit, effluent samples were collected during visit and as per the analysis report, the conc. of some parameters was found beyond the permissible limits. The industry is in process to upgrade its ETP in order to achieve the prescribed standards. The industry is lying closed for last 3 months. The industry was lastly visited on 28.09.2021 and it was observed that the industry was lying closed due to disconnection of electric supply and the work of upgradation of ETP is in progress.

#### **5.14 Recommendation No.14**

The Monitoring Committee noted the observations, findings and recommendations made by the experts engaged by PPCB and directed as under:-

##### **5.14.1 Recommendation No.14(i)**

The officers of Punjab Pollution Control Board (PPCB) and Department of Water Supply and Sanitation (DWSS) shall monitor ground water of 10 hand pumps of the area within 15 days and in case, contamination is observed in the ground water samples, the ground water sources may be sealed and display board mentioning that the ground water source is not fit for drinking purposes may be erected at the sites.

#### **5.14.1.1 Compliance Status of Recommendation No.14(i)**

The water sample of all the 10 no. Hand pumps got tested and found contaminated due to various parameters. So these 10 no. hand pumps have been got sealed and mentioned with red colour that ground water source is not fit for drinking. Also, concerned villagers are advised to use water supply from Water works of concerned villages. Out of these 10 no. villages, RO plant already installed in 5 no. villages and villagers are advised to get water supply from these RO plants. The ground water sources, which were found contaminated during the sampling of ground water sources of Fazika area by the Monitoring Committee on 6.1.2020, have been sealed and these residents are being supplied potable water. Further, the department of Water Supply & Sanitation has provided R.O. systems in 21 villages to supply safe drinking water.

#### **5.14.2 Recommendation No.14(ii) first point**

Safe drinking water, based on canal water supply scheme, may be given to the inhabitants of the area by the Dept. of Water Supply & Sanitation. The Dept. of Water Supply & Sanitation shall also implement the water supply scheme prepared for 205 villages, based on canal water at the earliest.

#### **5.14.2.1 Compliance Status of Recommendation No.14(ii) first point**

Safe drinking water based on canal water scheme will be given to the inhabitants of the area as multi village surface water project for 205 Nos. villages of division fazilka have been Admin. Approved vide GOP No. WSSD-BR2011/397/2021-4BR2/I/189132/2021 dt. 31-05-2021 for Rs. 419.96 Crore. Tender will be called at the earliest and safe canal water based drinking water supply will be given to the residents.

#### **5.14.3 Recommendation No.14(ii) second point**

The Dept. shall also continue to monitor ground water sources, whose water is supplied to the inhabitants for drinking purpose from time to time and data in this regard may be sent to PPCB.

#### **5.14.3.1 Compliance Status of Recommendation No.14 (ii) second point**

Safe drinking water based on canal water scheme will be given to the inhabitants of the area as multi village surface water project for 205 Nos. village of division fazilka have been Admin. Approved vide GOP No. WSSD-BR2011/397/2021-4BR2/I/189132/2021 dt. 31-05-2021 for Rs. 419.96 Crore. Tender will be called at the earliest and safe canal water based drinking water supply will be given to the residents.

The Deptt. is monitoring ground water sources, whose water is supplied to the inhabitants for drinking purpose. In this regard, water sample test reports will be sent to PPCB in future time to time.

#### 5.14.4 Recommendation No.14 (iii)

PPCB shall continue to monitor the water quality of the drains and pond wastewater to assess any improvement in the quality of water in these water bodies with the installation of STPs in the area.

##### 5.14.4.1 Compliance Status of Recommendation No.14(iii)

The Monitoring Committee visited the various drains of Fazilka area and collected the water samples of the drains on 22.09.2021, the analysis results which are mentioned as per Table-15, given below:-

**Table-15: Analysis results of drain wastewater samples collected from Fazilka area**

Sr. No.	Name of the Drain	Parameters (mg/l except pH & F.Coli)					
		pH	TSS	DO	BOD	COD	F.Coli
1.	Abul Khurana outfall Drain	8.2	59	6.6	11	50	1400
2.	Sabuana drain	8.1	97	7.2	11	52	1700
3.	Fazilka drain	7.6	178	4.4	18	84	6300
4.	Mauzam DCB	7.7	113	4.8	32	152	9400
5.	Aspal extension drain cum ditch channel	8.2	62	6.2	10	41	1300
6.	Big pond in Mauzam drain/defence drain	8.2	39	7.9	14	68	1300

##### 5.14.4.2 Further recommendations

In view of the analysis results of the drain wastewater sample as mentioned in Table-15, given above, the Monitoring Committee is of the view that the water accumulated in the big pond may be utilized for irrigation of nearby fields for which the department of Soil & Water Conservation in consultation with experts of PAU, Ludhiana shall prepare irrigation scheme within 01 month and funds may be arranged for laying of the irrigation network in the area. The whole of the exercise shall be completed by 31.03.2022. By doing so, the problem of accumulation of water of drains in the big pond may be resolved and there shall be significant reduction in the volume of water in big pond.

##### 5.14.5 Recommendation No.14 (iv)

The Dept. of Soil & Water Conservation shall lay a irrigation network in the nearby fields of Abohar area to utilize the treated sewage of 25 MLD STP Abohar and shall start the work of laying of pipeline in the first week of June 2021 and shall be completed by 31.12.2021.

#### 5.14.5.1 Compliance Status of Recommendation No.14(iv)

The Monitoring Committee during its visit to STP's of Fazilka area on 21.9.2021 & 22.9.2021, it was observed that no irrigation network for utilization of treated sewage of STP (capacity 25 MLD) Abohar has been laid by the Dept. of Soil & Water Conservation. The Department informed that in order to utilize the treated sewage of the town for irrigation, detailed irrigation scheme costing Rs. 22 crores to utilize treated sewage in command area of 700 hectares has been prepared but the funds have not been received.

The Monitoring Committee recommends that Department of Soil & Water Conservation shall take up the matter with Principal Secretary, Department of Finance for early release of funds for laying of irrigation network to utilize treated sewage of STP Abohar of capacity 25 MLD for irrigation.

#### 5.15 Recommendation No.15

For installation of new STP of capacity 13 MLD for treatment of sewage of Fazilka town, replacing the existing STP of 8 MLD based on WSP technology, the funds amounting to Rs. 15 crore have been arranged. The Monitoring Committee directed that the funds amounting to Rs. 15 crores should be entirely used for installation of 13 MLD new STP and no funds may be diverted for any other purpose keeping in view the environment status of the area. The Deputy Commissioner, Fazilka shall personally monitor the issue.

#### 5.15.1 Compliance Status of Recommendation No.15

The Monitoring Committee has visited the STP, Fazilka of capacity 8 MLD on 21.09.2021 and it has been observed as under:-

Total discharge of sewage of the town is 11 MLD and the same is discharged into Fazilka drain. STP of capacity 8 MLD, based on waste stabilization pond, has been installed and commissioned. The treated sewage is discharged into Fazilka drain. The analysis results of treated effluent samples, collected by PPCB during the months of June to August, 2021 have been found beyond the permissible limits (BOD: 32-78 mg/l, F.Coli: 1400-25000 MPN/100 ml). PWSSB has started the construction work of STP of capacity 13 MLD for which SBR tanks (2 nos.) are at foundation stage and it was claimed that STP shall be completed by 31.05.2022. The Department of Soil & Water Conservation informed that in order to utilize the treated sewage of existing 8 MLD capacity STP, irrigation network has been laid. The analysis results of effluent samples collected from inlet & outlet of STP, Fazilka are mentioned as per Table-16 given below:-

Table-16 : Analysis results of effluent samples collected from STP of capacity 8 MLD, Fazilka

Sr. No.	Parameters	Inlet of STP	Outlet of STP
1.	pH	7.2	7.7
2.	TSS, mg/l	238	79
3.	BOD, mg/l	73	42
4.	COD, mg/l	241	162

5.	F.Coli, MPN/100 ml	70000	3900
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The analysis results as mentioned in the Table-16 given above, indicate that the values of parameters namely BOD and F.coli parameter, which have been found as 42 mg/l & 3900 MPN/100 ml, respectively, are higher than the prescribed standards.

PWSSB has started the construction work of STP of capacity 13 MLD for which SBR tanks (2 nos.) are at foundation stage and it was claimed that STP shall be completed by 31.05.2022. The Department of Soil & Water Conservation informed that in order to utilize the treated sewage of existing 8 MLD capacity STP, irrigation network has been laid.

#### **5.15.2 Recommendations of the Monitoring Committee made on 21.09.2021 w.r.t. 8 MLD capacity STP, Fazilka**

- i) Department of Soil & Water Conservation shall start operating its existing irrigation network system to utilize treated sewage of 8 MLD capacity STP for irrigation within 02 month. The department shall also prepare irrigation scheme to utilize remaining additional quantity of 5 MLD treated sewage, within 01 month.**
- ii) For the removal of floating matter and other solid material, MC/PWSSB shall provide additional component at the inlet of first pond of waste stabilization pond within 03 months.**
- iii) In order to bring F.Coli. parameter within the prescribed norms, MC / PWSSB shall provide chlorine contact tank at the outlet of the WSP within 02 months.**
- iv) PWSSB shall complete the construction work of new STP of capacity 13 MLD within the timeline as committed by the department.**

#### **5.16. Recommendation No.16**

In order to ensure no discharge of drain water into Fazilka drain and further into big pond to control seepage and avoid ground water contamination, as per earlier directions of the Monitoring Committee, PPCB had taken up the matter with the Dept. of Water Resources to close the regulator installed at Sabuana drain but it was not closed permanently. The Executive Engineer, Dept. of Water Resources has now informed that the regulator has been closed temporarily with gunny bags because the department has to open the regulator to discharge the excess flow. Accordingly, the Monitoring Committee has directed that the temporarily closed regulator may be opened only during exigency and proper record alongwith reasons mentioned therein shall be maintained by the department and the same may brought in the notice to Deputy Commissioner, Fazilka immediately.

#### **5.16.1 Compliance Status of Recommendation No.16**

**The Executive Engineer, Department of Drainage has informed vide letter no. 3793-95 dated 22.09.2021 that regulator on Sabuana Drain at RD-28500 was temporary closed with empty cement bags on 05.02.2021 and the same is lying closed till date. It has been further informed that the said regulator**

shall be opened on need basis only after informing the Deputy Commissioner, Fazilka.

#### **5.17. Recommendation No.17**

In order to treat wastewater of Fazilka drain, PPCB shall initiate the process of installation of in-situ remediation technology in Fazilka drain for which it shall get prepare proposal from the reputed agency and the same shall be implemented within 03 months.

##### **5.17.1 Compliance Status of Recommendation No.17**

PPCB has reported that as in-situ remediation technology to be installed in Fazilka drain to treat its effluent, most of the water of Fazilka drain is coming from STP, Fazilka, as such, with the persuasion of the Board, Nano Bubble Technology was installed in different ponds of the Waste Stabilization Ponds of STP during 11.07.2021 to 12.08.2021 (one month). The PPCB has carried out the monitoring of performance of the technology w.r.t various parameters of pond effluent and it was observed that there was no significant reduction in the values of the various parameters such as BOD, COD, TSS & F.Coli.

PPCB has not tried any other in-situ remediation technology to be installed in Fazilka, drain to improve its water quality and the said drain is carrying waste water containing the values of parameters namely TSS, BOD, COD and F.Coli. as 178 mg/l , 18mg/l , 84mg/l, 6800 MPN/100 ml.

It is mentioned here that since present STP, Fazilka is based on waste stabilization technology (WST) which is old one and not achieving the prescribed standards w.r.t. various parameters, as such, a new STP of capacity 13 MLD based on new technology i.e. SBR technology is being setup and construction work of the said STP has been started and likely to be completed by May, 2022 as informed by the executing agency (PWSSB).

For the utilization of treated sewage of the new STP of capacity 13 MLD, the existing irrigation scheme which has been installed for utilization of treated sewage of 8 MLD capacity, may be utilized for irrigation purpose and for utilization of remaining quantity of treated sewage as 5 MLD, irrigation network may be extended.

#### **5.18. Recommendation No.18**

For the upgradation of existing STP of Jalalabad town of capacity 8 MLD to cater excess hydraulic load of 4 MLD, funds amounting to Rs. 2 crores are available with the MC Jalalabad and more funds shall be required for upgradation of the same. The Monitoring Committee has directed that the funds amounting to Rs. 2 crore may be kept in custody of MC, Jalalabad and it may not be diverted for any other work and in the meantime, efforts may be made to get more funds from the Dept. of Local Govt. for upgradation of existing STP timely.

#### **5.18.1 Compliance Status of Recommendation No.18**

The Monitoring Committee during its visit to STP, Jalalabad of capacity 8 MLD, it was observed that no work of installation of new STP has started so far by PWSSB. The recommendations with regard to installation of new STP of adequate capacity, have been mentioned at point No. IV of District Fazilka.

#### **5.19. Recommendation No.19**

Keeping in view the situation of Fazilka area, canal water is supplied through seasonal canal for 6 months in a year for irrigation of agriculture fields. However, taking note of the situation and to ensure proper cropping in the area, the Monitoring Committee directed that in the remaining 6 months (December to May) period, sufficient quantity of canal water may be supplied for irrigation of agriculture fields' atleast once in a month. Deputy Commissioner, Fazilka shall ensure the compliance of the same.

#### **5.19.1 Compliance Status of Recommendation No.19**

The Executive Engineer, Eastern Canal Division, Ferozpur vide his office letter no. 3780-81 dated 23.09.2021 has reported that Canal Water will be supplied to the cultivators of Fazilka area, keeping in view the availability of water at Harike Barrage. The canal water can't not be supplied in the month of April & May due to internal clearance different channels i.e. Ferozpur Feeder, Main Branch and local distributary & Minors take place in these months. Moreover, it has been requested by the Department that the cultivators must intimate the irrigation department at least 3 to 4 days prior for necessity of Canal Water because Fazilka area lies at the tail of the Eastern Canal System.

#### **5.20. Recommendation No.20**

The Monitoring Committee noted the crop yield data of Fazilka area for the last 03 years and observed that there was very less variation with respect to yield of crop in the border area as compared to the crop yield data of the remaining area of the district. The Monitoring Committee has directed that Chief Agriculture Officer of Fazilka area shall continue to monitor crop yield data of both the seasons of the year and its impact on yield, if any and data of the same may be maintained. The monitoring process may be continued in every season for next 03 years.

#### **5.20.1. Compliance Status of Recommendation No.20**

The Chief Agriculture officer, Fazilka vide his office letter no. 4750 dated 05.10.2021 has reported that the experiments with regard to yield of the crops shall be carried out by the Department of Agriculture in the upcoming season and the report will be submitted accordingly.

#### **5.21. Recommendation No.21**

In order to make free flow of water of Fazilka drain into river Sutlej, which has been closed at borderlines of the countries, by opening the same, Chief Secretary, Punjab has written D.O letter dated 19.11.2020 to the Secretary to Govt. of India,

Department of Water Resources, Ministry of Jal Shakti, New Delhi to look into the matter at personal level for ensuring compliance. The Monitoring Committee noted the compliance and directed that Chief Secretary, Punjab shall again take up matter with the Ministry of Water Resources, Government of India, New Delhi to further take up the matter with the concerned Ministry of Government of Pakistan through Ministry of External Affairs, Govt. of India to open the Fazilka drain, which is presently has been closed at the borderline of the countries, to make free flow in the river Sutlej.

**5.21.1 Compliance Status of Recommendation No.21**

**The matter was taken up by the Commissioner Indus, Ministry of Jal Shakti, Govt. of India with the Pakistan Commissioner for Indus Waters on 21.05.2021, wherein, it has been informed that as per Articles IV(10) of the Water Treaty, 1960 between India and Pakistan, it has been mentioned that each party declares its intention to prevent, as far as practicable, undue pollution of the waters of the rivers which might affect adversely uses similar in nature to those to which the waters were put on the effective date, and agrees to take all reasonable measures to ensure that before any sewage or industrial waste is allowed to flow into the rivers, it will be treated, wherever necessary, in manner as not materially to affect those uses. Pakistan side also complaints of the pollution coming to their side from our side and is likely to raise this issue again in response.**

**5.22. Recommendation No.22**

For effective operation of STPs of Sri Mukatsar Sahib and Jalalabad towns, in the earlier recommendations of the Monitoring Committee, it was recommended that operation and maintenance work of STPs of these towns may be given to PWSSB, being expert agency in STPs operation. The Monitoring Committee has taken a serious view for not handing over the operation & maintenance work of STP Sri Muktsar Sahib and Jalalabad to PWSSB and directed that Deputy Commissioners of the concerned districts shall hold a meeting with MCs Jalalabad and Sri Muktsar Sahib, PWSSB and DWSS within 02 days and issue regarding operation & maintenance of both the STPs by Punjab Water Supply & Sewage Board may be resolved and these STPs may be handed over to PWSSB.

**5.22.1. Compliance Status of Recommendation No.22**

**The Monitoring Committee in the presence of Officers of various departments including Punjab Pollution Control Board visited STP of capacity 8 MLD of Jalalabad town on 21.09.2021 and it was observed that the said STP is being operated by MC, Jalalabad, whereas as per the earlier directions of the Monitoring Committee, the operation & maintenance work of STP Jalalabad could have been taken by PWSSB but presently, MC, Jalalabad is operating the said STP and it has not been handed over to PWSSB.**

**The operation and maintenance of STP's of Sri Muktsar Sahib has been taken over by PWSSB but these STP's are yet to be made in operation**

because at the time of visit of the Monitoring Committee on 18.08.2021, the STP's of Sri Muktsar Sahib were found in defunct stage. The recommendations regarding making the STP's in operation have been made by the Monitoring Committee on 18.08.2021, which have been mentioned at point No. 5.1.11 of recommendations No. 1 as mentioned at point 5.1.

**5.23. Recommendation No.23**

Civil Surgeon, Fazilka and Civil Surgeons of the other districts shall continue to conduct health check up camps and the persons affected with water borne diseases, if any, may be identified and the list of the same may be sent to the District Administration of further action.

**5.23.1 Compliance status of Recommendation No.23**

**It has reported by Civil Surgeon, Fazilka that a health survey of 10 villages has been conducted by the team of the doctors from time to time and no water borne disease has been observed in any of the person of these villages.**

**5.24. Recommendation No.24**

Deputy Directors of Dept. of Animal Husbandry, Fazilka and other districts shall continue to conduct health survey of animals and the animal affected with any diseases may be identified and reported to the District Administration of further action.

**5.24.1 Compliance status of Recommendation No.24**

**Deputy Director Animal Husbandry has reported that, the survey of 10 villages has been done and it has been reported that no animal was found affected with any kind of disease for usage of underground water.**

**5.25. Recommendation No.25**

With regard to laying of sewerage network, water supply schemes and installation of STPs as long term measures for control of pollution in 9 ULBs namely Arniwala, Mallanwala, Mudki, Mamdot, Nihal Singh Wala, Badni Kalan, Kot Ise Khan, Fatehgarh Panjtoor and Beriwala, Punjab Water Supply and Sewage Board has submitted that detailed project reports (DPRs) costing Rs 31 crores, Rs 37.34 crores, Rs 23 crores, Rs 40.22 crores, Rs 49.13 crores, Rs 20.50 crores, Rs 43.48 crores, Rs 8.0 crores and Rs 27 crores, respectively, have been prepared and the same have been sent to the State Govt. for approval. The funds for these towns are being arranged.

**5.25.1 Compliance Status of Recommendation No.25**

PWSSB has reported the status of DPR, availability of funds and status of tender as mentioned at Table-17, given below.

**Table-17: Status of DPR, availability of funds and status of tender of 09 Nagar Panchyanats**

Sr. No.	Name of Town	Status of DPR	Availability of funds	Status of Tender
1.	Fatehgarh	DPR amounting to	Funds are not	Tenders have

	Panjtur	Rs. 12.08 crore of sewerage system and STP is under checking/ approval.	yet tied up or allocated under any scheme.	been opened on 30.9.2021 and bids are being checked.
2.	Kot Ise Khan	DPR amounting to Rs. 22.96 crore of sewerage system and STP is under checking/ approval.	Funds are not yet tied up or allocated under any scheme.	Tenders have been called and will be opened on 14.10.2021.
3.	Badhni Kalan	DPR amounting to Rs. 13.05 crore of sewerage system and STP is under checking/ approval.	Funds are not yet tied up or allocated under any scheme.	Tender document is under checking and approval.
4.	Nihal Singh Wala	DPR amounting to Rs. 15.64 crore of sewerage system and STP is under checking/ approval.	Funds are not yet tied up or allocated under any scheme.	Land is not available and hence tender document cannot be prepared.
5.	Arniwala	Estimate has been prepared of Rs. 17.59 crore and sent to head quarter for approval on 26.4.2021.	Funds are not yet tied up or allocated under any scheme.	Tender will be recalled shortly and STP will be completed and commissioned within 18 months.
6.	Mallanwala	Estimate has been prepared of Rs. 14.68 crore and sent to head quarter for approval on 26.4.2021.	Funds are not yet tied up or allocated under any scheme.	Land not available and hence tender document cannot be prepared.
7.	Mudki	Estimate has been prepared of Rs. 11.14 crore and sent to head quarter for approval on 26.4.2021.	Funds are not yet tied up or allocated under any scheme.	Land not available and hence tender document cannot be prepared.
8.	Mamdot	Estimate has been prepared of Rs. 12.82 crore and sent to head quarter for	Funds are not yet tied up or allocated under any scheme.	Tender yet to be called.

		approval on 26.4.2021.		
9.	Beriwala	DPR under approval.	Funds tied up Rs. 8.05 crore.	Tender yet to be called.

## 5.26. General Recommendation

### 5.26.1 Recommendation w.r.t. regular payment of operation & maintenance charges of STPs:

The Monitoring Committee has observed that normally the operation & maintenance charges of STPs are not paid regularly by the Municipal Councils / Corporations to the contractor responsible for operation of STPs, resulting in poor performance of STPs because of their irregular operation. The concerned MCs are to be ensured that operation & maintenance charges are paid regularly to the contractor so that STPs may be operated effectively and efficiently by the contractor for all the times.

**Monitoring Committee recommends that all the MCs, PWSSB, DWSS or any other concerned department operating the STPs and Dept. of Local Govt. may note the observations for compliance.**

#### 5.26.1.1 Compliance Status.

**With regard to operation & maintenance of STP's, the Monitoring Committee has already made its recommendations during its visit to STP's of the towns falling under 5 district i.e. Moga, Sri Muktsar Sahib, Faridkot, Ferozepur & Fazilka on 09.07.2021, 18.08.2021, 31.08.2021, 07.09.2021 and 21.09.2021 & 22.09.2021, respectively.**

**The Monitoring Committee further recommends that the Department of Local Government shall earmark separate funds in each financial year for the operation & maintenance of STPs, of all the Municipal councils/ Nagar panchayats and these funds may be utilized entirely for operation and maintenance of STPs and these may not be diverted for any other usage. All the arrears w.r.t. operation and maintenance charges to be paid to the operating agencies of STPs may be cleared by all the MCs. by 31.12.2021.**

### 5.26.2 Recommendation w.r.t. quantification of sludge generation and its disposal:

The Monitoring Committee has observed that in most of the STPs, the quantity of sludge generated during operation of STP is not measured and no proper record is maintained for the same. Further, the disposal of sludge in an environmentally sound manner is not made by most of the Municipal Councils/Corporations.

Therefore, there is need to quantify the sludge generated during operation of STPs especially based on aerobic biological treatment system. The technological issues like maintaining required level of MLSS and MLVSS in the aeration chamber and the amount of sludge recycled back into the system to maintain biomass in the aeration chamber are not checked properly, which results into poor settling of sludge or sludge bulking in the clarifier. Further, the sludge generated from the system needs to be dried through

centrifuging/mechanical decanting system. After drying of sludge, it may be stored at a dedicated storage room and thereafter, it may be utilized for gardens / parks / green belts / agriculture areas as manure. The record of operational hours of STP, sludge generation per day and its disposal by the above methods may be maintained by the operator of the STP.

**The Monitoring Committee recommends that all the MCs, Dept. of Local Govt, PWSSB and Dept. of Water Supply & Sanitation and any other Govt. agency, operating the STPs may note above observations and immediate action may be taken in the matter for effective performance of STPs.**

#### **5.26.2.1 Compliance Status**

**With regard to quantification of sludge generation from STP's and its disposal, the Monitoring Committee has already made its recommendations during its visit STP's of the towns falling under 5 district i.e. Moga, Sri Muktsar Sahib, Faridkot, Ferozepur & Fazilka on 09.07.2021, 18.08.2021, 31.08.2021, 07.09.2021 and 21.09.2021 & 22.09.2021, respectively.**

#### **5.26.3 Recommendation w.r.t. treatment of sewage and utilization of treated sewage for irrigation**

The Monitoring Committee has observed that treated sewage of STPs, even based on new technology, is presently being discharged into drains leading to river system and wasting the best quality treated effluent. The farmers may be more benefited in case the treated sewage is utilized for irrigation purposes and bio-sludge from STPs may be utilized as manure in the agriculture fields, which may not only save the ground water / canal water but also save the energy and cost of manure.

**The Monitoring Committee recommends that the concerned departments may implement above the suggestions in time bound manner.**

#### **5.26.3.1 Compliance Status**

**With regard to utilization of treated sewage of the towns of five districts, the Monitoring Committee has already made its recommendations during its visit STP's of the towns falling under 5 district i.e. Moga, Sri Muktsar Sahib, Faridkot, Ferozepur & Fazilka on 09.07.2021, 18.08.2021, 31.08.2021, 07.09.2021 and 21.09.2021 & 22.09.2021, respectively.**

#### **5.27 Additional issue: Rejuvenation of villages ponds**

The Executive Engineer, Department of Panchyati Raj, Fazilka has informed vide letter no. 1389 dated 30.09.2021 that for rejuvenation of ponds of 83 villages identified in district Fazilka, an amount of Rs. 90.0 lac has been received and out of said amount, villages ponds of village Bare wala, Houz Khas & Halim Wala have been rejuvenated. Now, the Department has received an amount of 1,72,71,000/- for rejuvenation of village ponds of 13 villages for which, the department has started the process of tendering. The work of rejuvenation of remaining 67 villages shall be carried out after the receipt of funds from the State Govt.

**The Monitoring Committee recommends that the work of rejuvenation of village ponds of 13 village for which tendering process has been started, shall be completed by 31.12.2021 and the work of rejuvenation of remaining**

village ponds of 67 villages of District Fazilka may be completed by 31.03.2022.

## 6.0 Overall conclusions and further recommendations.

1. There are 26 Urban Local Bodies (Municipal Councils/Nagar Panchayats) in five districts namely Moga, Sri Muktsar Sahib, Faridkot, Ferozepur & Fazilka.

The status of STP's of these 26 ULB's is as under:-

I. Sewage Treatment Plants in 14 ULB's (Moga, Baghapurana, Dharamkot, Gidderbaha, Malout, Sri Muktsar Sahib, Jaitu, Talwandi Bhai, Zira, Makhu, Ferozepur, Abohar, Fazilka and Jalalabad) have been installed. The performance of these 14 STPs is mentioned as under.

i) 09 ULB's (Talwandi Bhai, Zira, Makhu, Moga, Dharamkot, Ferozepur, Gidderbaha, Malout, Jaitu) are meeting with the prescribed standards.

ii) STP of 01 ULB, Abohar has been found failure in case of achievement of standards w.r.t. parameters namely BOD & F.Coli (32 mg/l and 1100 MPN/100 ml).

iii) Out of 04 ULB's, STP in case of 01 ULB namely Baghapurana town is under stabilization, 3 STP's of 01 ULB namely Sri Muktsar Sahib are lying defunct, STP of 01 ULB (Jalalabad) is required enhancement and upgradation. STP of 01 ULB namely Fazilka of capacity 13 MLD is under construction and it will replace the existing STP of capacity 08 MLD.

II. STP's of 03 ULB's (Faridkot, Kotkapura & Guru Harsahai) are under construction.

For the treatment of sewage of ULB Faridkot, land has been purchased and only boundary wall on two sides have been constructed and excavation/ foundation work of utility room has been started but no construction work of any component of STP has been started.

STP of capacity 8 MLD, Kotkapura based on SBR technology, consists of primary treatment system, aeration chamber and chlorine contact tank-cum-treated effluent collection tank, has been completed. No electric connection was released by PSPCL for operation of STP. Presently, untreated sewage of the town is discharged into Deviwalla drain. Now, it has been informed by PPCB that electric connection has been released by PSPCL but STP has not been made operational.

STP of capacity 6 MLD, Kotkapura based on SBR technology, consists of primary treatment system, aeration chamber and chlorine contact tank-cum-treated effluent collection tank, has been completed. However, electrical fittings of STP are yet to be completed. No electric connection has been released by PSPCL for operation of STP. The Executive Engineer, PSPCL claimed that MC, Kotkapura has not released the

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pending payment of the PSPCL. Presently, untreated sewage of the town is discharged into Warring link drain.

- III. The remaining 09 ULB's, which are small MC's/NP's having small population, the Executing Agency (PWSSB) is in the process of preparation of DPR/calling the tender for installation of sewerage system and installation of STP's, which may take about one year for laying of sewerage network and installation of STP's. Therefore, as short term measures, in-situ remediation systems/pond systems in these MC's/NP's are under construction. Out of these 09 ULB, 08 ULB's (Nihal Singh Wala, Badhni Kalan, Fatehgarh Panjtoor, Kot-Ise Khan, Mudki, Mallan Wala Khas, Mamdot, Arniwala Shiekh Subhan) are in process of installation of in-situ remediation of wastewater, whereas, in case of M.C. Bariwala no land has been made available for installation of in-situ treatment system for M.C. Bariwala.

The Monitoring Committee has visited the in-situ remediation technology being installed in the towns namely Mallanwala, Mandot, Mudki, Nihal Singh wala, Badhni kalan, Kot Ise khan, Fatehgarh panjtoor, Arniwala Sheikh Subhan and Bariwala but none of the above said Nagar panchayats have completed in-situ remediation technology, so far, therefore, it is recommended that PPCB shall impose environmental compensation on all the Nagar panchayat namely Mallanwala, Mandot, Mudki, Nihal Singh wala, Badhni kalan, Kot Ise khan, Fatehgarh panjtoor, Arniwala Sheikh Subhan and Bariwala for their failure to install in-situ remediation technology by 31.03.2020 and commencing the STPs of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 6.12.2020 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

With regard to laying of Sewage network and installation of STPs as long term measures for control of pollution in 9 ULBs namely Arniwala, Mallanwala, Mudki, Mamdot, Nihal Singh Wala, Badni Kalan, Kot Ise Khan, Fatehgarh Panjtoor and Beriwala, Punjab Water Supply and Sewage Board has submitted that detailed project reports (DPRs) costing Rs 17.59 crores, Rs 14.68 crores, Rs 11.14 crores, Rs 12.82 crores, Rs 15.64 crores, Rs 13.05 crores, Rs 22.96 crores, Rs 12.08 crores and Rs 8.05 crores, respectively, have been prepared and the same have been sent to the State Govt. for approval. The funds for same have not been tied up so far.

The Monitoring Committee recommends that the Principal Secretary, Govt. of Punjab, Dept. of Local Govt. shall take up the matter with the Principal Secretary, Finance for early release of funds so that sewerage system and STP for the said towns (Arniwala, Mallanwala, Mudki,

Mamdot, Nihal Singh Wala, Badni Kalan, Kot Ise Khan, Fatehgarh Panjtoor and Beriwala) may be installed in a time bound manner.

2. The Monitoring Committee has visited STP's of all the 26 ULB's of five districts namely Moga, Sri Muktsar Sahib, Faridkot, Ferozepur and Fazilka on 09.07.2021 & 5.10.2021, 18.08.2021, 31.08.2021, 07.09.2021, 21.09.2021 and 22.09.2021. The reports prepared by the Monitoring Committee after visiting of STP's of all these ULB's have been annexed as per Annexure-B/B-1, C, D, E & F, respectively. The Monitoring Committee recommends that the recommendations made by the Monitoring Committee in its reports w.r.t. STP's of the towns of five districts may also be implemented by the concerned departments/MC within the time schedule as recommended by the Monitoring Committee, which are mentioned as under.

3. Recommendation of the Monitoring Committee w.r.t each STP of each districts

District Moga

I. Sewage Treatment Plant of capacity 27 MLD at Moga

i) The present generation of sewage of the town is about 31 MLD, whereas, STP has been installed to treat 27 MLD sewage and the remaining 4 MLD untreated sewage is being discharged into Singhwali Sem Nallah. Municipal Corporation, Moga needs to provide additional sewage treatment plant of adequate capacity to treat remaining quantity of sewage generated from the entire population of the town, within 01 month and in the meantime, in-situ remediation technology may be setup in the drain, carrying untreated sewage and not connected to the STP, within 02 months. Additional STP of adequate capacity may be installed in a time bound manner.

ii) The secondary sludge generated from secondary clarifier of STP is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system contain lot of moisture (70-75 %) and such type of sludge with high moisture content may not be allowed to be disposed of in low lying area as it may contaminate the underground water.

Therefore, the Monitoring Committee recommends that Municipal Corporation Moga shall either provide sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.

iii) For the utilization of treated sewage for irrigation, during visit it was submitted that the Department of Soil & Water Conservation has prepared irrigation scheme costing Rs. 13 crore to lay irrigation network of length 30 km covering a command area of 880 hectares. The

department has requested its higher authorities for release of funds so as to enable it to lay irrigation network in a time bound manner. It was further informed that the irrigation network shall be laid within 06 months after the release of funds to the department.

The Monitoring Committee recommends that the Department of Soil & Water Conservation shall approach Deputy Commissioner, Moga for early of funds and the Deputy Commissioner, Moga shall take up the matter with the Department of Finance for early release of funds so that irrigation scheme to utilize the treated sewage of Moga town for irrigation in a time bound manner.

**II. Sewage Treatment Plant, Baghapurana of capacity 4 MLD.**

- i) MC, Baghpaurana shall release sewer connections to all the residents of the town within 02 months.
- ii) Department of Water Supply & Sanitation shall commission and start operating STP within 2 1/2 months.
- iii) The Deputy Commissioner, Moga shall hold meeting with the Municipal Council Baghapurana, Department of Water Supply & Sanitation and Additional Deputy Commissioner (Urban Development) within 15 days to sort out the issue w.r.t operation of STP either by contractor or concerned department as per the agreement made during construction of STP.
- iv) The Department of Soil & Water Conservation shall lay irrigation network to utilize the treated sewage for irrigation, within 03 months.
- v) Punjab Pollution Control Board shall start the process of imposing environment compensation on MC, Baghpaurana because of its failure to commission STP by 31.03.2021.

**III. Sewage Treatment Plant Dharmkot of capacity 4 MLD.**

- i) MC Dharmkot shall release operation and maintenance charges of operation of STP for the last 03 years to Punjab Supply & Sewerage Board within 02 months.
- ii) Deputy Commissioner, Moga shall take up the matter with the Department of Local Govt. regarding paying of operation & maintenance charges of STPs regularly to the operator of the STPs so that these may remain in operation at all the times.
- iii) PWSSB, Department of Soil & Water Conservation and MC Dharmkot shall hold meeting with the farmers of nearby villages within 15 days apprising them about good quality of treated sewage of Dharmkot and educating them about utilisation of treated sewage of other STPs for irrigation purposes which may save the cost of manure and natural resources.

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**IV. Remediation of wastewater of NP Nihal Singh Wala**

- i) The Nagar Panchayat, Nihal Singh Wala shall expedite the construction work of six ponds system and shall ensure that it may be completed by 31.10.2021.
- ii) Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.
- iii) Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount because of failure of the Nagar Panchayat, Nihal Singh Wala for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.

**V. Remediation of wastewater of NP Badhni Kalan**

- i) The Nagar Panchayat, Badhni Kalan shall expedite the construction work of six ponds system and shall ensure that it may be completed by 31.10.2021.
- ii) Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.
- iii) Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount because of failure of the Nagar Panchayat, Badhni Kalan for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.

**VI. Remediation of wastewater of NP Fatehgarh Panjtoor**

- i) The Nagar Panchayat, Fatehgarh Panjtoor shall expedite the construction work of treatment facility and shall ensure that it may be completed by 31.10.2021.
- ii) Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.
- iii) Punjab Water Supply & Sewerage Board shall complete the work of laying of sewerage network and installation of STP to treat the sewage of the town in a time bound manner.
- iv) Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount on Nagar Panchayat, Fatehgarh Panjtoor because of its failure for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.

**VII. Remediation of wastewater of NP Kot Ise Khan**

- i) The Nagar Panchayat, Kot Ise Khan shall expedite the construction work of treatment facility and shall ensure that it may be made operational by 31.10.2021.
- ii) Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.

- iii) Punjab Water Supply & Sewerage Board shall complete the work of laying of sewerage network and installation of STP to treat the sewage of the town in a time bound manner.
- iv) Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount on Nagar Panchayat, Kot Ise Khan because of its failure for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.

**District- Sri Muktsar Sahib**

**I. Sewage Treatment Plant of capacity 7 MLD at Gidderbaha**

- i) The secondary sludge generated from secondary clarifier of STP is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system contain lot of moisture and such type of sludge with high moisture content may not be allowed to be disposed of in low lying area as it may contaminate the underground water and even the farmers may not like to lift and use such type of sludge into their fields as manure.

Therefore, the Monitoring Committee recommends that Municipal Council, Gidderbaha shall either provide sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.

- ii) For the utilization of treated sewage for irrigation, during visit it was submitted that the Department of Soil & Water Conservation has prepared irrigation scheme costing Rs. 3 crore to lay irrigation network covering a command area of 600 acres. The department has requested its higher authorities for release of funds so as to enable it to lay irrigation network in a time bound manner.

The Monitoring Committee recommends that the Department of Soil & Water Conservation shall approach Deputy Commissioner, Sri Muktsar Sahib for early release of funds and the Deputy Commissioner, Sri Muktsar Sahib shall take up the matter with the Department of Finance for the same so that irrigation scheme to utilize the treated sewage of Gidderbaha town for irrigation may be laid in a time bound manner.

- iii) Regarding release of funds amounting to Rs. 12.0 crore to be paid to PSPCL as electricity charges for operation of STP, PWSSB shall take up the matter with the Principal Secretary, Department of Urban Local Body for early release of funds so that the functioning of STP may not be hampered.
- iv) PWSSB, department of Soil & Water Conservation, MC, Gidderbaha and PPCB shall jointly conduct IEC activity to educate the farmers of nearby villages to utilize the treated sewage for irrigation. Such IEC activities may be conducted atleast twice in a year.

- v) PWSSB shall maintain proper record regarding generation of primary and secondary sludge generated during the operation of STP, vehicle number of the vehicle used for transportation of these sludges and mode of disposal of primary as well as secondary sludge.
- vi) PWSSB shall construct a Pucca platform for storage of primary sludge for its proper management before its final disposal. The said activity may be conducted within 15 days.

**II. Sewage Treatment Plants of capacity 10 MLD (MBBR) and 3 MLD (WSP) at Malout**

- i) The secondary sludge generated from secondary clarifier of STP is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system was containing lot of moisture content and the effluent generated from dewatering of sludge was found stagnating adjoining to the system, which may contaminate the underground water and even the farmers may not like to lift and use such type of sludge having lot of moisture content into their fields as manure.

Therefore, the Monitoring Committee recommends as under:

- a) Municipal Council, Malout shall either provide sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.
  - b) The effluent generated from dewatering of secondary sludge may be taken into influent collection tank and the stagnation caused near the dewatering system may be removed within 7 days and photographs in this regard may be sent to PPCB, Regional Office, Bathinda.
- ii) PWSSB shall maintain proper record regarding generation of primary and secondary sludge generated during the operation of STP, registration number of the vehicles used for transportation of the sludge and mode of disposal of primary as well as secondary sludge.
  - iii) PWSSB shall construct a Pucca platform for storage of primary sludge for its proper management before its final disposal. The said activity may be conducted within 15 days.
  - iv) The Monitoring Committee observed that the generation of sewage of Malout Town is 20 MLD, whereas STPs of capacity 13 MLD have been installed and there is a gap of 7 MLD, which is being discharged into the drain without any treatment and no steps have been taken to provide in-situ remediation technology for treatment of sewage till the STP for treatment of remaining quantity of sewage is installed. The Monitoring Committee recommended that the PPCB shall impose environment compensation of suitable amount as cost of damage caused to the environment due to discharge of untreated sewage into drainage system ecology and aquatic system.

- v) As per the directions of the Hon'ble National Green Tribunal in OA No. 1069 of 2018 in the matter of Nitin Shanker Deshpande Vs Union of India & Others has directed that STPs may be installed to achieve stringent standards w.r.t. BOD, COD, TSS and other parameters. Such stringent standards may be achieved by providing such technology which may bring BOD less than 10 mg/l and probably SBR technology may be one of the best technologies to achieve such stringent standards. Therefore, PWSSB may consider such technologies while finalizing the design of the STP.
- vi) PWSSB shall de-silt ponds within one month to improve the performance of the system.
- vii) PWSSB shall construct a separate tank of adequate capacity after chlorine dosing to facilitate the lifting of treated sewage for its utilization in the fields for irrigation.
- viii) For the installation of additional STP of capacity 7 MLD, Deputy Commissioner, Sri Muktsar Sahib shall hold meeting with PWSSB, MC, Malout and other concerned officers within 15 days and take up the matter with higher authorities for early release of funds for installation of said STP.
- ix) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize its sewage of 10 MLD capacity STP and shall approach Deputy Commissioner, Sri Muktsar Sahib for early release of funds so that the same may be implemented in a time bound manner.
- x) MC, Malout shall construct a bitumen / Pucca road, which is leading to STP of capacity 10 MLD in a time bound manner.
- III. Sewage Treatment Plants of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD installed for treatment of sewage of Sri Muktsar Sahib town**
- i) The Monitoring Committee observed that all the 3 STPs of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD are lying defunct and the untreated sewage of 2 STPs (8.7 MLD & 3.5 MLD) is being discharged into sullage carrier leading to Chand Bhan drain. The untreated sewage of 5.7 MLD STP is being discharged into Sarainaga drain.
- ii) The STP of capacity 3.5 MLD was installed in the year 2008, whereas the 2 STPs of capacity 8.7 MLD and 5.7 MLD were setup in the year 2013-14. The Chairman of the Monitoring Committee took a serious view for becoming the STPs in a defunct stage in a very short period, which is serious lapse on the part of the establishing / operating agency. Besides, the establishing / operating agency has not bothered to revive the functioning of the STPs and no steps have been taken in this regard so far. Deputy Commissioner, Sri Muktsar Sahib shall fix the responsibility of the concerned department / agency for becoming the STPs in a defunct stage in a very short period and not taking any step for revival of the same in a time bound manner and continue to discharge untreated sewage into drain. PPCB shall impose environmental compensation of suitable amount on the establishing / operating agency as a cost to the damage caused to the environment due to

**discharge of untreated sewage into drains and affecting ecology and aquatic system.**

- iii) PWSSB informed that estimate has been prepared for rehabilitation of all the 3 STPs of capacity 8.7 MLD, 5.7 MLD and 3.5 MLD along with operation and maintenance cost for 5 years. The Monitoring Committee recommended that these STPs may be revived in a time bound manner and shall ensure that no untreated sewage be discharged into drains. For this purpose, PWSSB shall submit timelines within 15 days for rehabilitation of all these STPs.
  - iv) PWSSB shall take up the matter with Deputy Commissioner, Sri Muktsar Sahib for early release of funds for rehabilitation of all the 3 STPs.
  - v) The approximate present discharge of sewage of Sri Muktsar Sahib town is 20 MLD, whereas STPs of capacity 17.9 MLD have been installed and there is gap of about 2.5 MLD, for which new STP is required to be installed. PWSSB shall prepare DPR for installation of STP for the gap discharge within 01 month and install additional STP in a time bound manner.
  - vi) The Department of Soil & Water Conservation shall prepare irrigation schemes to utilize its sewage of 3 STPs of capacity 8.7 MLD, 5.7 MLD and 3.5 MLD and shall approach Deputy Commissioner, Sri Muktsar Sahib for early release of funds so that the same may be implemented in a time bound manner.
- IV. Treatment of sewage of Nagar Panchayat, Bariwala**
- i. Deputy Commissioner, Sri Muktsar Sahib shall hold meeting with officers of Mandi Board, PWSSB, Nagar Panchayat, Bariwala and PPCB within 10 days so as to resolve the matter regarding availability of land for setting up of treatment facility to treat the sewage of Bariwala town.
  - ii. **PWSSB in coordination with Nagar Panchayat, Bariwala shall install in-situ remediation technology in the drain carrying untreated sewage at suitable location in a time bound manner as directed in the last meeting of Monitoring Committee held on 04.03.2021 at Moga.**
  - iii. The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of Nagar Panchayat, Bariwala and the same may be implemented in a time bound manner.
  - iv. PWSSB shall take up the matter with the Deputy Commissioner, Sri Muktsar Sahib for early release of funds for laying sewerage network and installation of STP within 15 days and further Deputy Commissioner, Sri Muktsar Sahib shall take up the issue with Principal Secretary, Department of Local Government for release of funds for said work within 01 month.
  - v. PPCB shall impose environmental compensation of suitable amount on Nagar Panchayat, Bariwala as a cost of damage caused to the environment due to discharge of untreated wastewater into drain and affecting ecology and aquatic system.

## District Faridkot

### **I. Sewage Treatment Plant of capacity 14 MLD at Faridkot**

- i) PWSSB shall start construction work of STP within 7 days and the same shall be completed and commissioned by 31.12.2021 as decided in the earlier meeting held on 04.03.2021.
- ii) PWSSB shall apply for release of electric connection for the operation of STP atleast 4 months before the commissioning of STP.
- iii) Pipeline of diameter 1400 mm shall be completed by 30.09.2021.
- iv) Department of Soil & Water Conservation shall prepare irrigation scheme within 40 days for which, PWSSB shall supply necessary data w.r.t. STP to the said department within 10 days. Department of Soil & Water Conservation shall get release funds from the Department of Finance through its Head Quarter for laying of irrigation network to utilize the treated sewage of STP Faridkot.
- v) Since Municipal Council, Faridkot and PWSSB have failed to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commissioning the STP of capacity 14 MLD within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017, therefore MC, Faridkot shall pay environmental compensation @ Rs. 5.0 lakh per month per drain for not providing in-situ remediation technology in the drain and PWSSB shall pay environmental compensation @ 5.0 lakh per month per STP for not commencing STP of capacity 14 MLD to treat sewage of Faridkot town. Punjab Pollution Control Board shall impose said environmental compensation on both the department i.e. MC, Faridkot and PWSSB accordingly and shall realize the same from the said departments.
- vi) MC, Faridkot shall develop thick green belt of suitable varieties of plants all around the boundary wall especially towards the adjoining house.

### **II. Sewage Treatment Plants of capacity 8 MLD (SBR) and 6 MLD (SBR) at Kot Kapura**

#### **a) STP of capacity 8 MLD (SBR)**

- i) PWSSB shall start the operation of STP immediately after release connection by PSPCL.
- ii) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of STP 8 MLD capacity and for laying of irrigation network, necessary funds shall be got released from the department of Finance through its Head Quarter.
- iii) MC, Kotkapura shall develop thick green belt along the boundary of the STP within 01 month.
- iv) PWSSB shall close the bypass arrangement provided to discharge its effluent during exigency in the presence of officer of PPCB.

- b) **STP of capacity 6 MLD (SBR)**
- i) **Department of Soil & Water Conservation shall take up the matter with its higher authorities for early release of funds for laying of irrigation network to utilize the treated effluent for irrigation. The said irrigation network shall be completed within 03 months.**
  - ii) **PWSSB shall provide additional arrangements to dry the sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.**
  - iii) **PWSSB shall construct Pucca platform for handling and management of primary sludge within 01 month.**
  - iv) **PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 02 months.**
  - v) **PWSSB shall install OCEMS for all the required parameters at the outlet of STP for monitoring of various parameters within 03 months.**
  - vi) **PWSSB shall install CCTV cameras at various components of STP within 02 months.**
  - vii) **PWSSB shall close bypass arrangement, made to discharge untreated wastewater, in the presence of officer of PPCB within 7 days.**
  - viii) **PSPCL shall release power connection to STP of capacity 06 MLD, Kotkapura within 15 days and ensure that no power connection of particular STP may be retained in case of non payment of any bill other than the electricity bill of that particular STP is not paid by the concerned operating agency.**

### **III. Sewage Treatment Plants of capacity 6 MLD (SBR) at Jaitu**

- i) **Department of Soil & Water Conservation shall take up the matter with its higher authorities for early release of funds for laying of irrigation network to utilize the treated effluent for irrigation. The said irrigation network shall be completed within 03 months.**
- ii) **PWSSB shall provide additional arrangements to dry the sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.**
- iii) **PWSSB shall construct Pucca platform for handling and management of primary sludge within 01 month.**
- iv) **PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 02 months.**
- v) **PWSSB shall install OCEMS for all the required parameters at the outlet of STP for monitoring of various parameters within 03 months.**

- vi) PWSSB shall install CCTV cameras at various components of STP within 02 months.
- vii) PWSSB shall close bye-pass arrangement, made to discharge untreated wastewater, in the presence of officer of PPCB within 7 days.

**District Ferozepur**

**I. Sewage Treatment Plant of capacity 4 MLD at Talwandi Bhai**

- i) Department of Soil & Water Conservation shall lay irrigation network to utilize the treated sewage of STP by 31.12.2021.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 02 months.
- v) PWSSB shall ensure that bypass arrangement presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to PPCB.
- vi) The Municipal Council, Talwandi Bhai shall ensure that the pending payment of operation and maintenance of STP to the operating agency is made within 6 months. Municipal Council, Talwandi Bhai shall also make regular payment of operation and maintenance charges of STP to the operating agency.

**II. Treatment System for treatment of sewage of Mudki town**

- i) Municipal Council, Mudki shall modify its treatment mechanism to make it as aerobic biological system within 15 month.
- ii) Municipal Council, Mudki shall provide additional treatment system to treat whole of the wastewater of the town by 15.11.2021 and no untreated sewage may be discharged into Mudki drain.
- iii) The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 02 month.
- iv) PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant within 01 month.
- v) The Municipal Council, Mudki through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP within 02 months.
- vi) PPCB shall impose environmental compensation on Municipal Council, Mudki for its failure to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not

commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

### **III. Sewage Treatment Plant of Capacity 8 MLD for Zira Town**

- i) Department of Soil & Water Conservation shall lay irrigation network to utilize the treated sewage of STP by 31.12.2021.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- vi) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- vii) PWSSB shall also install electromagnetic flow meter at the inlet of STP within 02 months.
- viii) PWSSB shall ensure that bypass arrangement presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to PPCB.
- ix) The Municipal Council, Zira shall ensure that the pending payment of operation and maintenance of STP to the operating agency is made within 6 months. Municipal Council, Zira shall also make regular payment of operation and maintenance charges of STP to the operating agency.

### **IV. Sewage Treatment Plant of Capacity 4 MLD for Makhu Town**

- i) Department of Soil & Water Conservation shall get the DPR prepared from the authorized agency and shall take up the matter with higher authorities for release of funds for laying of irrigation network to utilize the treated sewage of STP by 31.10.2021. The said department shall complete the project for laying of irrigation network to utilize the treated sewage for irrigation by 31.12.2021.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 02 months.

- v) PWSSB shall ensure that bye-pass arrangement presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to PPCB.
- vi) The Municipal Council, Makhu shall ensure that the pending payment of operation and maintenance of STP to the operating agency is made within 6 months. Municipal Council, Makhu shall also make regular payment of operation and maintenance charges of STP to the operating agency.

**V. Treatment System for treatment of sewage of Mallanwala Khas**

- i) Municipal Council, Mallanwala Khas shall commission treatment system within 10 days.
- ii) Municipal Council, Mallanwala Khas shall provide additional treatment system to treat whole of the wastewater of the town by 15.11.2021 and no untreated sewage may be discharged into Sukkarnallah drain.
- iii) The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 02 month.
- iv) PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant within 01 month.
- v) The Municipal Council, Mallanwala Khas through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP within 02 months.
- vi) PPCB shall impose environmental compensation on Municipal Council, Mallanwala Khas for its failure to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

**VI. Sewage Treatment Plant of capacity 18 MLD at Ferozepur**

- i) Department of Soil & Water Conservation shall get the DPR prepared from the authorized agency and shall take up the matter with higher authorities for release of funds for laying of irrigation network to utilize the treated sewage of STP by 31.10.2021. The said department shall complete the project for laying of irrigation network to utilize the treated sewage for irrigation by 31.12.2021.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.

- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 02 months.
- v) PWSSB shall ensure that bypass arrangement presently lying sealed shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to PPCB.

**VII. Treatment System for treatment of sewage of Mamdot**

- i) Municipal Council, Mamdot shall make necessary modification in the treatment system provided by it as per the treatment technology and shall commission the same within 15 days.
- ii) Municipal Council, Mamdot shall ensure that with the installation of treatment system provided at different locations, no untreated wastewater is discharged into ponds.
- iii) The treated sewage shall be utilized for irrigation in the nearby fields.
- iv) The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 02 month.
- v) PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant within 01 month.
- vi) The Municipal Council, Mamdot through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP within 02 months.
- ix) PPCB shall impose environmental compensation on Municipal Council, Mamdot for not commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

**VIII. Sewage Treatment Plants for treatment of sewage of Guruharsahai town of capacity 1 MLD and 4 MLD**

- i) PWSSB shall complete and commission both the STPs of capacity 1 MLD and 4 MLD by 31.03.2022 as committed by the department.
- ii) The department of Soil & Water Conservation shall prepare detailed project report for laying of irrigation network within 01 month. The department shall also take up the matter for release of funds for laying of irrigation network with high authorities and shall ensure that irrigation network to utilize the treated sewage is commissioned by 31.03.2022 i.e. simultaneously with the commissioning of the STPs of the town.
- iii) PPCB shall impose environmental compensation on Municipal Council, Guruharsahai and PWSSB for failure of Municipal Council to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commissioning both the STPs of capacity 1 MLD and 4 MLD within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

## District Fazilka

### **I. Sewage Treatment Plant of capacity 25 MLD at Abohar**

- i) Department of Soil & Water Conservation shall take up the matter with the Deputy Commissioner, Fazilka regarding release of funds for laying of irrigation network to utilize the treated sewage of STP Abohar for irrigation within 15 days. Further, the Deputy Commissioner shall raise the issue with the Department of Finance for early release of funds and the Department of Soil & Water Conservation shall follow up the matter. The irrigation network to utilize treated sewage for irrigation may be completed by 31.12.2021.
- ii) PWSSB shall make centrifugal system in operation within 07 days and ensure that no wastewater in slurry form is taken back into the influent collection tank and only the effluent after dewatering/decanting of sludge in the centrifugal system may be taken at the inlet chamber of STP.
- iii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level in case secondary sludge is not dried properly by existing centrifugal system. The dewatered/decanted sludge in dry form may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iv) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- v) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.
- vi) PWSSB shall ensure that bypass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of Punjab Pollution Control Board.
- vii) PWSSB shall ensure that the functioning of STP may be checked from time to time so as to enable it to meet with the standards prescribed by the PPCB.

### **II. Treatment system for treatment of sewage of Arniwala Shiekh Subhan town**

- i) As demonstration projects for in-situ remediation of wastewater, PPCB has tried some technologies in flowing water but technology is yet to be tried in static effluent/pond effluent. Thus, Municipal Council, Arniwala Shiekh Subhan in consultation with PPCB may modify/upgrade in-situ remediation technology which may work in static effluent/pond effluent to get better performance of the system, within 01 month.

- ii) PWSSB shall allot the work regarding laying of sewerage network and installation of sewage treatment plant within 02 month and work of the STP may be started within 03 months and the same may be completed in a time bound manner.
- iii) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 01 month.
- x) PPCB shall impose environmental compensation on Municipal Council, Arniwala Shiekh Subhan for its failure to commence STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

### **III. Sewage Treatment Plant of Capacity 8 MLD for Fazilka Town**

- i) Department of Soil & Water Conservation shall start operating its existing irrigation network system to utilize treated sewage of 8 MLD capacity STP for irrigation within 02 month. The department shall also prepare irrigation scheme to utilize remaining additional quantity of 5 MLD treated sewage, within 01 month.
- ii) For the removal of floating matter and other solid material, MC/PWSSB shall provide additional component at the inlet of first pond of waste stabilization pond within 03 months.
- iii) In order to bring F.Coli. parameter within the prescribed norms, MC / PWSSB shall provide chlorine contact tank at the outlet of the WSP within 02 months.
- iv) PWSSB shall complete the construction work of new STP of capacity 13 MLD within the timeline as committed by the department.

### **IV. Sewage Treatment Plant of Capacity 8 MLD for Jalalabad Town**

- i) MC/PWSSB shall upgrade/rehabilitate the components of STP within 01 month so that it may meet with the prescribed standards.
- ii) MC/PWSSB shall prepare DPR for providing additional STP of adequate capacity to treat whole of the quantity of sewage of Jalalabad area, within 01 month and funds for the same may be arranged within 02 months. The work of additional STP may be started within 03 months and the same may be completed in a time bound manner.
- iii) Department of Soil & Water Conservation shall continue to operate its existing irrigation network to utilize treated sewage of 8 MLD capacity STP for irrigation. The department shall also prepare irrigation scheme within 02 months to utilize treated sewage of additional STP of adequate capacity to be provided by MC/ PWSSB.
- iv) MC/PWSSB shall make the centrifugal system provided for dewatering of secondary sludge in operation within 15 days and if required, upgradation of the same may be made within 01 month. For the storage of secondary sludge, MC/PWSSB shall provide dedicated storage shed/room and shall maintain proper record w.r.t. generation of secondary sludge,

transportation and its utilization for various usage in an environmentally sound manner. The secondary sludge may be utilized for parks/green belts/agriculture areas as manure and proper record in this regard may be maintained.

- v) MC/PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- vi) MC/PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month. MC/PWSSB shall install online continuous effluent monitoring system at the outlet of STP within 02 months.
- vii) PWSSB shall ensure that bye-pass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of PPCB.

#### **4. Other recommendations**

##### **I. Compliance of directions issued by PPCB with regard to Kathpal Diaries (Unit-2), Village Kokri Phoola Singh, Tehsil & Distt. Moga**

Punjab Pollution Control Board has reported that the industry was visited by officers of the Board on 10.03.2021 and it was observed that the industry was in operation of processing of milk. During visit, effluent samples were collected during visit and as per the analysis report, the conc. of some parameters was found beyond the permissible limits. The industry is in process to upgrade its ETP in order to achieve the prescribed standards. The industry is lying closed for last 3 months. The industry was lastly visited on 28.09.2021 and it was observed that the industry was lying closed due to disconnection of electric supply and the work of upgradation of ETP is in progress.

The Monitoring Committee recommends that the PPCB may finalize issue after the upgradation of ETP by the industry and ensure that it shall meet with the standards prescribed for the discharge of treated effluent for all the times.

##### **5. Supply of safe drinking water based on canal/ground water supply scheme to the inhabitants of Fazilka area**

- i) The Department of Water Supply Sanitation has informed vide letter no. 7395 dated 22.09.2021 that the in order to supply safe drinking water based on canal water supply scheme, to the inhabitants of 205 villages of the district, Govt. of Punjab has given approved vide GOP No. WSSD-BR2011/397/2021-4BR2/I/189132/2021 dt. 31-05-2021 for Rs. 419.96 Crore. Tender will be called at the earliest and safe canal water based drinking water supply will be given to the residents.

The Monitoring Committee recommends that the Dept. of Water Supply & Sanitation shall allot the work for installation of water supply scheme based on canal water within 02 months and water supply scheme may be implemented by 31.03.2022

ii) In order to ensure the safe drinking water from ground water sources, Dept. of Water Supply & Sanitation shall continue to monitor ground water sources, whose water is supplied to the inhabitants for drinking purpose from time to time and data in this regard may be sent to PPCB. In case the ground water sources are found unfit for drinking purposes, the same may be sealed by PPCB in the presence of officers of department of Water Supply and Sanitation.

**6. Monitoring of water quality of drains by PPCB**

In order to check the surface water quality of drains passing through district Fazilka, PPCB shall continue to monitor the water quality of drains atleast twice in year. In case de-gradation in the water quality of the drains is observed by the Board, the suitable action for remediation of the same may be taken accordingly.

**7. Installation of irrigation network to utilize the water of big pond water for irrigation**

The Monitoring Committee in the presence of the officers of PPCB and other departments has collected the drain water samples including big pond containing accumulated water of drains on 22.09.2021 and it has been observed that the values of the parameters namely pH, TSS, BOD, COD, DO & F.Coli have been observed as 8.2, 39 mg/l, 14 mg/l, 68 mg/l, 7.9 mg/l & 1300 MPN/100 ml, respectively and the water of big pond may be utilized for irrigation for which the department of Soil & Water Conservation shall prepare irrigation scheme in consultation with experts of PAU, Ludhaina within 01 month and funds may be arranged for laying of the irrigation network in the area. The whole of the exercise shall be completed by the department of Soil & Water Conservation by 31.03.2022. By doing so, the problem of accumulation of water of drains in the big pond may be resolved and there shall be significant reduction in the quantity of the water in big pond.

**8. Utilization of treated sewage of STP Abohar of capacity 25 MLD for irrigation**

The Monitoring Committee during its visit to STP's of Fazilka area on 21.9.2021 & 22.9.2021, it was observed that no irrigation network for utilization of treated sewage of STP (capacity 25 MLD) Abohar has been laid by the Dept. of Soil & Water Conservation. The Department informed that in order to utilize the treated sewage of the town for irrigation, detailed irrigation scheme costing Rs. 22 crores to utilize treated sewage in command area of 700 hectares has been prepared but the funds have not been received.

The Monitoring Committee recommends that Department of Soil & Water Conservation shall take up the matter with Principal Secretary, Department of

Finance for early release of funds for laying of irrigation network to utilize treated sewage of STP Abohar of capacity 25 MLD for irrigation.

**9. Closing of Regulator installed at Sabuana drain by Dept. of Water Resources**

In order to ensure no discharge of wastewater of drains into Fazilka drain and further into big pond to control seepage and avoid ground water contamination, the Dept. of Water Resources shall close the regulator installed at Sabuana drain. The Executive Engineer, Dept. of Water Resources has informed that the regulator has been closed temporarily with empty cement bags because the department has to open the regulator to discharge the excess flow. Accordingly, the Monitoring Committee recommends that the temporarily closed regulator may be opened only during exigency and proper record alongwith reasons mentioned therein shall be maintained by the Department of Water Resources and the same may brought in the notice to the Deputy Commissioner, Fazilka immediately.

**10. Installation of in-situ remediation technology in Fazilka drain**

PPCB has reported that as in-situ remediation technology to be installed in Fazilka drain to treat its effluent, most of the water of Fazilka drain is coming from STP, Fazilka, as such, with the persuasion of the Board, Nano Bubble Technology was installed in different ponds of the Waste Stabilization Ponds of STP during 11.07.2021 to 12.08.2021 (one month). The PPCB has carried out the monitoring of performance of the technology w.r.t various parameters of pond effluent and it was observed that there was no significant reduction in the values of the various parameters such as BOD, COD, TSS & F.Coli.

PPCB has not tried any other in-situ remediation technology to be installed in Fazilka, drain to improve its water quality and the said drain is carrying waste water containing the values of parameters namely TSS, BOD, COD and F.Coli. as 178 mg/l , 18mg/l , 84mg/l, 6800 MPN/100 ml.

It is mentioned here that since present STP, Fazilka is based on waste stabilization technology (WST) which is old one and not achieving the prescribed standards w.r.t. various parameters, as such a new STP of capacity 13 MLD based on new technology i.e. SBR technology is being setup and construction work of the said STP has been started and likely to be completed by May, 2022 as informed by the executing agency (PWSSB). For the utilization of treated sewage of the new STP of capacity 13 MLD, the existing irrigation scheme which has been installed for utilization of treated sewage of 8 MLD capacity, may be utilized for irrigation purpose and for utilization of remaining quantity of treated sewage as 5 MLD, irrigation network may be extended.

Re

- 11. Supply of canal water for irrigation the agriculture fields of Fazilka area**  
The Executive Engineer, Eastern Canal Division, Ferozepur vide his office letter no. 3780-81 dated 23.09.2021 has reported that Canal Water will be supplied to the cultivators of Fazilka area, keeping in view the availability of water at Harike Barrage. The canal water can't not be supplied in the month of April & May due to internal clearance different channels i.e. Ferozepur Feeder, Main Branch and local distributary & Minors take place in these months. Moreover, it has been requested by the Department that the cultivators must intimate the irrigation department at least 3 to 4 days prior for necessity of Canal Water because Fazilka area lies at the tail of the Eastern Canal System.
- 12. Crop yield data of Fazilka area by the Dept. of Agriculture**  
The Chief Agriculture officer, Fazilka vide his office letter no. 4750 dated 05.10.2021 has reported that the experiments with regard to yield of the crops shall be carried out by the Department of Agriculture in the upcoming season and the report will be submitted accordingly.
- 13. Matter to be taken up with neighbor country to make free flow of water into river Sutlej**  
The matter was taken up by the Commissioner Indus, Ministry of Jal Shakti, Govt. of India with the Pakistan Commissioner for Indus Waters on 21.05.2021, wherein, it has been informed that as per Articles IV(10) of the Water Treaty, 1960 between India and Pakistan, it has been mentioned that each party declares its intention to prevent, as far as practicable, undue pollution of the waters of the rivers which might affect adversely uses similar in nature to those to which the waters were put on the effective date, and agrees to take all reasonable measures to ensure that before any sewage or industrial waste is allowed to flow into the rivers, it will be treated, wherever necessary, in manner as not materially to affect those uses. Pakistan side also complaints of the pollution coming to their side from our side and is likely to raise this issue again in response.
- 14. Operation and maintenance of STP's of Sri Muktsar Sahib and Jalalabad**  
The Monitoring Committee in the presence of Officers of various department including Punjab Pollution Control Board visited STP of capacity 8 MLD of Jalalabad town on 21.09.2021 and it was observed that the said STP is being operated by MC, Jalalabad, whereas as per the earlier directions of the Monitoring Committee, the operation & maintenance work of STP Jalalabad could have been taken by PWSSB but presently, MC, Jalalabad is operating the said STP and it has not been handed over to PWSSB.
- The operation and maintenance of STP's of Sri Muktsar Sahib has been taken over by PWSSB but these STP's are yet to be made in operation because at the time of visit of the Monitoring Committee on 18.08.2021, the STP's of Sri Muktsar Sahib were found in defunct stage. The recommendations regarding making the STP's in operation have been made by the Monitoring Committee

on 18.08.2021, which have been mentioned at point No. 5.1.11 of recommendations No. 1 of point 5.1.

**15. Health Survey of inhabitants of Fazilka area**

It has reported by Civil Surgeon, Fazilka that a health survey of 10 villages has been conducted by the team of the doctors from time to time and no water borne disease has been observed in any of the person of these villages.

**16. Health Survey of Animals of Fazilka area**

Deputy Director Animal Husbandry has reported that, the survey of 10 villages has been done and it has been reported that no animal was found affected with any kind of disease for usage of underground water.

**17. Installation of sewerage network and sewage treatment plant for treatment of sewage of 09 small towns having less population (Arniwala, Mallanwala, Mudki, Mamdot, Nihal Singh Wala, Badni Kalan, Kot Ise Khan, Fatehgarh Panjtoor and Beriwala).**

With regard to laying of sewage network and installation of STPs as long term measures for control of pollution in 9 ULBs namely Arniwala, Mallanwala, Mudki, Mamdot, Nihal Singh Wala, Badni Kalan, Kot Ise Khan, Fatehgarh Panjtoor and Beriwala, Punjab Water Supply and Sewage Board has submitted that detailed project reports (DPRs) costing Rs 17.59 crores, Rs 14.68 crores, Rs 11.14 crores, Rs 12.82 crores, Rs 15.64 crores, Rs 13.05 crores, Rs 22.96 crores, Rs 12.08 crores and Rs 8.05 crores, respectively, have been prepared and the same have been sent to the State Govt. for approval.

**7.0 Special observations of the Monitoring Committee**

Based on the data, information, reports and visit to the sewage treatment plants/ treatment facilities to treat the sewage of the towns/ Municipal Councils of 05 districts (Moga, Sri Muktsar Sahib, Faridkot, Ferozepur and fazilka), the Monitoring Committee has made the following special observations.

**i) The officers have been found guilty for providing wrong information to the Monitoring Committee in the following cases.**

a) As per the action taken report submitted by the departments, it was submitted that PPCB is monitoring the performance of existing treatment plants in the State on monthly basis and as per the analysis results, STPs of Jalalabad west and Sri Muktsar Sahib have failed to comply with the prescribed standards but it was never reported that the STPs of Sri Muktsar Sahib are lying defunct and STPs of Jalalabad is non operational for the last long time.

a1) The Monitoring Committee during its visit to STPs of Sri Muktsar Sahib on 18.8.2021, it was observed that 03 STPs each of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD are lying defunct and the untreated sewage is being discharged into Chand Bhan drain and Sarainaga drain.

a2) The Monitoring Committee visited STP Jalalabad capacity 8 MLD on 21.9.2021 and it was observed that though the aeration system in the

MBBR tanks was in operation but no aerobic biological activity was seen in the aeration chamber resulting in no improvement in the quality of wastewater effluent. No primary and secondary sludge was found removed from the treatment system which indicates that STP was lying non-operational. It appears that STP was made operational only after receiving the information about the visit of the Monitoring Committee in the area. The capacity of the STP is 8 MLD, whereas, 12 MLD sewage was being passed through it, which has resulted into ineffective performance of STP. However, the analysis of the effluent sample collected from the outlet of STP indicate that all the parameters are within the norms, which are erratic. Punjab Pollution Control Board may fix the responsibility of the officer who has analyzed the effluent samples of STP, Jalalabad. Even the analysis of the effluent samples collected from the STP in the previous months (June, 2021 to September, 2021) are within the prescribed norms. It requires enquiry into the matter as the condition of various components of STP indicate that it had not been operated properly for the past long time and effluent is only entering at inlet of STP and just passing through the various components of STP without any biological activity and removal of solid waste, primary and secondary sludge.

- b) During the visit of the Monitoring Committee to STP Baghapurana of District Moga of capacity 4 MLD, it was observed that the sewerage connections to the all the residents of the town have not been released and STP has not been commissioned so far and it is on trial basis. However, the Monitoring Committee was never informed about the non commissioning and non operation of STP Baghapurana and still it is non operational and has not been commissioned so far.

The above facts indicate that there was almost zero treatment in STPs of Sri Muktsar Sahib, Jalalabad and Baghapurana and the untreated sewage is discharged into drains without even providing in-situ remediation technology in the drains. In the other cases, wherever the STPs are under construction, the construction work of these STPs has been found started by the MCs/NPs only after the receiving the notice of visit by the Monitoring Committee to the STPs of the area. The same situation was found during the visit of subcommittee of Dr. Babu Ram, Technical Expert, Monitoring Committee and Sant Balbir Singh Seechewal, Member, Monitoring Committee on 5.10.2021 to the in-situ remediation technology being installed by Municipal Council, Nihal Singh Wala, Badhni Kalan, Fatehgarh Panjtoor and Kot Ise Khan. The report of the subcommittee is annexed as per Annexure B-1.

- ii) There is no commitment on the part of the District Administration to achieve the desired results, therefore, there is need to monitor the functioning of the STPs of all the towns of the 05 districts (Moga, Sri Muktsar Sahib, Faridkot, Ferozepur

and Fazilka) and STPs which are under construction at level of Monitoring Committee or any other responsible body by keeping a strict vigil on all these STPs of 05 districts.

- iii) On account of discharge of untreated sewage into drains, leading to river Sutlej, lot of damage has been caused to the environment. Therefore, the Monitoring Committee recommends that over and above, the environment compensation already imposed by the Hon'ble National Green Tribunal, a penalty of Rs. 10 crore may be imposed on the State Govt. The amount so recovered from the State Govt., may be kept separately by Punjab Pollution Control Board and it may be utilized for restoration of the quality of environment.
- iv) Despite persuasion by the Monitoring Committee number of times, no new irrigation scheme has been laid so far to utilize the treated sewage of ULBs of 05 districts.
- v) Regular payment of charges of operation and maintenance of STPs to the operating agencies of STPs and timely payment of electricity bill to PSPCL by the Municipal Bodies

a) Observations of the Monitoring Committee

The Monitoring Committee set up by Hon'ble NGT for Punjab has been reviewing the status of pollution in Punjab rivers since its inception and submitting its reports to the NGT. One major issue noted by the Monitoring Committee is poor performance of sewage treatment plants in the State because of delayed payment by the municipal bodies.

Many STPs in the State are being run by the Punjab Water Supply and Sewerage board on behalf of municipal bodies. Some municipal bodies have opted to operate their STPs on their own and appointed private operators on contract. Whether it is the Board or a private operator, they can do so efficiently only if they are paid on time by the municipal body. Elected members of municipal bodies, however, are generally reluctant to use their funds for this purpose, as they would rather use the funds on development of roads, parks, streetlights etc. – items that win them immediate goodwill of their voters. The benefit of sewage treatment plants is felt not in the same city, but in areas downstream of the city. The operators of the plants cut corners in the absence of timely payment, which hurts the State doubly: first, the plant is not operated properly resulting in poor quality of treated water; and second, the operator eventually gets the payment from the municipal body through legal means without proper operation and maintenance. Apart from O&M, municipal bodies have also defaulted in many cases in payment of electricity bills, because of which many new STPs are not being released power connections months after their completion.

The Monitoring Committee has been emphasising the importance of timely payment on the municipal bodies and the situation today is considerably better than it was two years back. Still, it is strongly felt that operation and

maintenance of STPs should have a dedicated fund that cannot be diverted to any other use.

**b) Sources of revenue for operation and maintenance of STPs**

The municipal bodies of Punjab get major part of their revenue from the State budget. 10% of the GST revenue is distributed pro-rata among the municipal bodies, and another 1% is given to the Punjab Water Supply and Sewerage Board for management of municipal infrastructure for water and sewage. Municipal bodies have other sources of revenue like property tax, water charges and sewerage charges. It is essential to earmark funds for O&M of STPs to ensure that the enormous investment made in setting up these plants does not go waste.

**c) Intervention of Hon'ble National Green Tribunal on the issue of payment of O&M charges of STPs.**

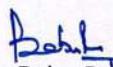
Hon'ble NGT may like to direct the state of Punjab to file an affidavit on the status of payments for operation and management of sewage treatment plants in the state, and its plans to ensure timely payments. In particular, the State may be directed to furnish:

- A statement of pending amount for O&M for each STP in the state.
- The annual expenditure on O&M for each STP currently in operation, and those expected to become operational in the coming three years; and
- Modalities to set up a dedicated fund for O&M of STPs that cannot be diverted to any other use by the local bodies.

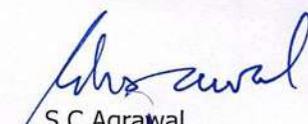
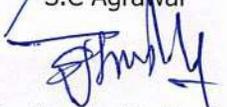
One possible modality to achieve this objective would be to earmark a portion of the amount being paid to the local bodies from the GST revenue and place it at the disposal of Punjab Water Supply and Sewerage Board, to whom the O&M of all STPs in the State should be entrusted.

The request is made to the Hon'ble NGT to consider the above proposal and may issue such directions as it may deem appropriate in the matter.

**vi) PSPCL shall ensure that no power connection of particular STP may be retained in case of non-payment of any bill other than non-payment of electricity bill of that particular STP by the concerned operating agency.**

  
Dr. Babu Ram

  
Sant Balbir Singh, Seechewal

  
S.C. Agrawal  
  
Justice Jasbir Singh,  
Former Judge, Punjab and Haryana  
High Court and now as Chairman of  
the Monitoring Committee

Item No. 04

(Court No.1)

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

(By Video Conferencing)

Original Application No. 596/2019

(With report dated 10.03.2021)

Vikram Ahuja

Applicant

Versus

State of Punjab & Ors.

Respondent(s)

Date of hearing: 09.06.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE M. SATHYANARAYANAN, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE BRIJESH SETHI, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

**ORDER**

1. The issue for consideration is the remedial action for violation of environmental norms by discharge of untreated sewage and effluents into the drains and other water bodies in Fazillka District in Punjab.
2. The matter was considered on 29.06.2020 in the light of earlier proceedings and the report of the Monitoring Committee headed by Justice Jasbir Singh, former Judge of Punjab and Haryana High Court dated 29.04.2020. The Monitoring Committee visited the site and analyzed the ground water samples. Meetings were held with the concerned stakeholders and recommendations were made for the remedial action. The report was accepted and the Tribunal directed further action, to be overseen by the Chief Secretary, Punjab.

3. The matter was last considered on 25.11.2020 in the light of report of the State PCB dated 21.11.2020 showing that certain steps have been initiated but the remaining work was yet to be done at various locations where standards of the water quality were not being met. Accordingly, we directed further remedial measures which were to be monitored by the Monitoring Committee constituted by this Tribunal headed by Justice Jasbir Singh, former Judge of Punjab and Haryana High Court. The operative part of the last order is as follows:

“ xxx.....xxx.....xxx.....xxx  
4. Accordingly, the State PCB has filed its report on 21.11.2020 giving point-wise compliance status. The said status report shows that certain projects have been initiated while the remaining are yet to be undertaken. At various locations the laid down standards of the water quality are not met.

5. We have also perused letter of the Chief Secretary, Punjab dated 19.11.2020 addressed to the Additional Chief Secretary, Animal Husbandry, Dairy Development & Fisheries; Principal Secretary, Department of Water Resources; Principal Secretary, Department of Water Supply & Sanitation and Secretary, Department of Local Government, Punjab, asking them to look into the matter at personal level and to ensure compliance. There is also letter of the Chief Secretary to the Secretary, Ministry of Jal Shakti with a request to take up the matter with Government of Pakistan for remedial action from across the border.

6. In view of above, there is need to further monitor the compliance of the required remedial measures for protection of the environment and public health in Fazilka District, Punjab. **The concerned authorities may continue further action and the Monitoring Committee headed by Justice Jasbir Singh, former Judge of Punjab and Haryana High Court may also verify the compliance status from the concerned Departments and furnish a further status report with appropriate recommendations before the next date** by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.”

4. Accordingly, the Monitoring Committee has filed its report dated 10.03.2021 giving the summary of works done in a tabular form. The Monitoring Committee directed the Principal Secretary, Department of

Local Government to take further remedial action. Following recommendations have been made in the report:

### **“3.2 Overall recommendations of the Monitoring Committee**

*Based on the latest action taken report submitted by the concerned departments on each activity as discussed in the meeting held on 4.3.2021, the Monitoring Committee has made further recommendations, which are submitted as under.*

- 1) *Punjab Water supply and sewerage Board (PWSSB) shall operate sewage treatment plants for the towns namely Jalalabad (W) (8 MLD), Abohar (25 MLD), Talwandi Bhai (4 MLD), Zira (8 MLD), Makhu (4 MLD), Moga (27 MLD), Dharamkot (4 MLD), Ferozepur (18 MLD), Gidderbaha (7 MLD) and Malout ( 02 STPS of capacity 3 MLD and 10 MLD) and Sri Mukhtar Sahib (2 STPs of capacity 8.7 MLD and 5.7 MLD) effectively and efficiently to ensure achievement of prescribed standards for all the times and all the Municipal Councils/Corporation shall ensure to pay operation and maintenance charges regularly to the operating agency*
- 2) *Sewage treatment plant for treatment of sewage of Jaitu town may be completed by 15.4.2021 and Punjab Pollution Control Board shall conduct the performance of STP in the last week of April 2021.*
- 3) *PWSSB shall start the construction work of STP of capacity 18 MLD for Faridkot town by 15.04.2021 and the same shall be completed by 31.12.2021 as committed by PWSSB.*
- 4) *Both the in-situ remediation technology as well as pond wastewater treatment system, based on Seechewal model, for Arniwala Sheikh subhan town shall be completed by 30.06.2021 by Municipal Council, Arniwala Sheikh subhan as per commitment made by it.*
- 5) *For treatment of wastewater of Mallanwal town, pond wastewater treatment system based on Seechewal model shall be completed by MC Mallanwala by 30.06.2021 as per commitment made by it.*
- 6) *For treatment of wastewater of Mudki town, pond wastewater treatment system based on Seechewal model as well as in-situ remediation technology shall be completed by MC Mudki by 30.06.2021 as per commitment made by it.*
- 7) *Treatment mechanism for treatment of wastewater of all the 06 ponds of Mamdot town shall be completed by MC Mamdot by 30.06.2021.*
- 8) *Treatment of wastewater of the town Nihal Singh Wala, based on Seechewal model, shall be completed by 30.06.2021.*

- 9) Treatment system for treatment of wastewater of Badhni Kalan shall be completed by 30.09.2021 as committed by MC.
- 10) For treatment of wastewater of Kot Ise khan, treatment system based on Seechewal model, shall be completed by 31.07.2021 as per the submission made by MC.
- 11) MC Fatehgarh Panjtoor shall provide treatment system based on Seechewal model by 30.09.2021 as per the commitment made by MC.
- 12) MC Bariwala shall install treatment system based on Seechewal model by 30.09.2021 as per the commitment made by MC and simultaneously it shall also take up the matter with the Dept. of Local Govt. for arrangements of funds at the earliest as to enable it to install STP at the earliest.
- 13) In order to check the performance of effluent treatment plant (ETP) of the industry namely M/s Kathpal Dairies (Unit-2), village Kokri Phoola Singh, Tehsil and District Moga, PPCB shall monitor the ETP of the industry within 15 days and shall continue to monitor its performance as per the frequency prescribed by PPCB / CPCB.
- 14) The Monitoring Committee noted the observations, findings and recommendations made by the experts engaged by PPCB and directed as under:
  - i) The officers of Punjab Pollution Control Board (PPCB) and Department of Water Supply and Sanitation (DWSS) shall monitor ground water of 10 hand pumps of the area within 15 days and in case, contamination is observed in the ground water samples, the ground water sources may be sealed and display board mentioning that the ground water source is not fit for drinking purposes may be erected at the sites.
  - ii) The ground water sources, which were found contaminated during the sampling of ground water sources of Fazika area by the Monitoring Committee on 6.1.2020, have been sealed and these residents are being supplied potable water. Further, the department of Water Supply & Sanitation has provided R.O. systems in 21 villages to supply safe drinking water.

**The Monitoring Committee recommends as under.**

- Safe drinking water, based on canal water supply scheme, may be given to the inhabitants of the area by the Dept. of Water Supply & Sanitation. The Dept. of Water Supply & Sanitation shall also implement the water supply scheme prepared for 205 villages, based on canal water at the earliest.

- *The Dept. shall also continue to monitor ground water sources, whose water is supplied to the inhabitants for drinking purpose from time to time and data in this regard may be sent to PPCB.*
  - iii) *PPCB shall continue to monitor the water quality of the drains and pond wastewater to assess any improvement in the quality of water in these water bodies with the installation of STPs in the area.*
  - iv) *The Dept. of Soil & Water Conservation shall lay a irrigation network in the nearby fields of Abohar area to utilise the treated sewage of 25 MLD' STP Abohar and shall start the work of laying of pipeline in the first week of June 2021 and shall be completed by 31.12.2021.*
- 15) *For installation of new STP of capacity 13 MLD for treatment of sewage of Fazilka town, replacing the existing STP of 8 MLD based on WSP technology, the funds amounting to Rs. 15 crore have been arranged. The Monitoring Committee directed that the funds amounting to Rs. 15 crores should be entirely used for installation of 13 MLD new STP and no funds may be diverted for any other purpose keeping in view the environment status of the area. The Deputy Commissioner, Fazilka shall personally monitor the issue.*
  - 16) *In order to ensure no discharge of drain water into Fazilka drain and and further into big pond to control seepage and avoid ground water contamination, as per earlier directions of the Monitoring Committee, PPCB had taken up the matter with the Dept. of Water Resources to close the regulator installed at Sabuana drain but it was not closed permanently. The Executive Engineer, Dept. of Water Resources has now informed that the regulator has been closed temporarily with gunny bags because the department has to open the regulator to discharge the excess flow. Accordingly, the Monitoring Committee has directed that the temporarily closed regulator may be opened only during exigency and proper record alongwith reasons mentioned therein shall be maintained by the department and the same may brought in the notice to Deputy Commissioner, Fazilka immediately.*
  - 17) *In order to treat wastewater of Fazilka drain, PPCB shall initiate the process of installation of in-situ remediation technology in Fazilka drain for which it shall get prepare proposal from the reputed agency and the same shall be implemented within 03 months.*
  - 18) *For the upgradation of existing STP of Jalalabad town of capacity 8 MLD to cater excess hydraulic load of 4 MLD, funds amounting to Rs. 2 crores are available with the MC Jalalabad and more funds shall be required for upgradation of the same.*

The Monitoring Committee has directed that the funds amounting to Rs. 2 crore may be kept in custody of MC, Jalalabad and it may not be diverted for any other work and in the meantime, efforts may be made to get more funds from the Dept. of Local Govt. for upgradation of existing STP timely.

- 19) Keeping in view the situation of Fazilka area, canal water is supplied through seasonal canal for 6 months in a year for irrigation of agriculture fields. However, taking note of the situation and to ensure proper cropping in the area, the Monitoring Committee directed that in the remaining 6 months (December to May) period, sufficient quantity of canal water may be supplied for irrigation of agriculture fields atleast once in a month. Deputy Commissioner, Fazilka shall ensure the compliance of the same.
- 20) The Monitoring Committee noted the crop yield data of Fazilka area for the last 03 years and observed that there was very less variation with respect to yield of crop in the border area as compared to the crop yield data of the remaining area of the district. The Monitoring Committee has directed that Chief Agriculture Officer of Fazilka area shall continue to monitor crop yield data of both the seasons of the year and its impact on yield, if any and data of the same may be maintained. The monitoring process may be continued in every season for next 03 years.
- 21) In order to make free flow of water of Fazilka drain into river Sutlej, which has been closed at borderlines of the countries, by opening the same, Chief Secretary, Punjab has written D.O letter dated 19.11.2020 to the Secretary to Govt. of India, Department of Water Resources, Ministry of Jal Shakti, New Delhi to look into the matter at personal level for ensuring compliance. The Monitoring Committee noted the compliance and directed that Chief Secretary, Punjab shall again take up matter with the Ministry of Water Resources, Government of India, New Delhi to further take up the matter with the concerned Ministry of Government of Pakistan through Ministry of External Affairs, Govt. of India to open the Fazilka drain, which is presently has been closed at the borderline of the countries, to make free flow in the river Sutlej.
- 22) For effective operation of STPs of Sri Mukatsar Sahib and Jalalabad towns, in the earlier recommendations of the Monitoring Committee, it was recommended that operation and maintenance work of STPs of these towns may be given to PWSSB, being expert agency in STPs operation. The Monitoring Committee has taken a serious view for not handing over the operation & maintenance work of STP Sri Muktsar Sahib and Jalalabad to PWSSB and directed that Deputy Commissioners of the concerned districts shall hold a meeting with MCs Jalalabad and Sri Muktsar Sahib, PWSSB and DWSS within 02 days and issue regarding operation & maintenance of both the STPs by Punjab Water Supply &

*Sewerage Board may be resolved and these STPs may be handed over to PWSSB.*

- 23) *Civil Surgeon, Fazilka and Civil Surgeons of the other districts shall continue to conduct health check up camps and the persons affected with water borne diseases, if any, may be identified and the list of the same may be sent to the District Administration of further action.*
- 24) *Deputy Directors of Dept. of Animal Husbandry, Fazilka and other districts shall continue to conduct health survey of animals and the animal affected with any diseases may be identified and reported to the District Administration of further action.*
- 25) *With regard to laying of sewerage network, water supply schemes and installation of STPs as long term measures for control of pollution in 9 ULBs namely Arniwala, Mallanwala, Mudki, Mamdot, Nihal Singh Wala, Badni Kalan, Kot Ise Khan, Fatehgarh Panjtoor and Beriwala, Punjab Water Supply and Sewerage Board has submitted that detailed project reports (DPRs) costing Rs 31 crores, Rs 37.34 crores, Rs 23 crores, Rs 40.22 crores, Rs 49.13 crores, Rs 20.50 crores, Rs 43.48 crores, Rs 8.0 crores and Rs 27 crores, respectively, have been prepared and the same have been sent to the State Govt. for approval. The funds for these towns are being arranged.*

*The Monitoring Committee recommends that Principal Secretary, Deptt. of Local Govt. shall look into the matter and detailed project report may be approved and funds from department of finance may be arranged at the earliest so that sewerage system, water supply lines and sewage treatment plants for the above said towns may be laid/setup in a time bound manner.*

#### **4.0 Recommendations of the Monitoring Committee on General issues.**

##### **4.1 Regular payment of operation & maintenance charges of STPs :**

*The Monitoring Committee has observed that normally the operation & maintenance charges of STPs are not paid regularly by the Municipal Councils / Corporations to the contractor responsible for operation of Sf Ps, resulting in poor performance of STPs because of their irregular operation. The concerned MCs are to be ensured that operation & maintenance charges are paid regularly to the contractor so that STPs may be operated effectively and efficiently by the contractor for all the times.*

**Monitoring Committee recommends that all the MCs, PWSSB, DWSS or any other concerned department operating the STPs and Dept. of Local Govt. may note the observations for compliance.**

#### **4.2 Quantification of sludge generation and its disposal:**

*The Monitoring Committee has observed that in most of the STPs, the quantity of sludge generated during operation of STP is not measured and no proper record is maintained for the same. Further, the disposal of sludge in an environmentally sound manner is not made by most of the Municipal Councils/Corporations.*

*Therefore, there is need to quantify the sludge generated during operation of Sf Ps especially based on- aerobic biological treatment system. The technological issues like maintaining required level of MLSS and MLVSS in the aeration chamber and the amount of sludge recycled back into the system to maintain biomass in the aeration chamber are not checked properly, which results into poor settling of sludge or sludge bulking in the clarifier. Further, the sludge generated from the system needs to be dried through centrifuging/mechanical decanting system instead of drying in the sludge drying beds occupying large area. After drying of sludge, it may be stored at a dedicated storage room and thereafter, it may be utilized for gardens / parks / green belts / agriculture areas as manure. The record of operational hours of STP, sludge generation per day and its disposal by the above methods may be maintained by the operator of the STP.*

***The Monitoring Committee recommends that all the MCs, Dept. of Local Govt, PWSSB and Dept. of Water Supply & Sanitation and any other Govt. agency, operating the STPs may note above observations and immediate action may be taken in the matter for effective performance of STPs.***

#### **4.3 Treatment of sewage and utilization of treated sewage for irrigation:**

*The Monitoring Committee has observed that treated sewage of STPs, even based on new technology, is presently being discharged into drains leading to river system and wasting the best quality treated effluent. The farmers may be more benefited in case the treated sewage is utilized for irrigation purposes and bio-sludge from STPs may be utilized as manure in the agriculture fields, which may not only save the ground water / canal water but also save the energy and cost of manure.*

***The Monitoring Committee recommends that the concerned departments may implement above the suggestions in time bound manner.”***

5. None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we

direct the State of Punjab to take further remedial action in terms of the above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of monitoring Sutlej River, the Committee may continue to function for monitoring other compliances in terms of specific orders of this Tribunal.

List for further consideration on 26.10.2021.

A copy of this order be forwarded to the Chief Secretary, Punjab by e-mail for compliance.

A copy of this order be also forwarded to Justice Jasbir Singh, former Judge of Punjab and Haryana High Court by e-mail.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

M. Sathyanarayanan, JM

Brijesh Sethi, JM

Dr. Nagin Nanda, EM

June 09, 2021  
Original Application No. 596/2019  
DV

## OFFICE OF THE MONITORING COMMITTEE

Constituted by the Hon'ble National Green Tribunal in OA No. 360 of 2018 in the matter Shree Nath Sharma Vs Union of India & Ors and other Environmental issues.

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex,  
Sector 68, SAS Nagar) Tel. No. 0172-2298091  
Email: cecswm606@gmail.com

To

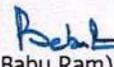
The Deputy Commissioner,  
Moga.

No. CMC/2021/1929  
Dated: 12.7.2021

**Subject: Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and ors. - Visit to the plants for remediation of wastewater of the towns of District Moga by the Monitoring Committee, constituted by Hon'ble National Green Tribunal, on 09.07.2021.**

\*\*\*\*\*  
Please find enclosed herewith a report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and ors. - Visit to the plants for remediation of wastewater of the towns of District Moga by the Monitoring Committee, constituted by Hon'ble National Green Tribunal, on 09.07.2021 for your information and necessary action please.

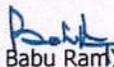
It is requested that the concerned officer of district administration may be directed to convey the report to all the concerned departments for compliance on the directions given/recommendations made by the Monitoring Committee and submit the action taken report within 15 days.

  
(Dr. Babu Ram) 12.7.2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/ /2021/1930

Dated: 12.7.2021

A copy is forwarded to the Additional Deputy Commissioner (D) and Commissioner, Municipal Corporation, Moga for information and necessary action.

  
(Dr. Babu Ram) 12.7.2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/ /2021/1931

Dated: 12.7.2021

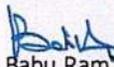
A copy is forwarded to the Member Secretary, Punjab Pollution Control Board, Patiala for information and necessary action.

  
(Dr. Babu Ram) 12.7.2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/ /2021/1932

Dated: 12.7.2021

A copy is forwarded to the Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda for information and necessary action.

  
(Dr. Babu Ram) 12.7.2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/ /2021/1933

Dated: 12.7.2021

A copy is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, Faridkot for information and necessary action.

  
(Dr. Babu Ram) 12.7.2021  
Technical Expert,  
Monitoring Committee

**Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and ors. - Visit to the plants for remediation of wastewater of the towns of District Moga by the Monitoring Committee, constituted by Hon'ble National Green Tribunal, on 09.07.2021.**

### **1.0 Background**

The Hon'ble National Green Tribunal while considering the issue of remedial action for violation of the environmental norms due to discharge of untreated sewage and effluent into drains or other water bodies in Fazilka district, has considered the report of the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, submitted to the Hon'ble Tribunal on 10.03.2021. The Hon'ble National Green Tribunal has passed the detailed order on 09.06.2021 in O.A. No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & Others, the relevant para no. 5 of which is reproduced as under :

#### **Para 5.**

**"None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we direct the State of Punjab to take further remedial action in terms of above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the Next date by email at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF / OCR support PDF and not in the form of image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of the monitor Sutlej River, the Committee may continue to function for operating other compliances in terms of specific orders of this tribunal.**

**2.0 Visit to plants for remediation of wastewater of the towns of District Moga as part of compliance of recommendations of the Monitoring Committee as mentioned in order dated 9.6.2021 in OA No.596 of 2019 in the Matter of Vikram Ahuja vs State of Punjab and ors.**

The following were present during the visit :

#### **a) Members of the Monitoring Committee.**

<b>Sr. No.</b>	<b>Name &amp; Designation of authority/officer in the department</b>	<b>Designation in the Monitoring Committee</b>
1	Justice Jasbir Singh, Former Judge, Punjab & Haryana High Court	Chairman
2	Sh. Subodh Agrawal, Former Chief Secretary, Punjab	Senior Member
3	Sant Balbir Singh Seechewal	Member
4	Dr. Babu Ram; Former Member Secretary	Technical Expert

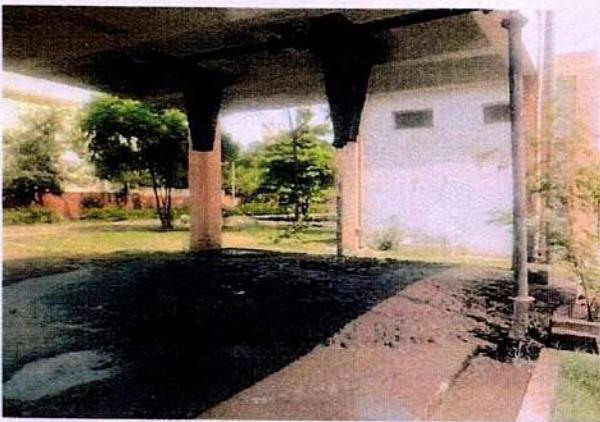
**b) List of the officers present during the visit is as per Annexure-1.**

## 2.1 Sewage Treatment Plant of capacity 27 MLD at Moga

Population of Moga town is 1.6 lakh as per census 2011 and present population is approx. 2 lakh and total discharge of sewage is 31 MLD and for treatment of sewage, STP of capacity 27 MLD, based on SBR technology, has been installed, which was in operation at the time of visit.

### 2.1.1 Observations of the Monitoring Committee

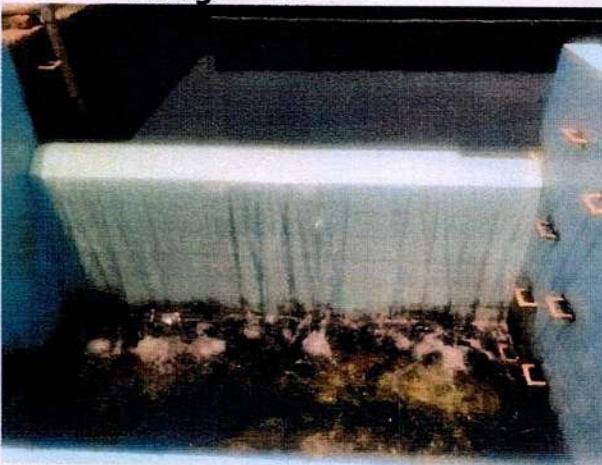
- i. For treatment of sewage of Moga town, MC Moga has installed STP of capacity 27 MLD, which was in operation at the time of visit.
- ii. The treated effluent is discharged into Moga drain.
- iii. As per the analysis results of effluent samples collected by PPCB from March 2021 to June 2021, parameters namely pH, TSS, BOD & F.Coli. are within the prescribed norms.
- iv. Sludge generated from the secondary clarifier is de-watered in centrifugal system, which was found in semi dried form containing 70-75 % moisture content.
- v. Primary sludge, containing inorganic constituents, produced from bar screen, grid chamber and other primary components, was found loading in tractor trolleys, which is further disposed of in low lying area.
- vi. The backwash water from centrifugal system was being discharged on the semi dried sludge, whereas, it should have been diverted to influent collection chamber. The photographs showing centrifuging system discharging backwash on semi dried sludge and components of STP are mentioned as per **Plates 1 to 6.**



**Plate 1: Backwash of centrifuging system being thrown on semi dried sludge**



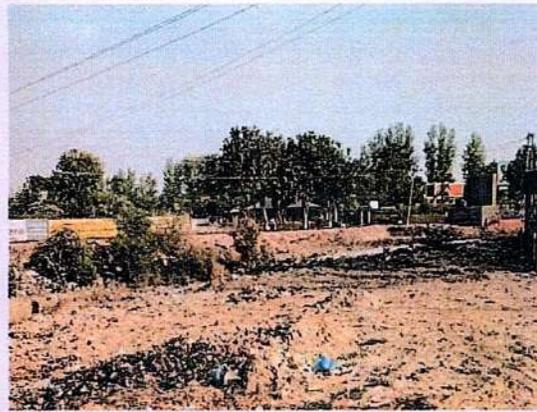
**Plate 2: SBR chamber with aeration system**



**Plate 3: Treated effluent leading to drain**



**Plate 4: Beaker containing clear effluent after treatment**



**Plate 5: Primary sludge being loaded in tractor trolleys**

**Plate 6: Semi dried sludge being disposed of on land in unscientific manner.**

### **2.1.2 Recommendations of the Monitoring Committee**

- i) The present generation of sewage of the town is about 31 MLD, whereas, STP has been installed to treat 27 MLD sewage and the remaining 4 MLD untreated sewage is being discharged into Singhwali Sem Nallah. Municipal Corporation, Moga needs to provide additional sewage treatment plant of adequate capacity to treat remaining quantity of sewage generated from the entire population of the town, for which proposal may be prepared within 01 month and in the meantime, in-situ remediation technology may be setup in the drain, carrying untreated sewage and not connected to the STP, within 02 months. Additional STP of adequate capacity may be installed in a time bound manner.
- ii) The secondary sludge generated from secondary clarifier of STP is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system contains lot of moisture (70-75 %) and such type of sludge with high moisture content may not be allowed to be disposed of in low lying area as it may contaminate the underground water. Therefore, the Monitoring Committee recommends that Municipal Corporation Moga shall either provide sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.
- iii) For the utilization of treated sewage for irrigation, during visit, it was submitted that the Department of Soil & Water Conservation has prepared irrigation scheme costing Rs. 13 crore to lay irrigation network of length 30 km covering a command area of 880 hectares. The department has requested its higher authorities for release of funds so as to enable it to lay irrigation network in a time bound manner. It was further informed that the irrigation network shall be laid within 06 months after the release of funds to the department.

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The Monitoring Committee recommends that the Department of Soil & Water Conversation shall approach Deputy Commissioner, Moga for early release of funds and the Deputy Commissioner, Moga shall take up the matter with the Department of Finance for early release of funds so that irrigation scheme to utilize the treated sewage of Moga town for irrigation may be laid in a time bound manner.

## 2.2 Sewage Treatment Plant Baghapurana

Population of Baghapurana town is 0.25 lakh as per census 2011 and present population is approx. 0.32 lakh and total discharge of sewage is 3.41 MLD and for treatment of sewage, STP of capacity 4 MLD, based on MBBR technology, has been installed but the same has not been commissioned so far and it is on trial basis. The Photographs showing components of STP are mentioned as **per plates 7 to 10**

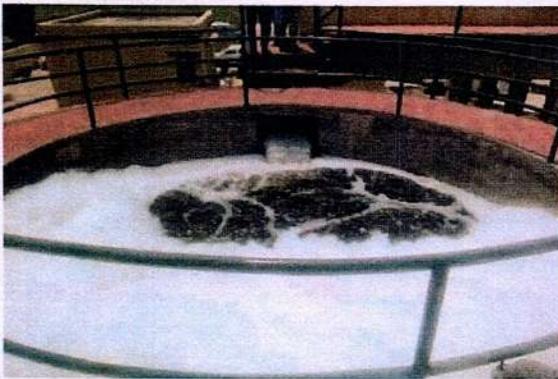


Plate 7: First MBBR tank on trial basis



Plate 8: Secondary clarifier containing old effluent



Plate 9: Sludge drying beds



Plate 10: Channel carrying untreated sewage

### 2.2.1 Observations of the Monitoring Committee

STP of capacity 4 MLD, based on MBBR technology, has been installed but the same is under trial and has not been commissioned so far. It was informed that the residents of the Baghapurana town have not taken sewer connection and untreated sewage is discharged into Kaleke drain. The Executive Officer, Baghpurana assured that the sewer connection to the inhabitants of Baghapurana town shall be released within 02 months and STP shall be made operational within 2 ½ months.

### 2.2.2 Recommendations of the Monitoring Committee.

- i. MC, Baghpaurana shall release sewer connections to all the residents of the town within 02 months.
- ii. Department of Water Supply & Sanitation shall commission and start operating STP within 2 ½ months.

- iii. **The Deputy Commissioner, Moga shall hold meeting with the Municipal Council Baghapurana, Department of Water Supply & Sanitation and Additional Deputy Commissioner (Urban Development) within 15 days to sort out the issue w.r.t operation of STP either by contractor or concerned department as per the agreement made during construction of STP.**
- iv. **The Department of Soil & Water Conservation shall lay irrigation network to utilize the treated sewage for irrigation, within 03 months.**
- v. **Punjab Pollution Control Board shall start the process of imposing environment compensation on MC, Baghpaurana because of its failure to commission STP by 31.03.2021.**

### **2.3 Remediation of wastewater of NP Nihal Singh Wala.**

#### **2.3.1 About sewage discharge and remediation of wastewater.**

The population of Nihal Singh Wala town is 0.10 lakh as per census 2011 and present population is approx. 0.14 lakh and total discharge of sewage is 1.6 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat (NP) Nihal Singh Wala submitted that Rs. 25 lakhs has been allotted for the construction of remediation system as treatment mechanism, based on 6 ponds system and the same is likely to be completed by 30.09.2021. Presently, the untreated sewage is being discharged into the drain. The excavation work for construction of treatment facility is under progress. The Photographs showing the excavation work of pond system at site are mentioned as per **Plates 11 and 12**



**Plate 11: Excavation work of pond system in progress**



**Plate 12: Excavation work of pond system in progress**

#### **2.3.2 Recommendations of the Monitoring Committee:**

- i. **NP, Nihal Singh Wala shall accelerate the construction work of 6 ponds system and it may be completed without further delay.**
- ii. **The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of the town for irrigation within 01 month and proposal may be sent to the concerned department for release of funds.**
- iii. **Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Nihal Singh Wala because of its failure to install STP and in-situ remediation technology by 31.03.2021.**

## **2.4 Remediation of wastewater of NP Badhni Kalan**

### **2.4.1 About sewage discharge and remediation system for wastewater**

The population of Badhni Kalan town is 0.11 lakh as per census 2011 and present population is approx. 0.15 lakh and total discharge of sewage is 1 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Badhni Kalan submitted that Rs. 23 lakhs has been allotted for the construction of remediation system for wastewater as treatment mechanism based on pond system. The photographs showing machinery in operation to clear the site by removing legacy solid waste to make available site for installation of remediation system as treatment mechanism are mentioned as per **plates 13 and 14**.



**Plates 13 and 14: Machinery in operation for clearing legacy solid waste to make available site for installation of remediation system as treatment mechanism**

During visit, it was observed that NP Badhni Kalan was engaged in clearing the legacy waste to get clear space for development of pond system as treatment mechanism. However, the work was in slow pace and it may take long time to complete the project.

### **2.4.2 Recommendations of the Monitoring Committee.**

- i. NP Badhni Kalan shall increase number of machines to clear the site to make it available for construction of pond system to treat the sewage of the town within 10 days.**
- ii. NP Badhni Kalan shall connect all the ponds, containing untreated sewage of the town, to the pond system to be developed at the site within 01 month.**
- iii. NP Badhni Kalan shall ensure that pond system as remediation of wastewater may be completed by 30.09.2021 as earlier committed by it, failing which PPCB shall impose environmental compensation for delay in execution of treatment system.**
- iv. The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation and shall take up the matter with the concerned department for release of funds to lay irrigation network in a time bound manner.**
- v. Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Badhni Kalan because of its failure to install STP and in-situ remediation technology by 31.03.2021.**

## 2.5 Sewage Treatment Plant Dharmkot.

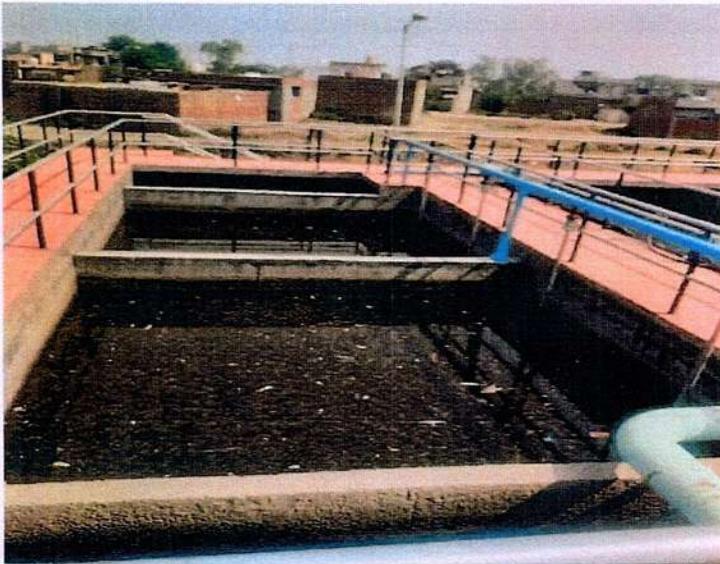
The population of Dharmkot town is 0.19 lakh as per census 2011 and present population is approx. 0.24 lakh and total discharge of sewage is 3 MLD and for treatment of sewage, STP of capacity 4 MLD, based on SBR technology, has been installed, which was in operation at the time of visit. The Photographs showing components of STP and dewatering mechanism are mentioned as per **plates 15 to 18**.



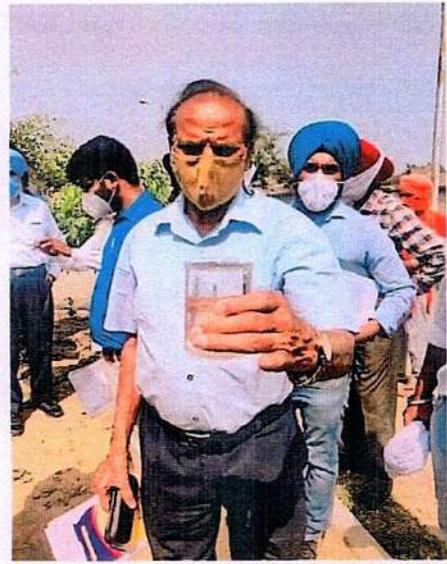
**Plate 15: Centrifuging system as dewatering mechanism for drying of secondary sludge**



**Plate 16: Aeration system in SBR basin**



**Plate 17: Other components of SBR**



**Plate 18: Beaker containing clear water after final treatment**

### 2.5.1 Observations of the Monitoring Committee.

- i. The secondary sludge generated from secondary clarifier was being dewatered in centrifuging system (dewatering system) and semi dried sludge was being collected at the bottom of the system and the same was found spread at the site.
- ii. The treated sewage is utilized for irrigation. The farmers present at site, informed that the quality of treated wastewater is suitable for irrigation as it is rich in nutrients and has reduced the cost of fertilizer and energy.
- iii. As per the analysis results of effluent samples collected by PPCB from March 2021 to June 2021, parameters namely pH, TSS, BOD & F.Coli. are within the prescribed norms.
- iv. Punjab Water Supply & Sewerage Board informed that no operation & maintenance charges of STP have been paid to the Board from the last 03 years for which the Monitoring Committee has taken a serious view.

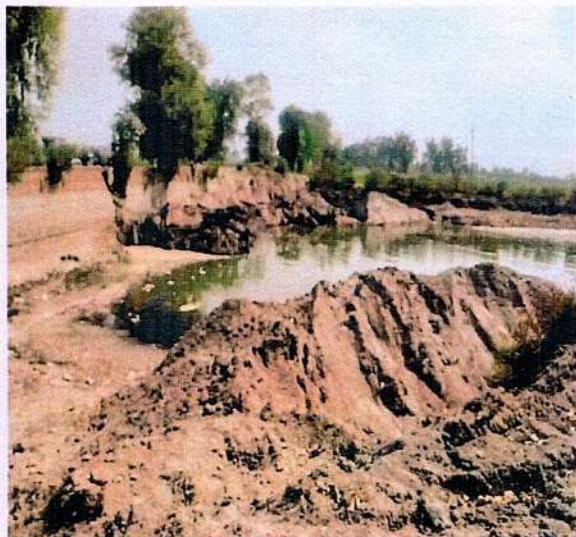
## 2.5.2 Recommendations of the Monitoring Committee

- i. MC Dharmkot shall release operation and maintenance charges of operation of STP for the last 03 years to Punjab Supply & Sewerage Board within 02 months.
- ii. Deputy Commissioner, Moga shall take up the matter with the Department of Local Govt. regarding paying of operation & maintenance charges of STPs regularly to the operator of the STPs so that these may remain in operation at all the times.
- iii. PWSSB, Department of Soil & Water Conservation and MC Dharmkot shall hold meeting with the farmers of nearby villages within 15 days apprising them about good quality of treated sewage of Dharmkot and educating them about utilisation of treated sewage of other STPs for irrigation purposes which may save the cost of manure and natural resources.

## 2.6 Remediation of wastewater of NP Fatehgarh Panjtoor

### 2.6.1 About sewage discharge and remediation system for wastewater

The population of Fatehgarh Panjtoor town is 0.05 lakh as per census 2011 and present population is approx. 0.06 lakh and total discharge of sewage is 0.76 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Fatehgarh Panjtoor submitted that necessary funds have been allotted for the construction of remediation system based on pond system. At the time of visit, the machinery was in operation to dewater the pond and but no significant progress was observed at site. It was informed that the untreated wastewater of the town is discharged at unknown places as there is no mechanism for discharge of sewage of the town. The photographs showing the operation of machinery for dewatering of pond are mentioned as per **plates 19 and 20**



**Plates 19 and 20: Photographs showing dewatering machine to dewater the pond to make available site for development of remediation of wastewater system in operation**

## 2.6.2 Recommendations of Monitoring Committee.

- i. **NP Fatehgarh Panjtoor shall dewater the pond within 07 days.**
- ii. **The construction of pond system as remediation of wastewater may be started within 10 days and the same may be completed by 30.09.2021 as earlier committed by it.**
- iii. **The Department of Soil & Water Conversation shall prepare irrigation scheme to utilize treated sewage for irrigation within 01 month and proposal may be sent to the concerned department for release of funds.**
- iv. **Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Fatehgarh Panjtoor because of its failure to install STP and in-situ remediation technology by 31.03.2021.**

## 2.7 Remediation of wastewater of NP Kot Ise Khan.

### 2.7.1 About sewage discharge and remediation system for wastewater

The population of Kot Ise Khan town is 0.13 lakh as per census 2011 and present population is approx. 0.17 lakh and total discharge of sewage is 1.88 MLD and no sewerage system has been provided in the town. The Executive Officer, Nagar Panchayat Kot Ise Khan submitted that necessary funds have been allotted for the construction of system for remediation of wastewater based on pond system. During visit, it was observed that excavation work of pond system was going on and machinery was in operation. The pond system may be constructed by 31.07.2021. The photographs showing excavation work for construction of pond system as remediation of wastewater in progress are mentioned as per **plates 21 and 22.**



**Plates 21 and 22: The photographs showing excavation work for construction of pond system as remediation of wastewater in progress.**

### 2.7.2 Recommendations of Monitoring Committee.

- i. **Nagar Panchayat Kot Ise Khan shall construct and commission pond system as remediation of wastewater by 31.07.2021.**
- ii. **The Department of Soil & Water Conversation shall prepare irrigation scheme to utilize treated sewage for irrigation within 01 month and proposal may be sent to the concerned department for release of funds.**

- iii. Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Kot Ise Khan because of its failure to install STP and in-situ remediation technology by 31.03.2021.

**3.0 Other concerned issues of the District Moga**

- i. During discussion with the officers of the departments, it was observed that Municipal Councils / Nagar Panchayats have no technical manpower and as such, the monitoring of the installation of pond system as remediation mechanism may be done at higher level of District Authority with the help of technical personnel of PWSSB and therefore, the Chairman of the Monitoring Committee directed that Additional Deputy Commissioner (Urban Development) shall hold monthly meeting with all the Executive Officers of the Municipal Councils / Nagar Panchayats of the district and other concerned departments and sort out the issues which may obstruct the construction of remediation system as treatment mechanism in a time bound manner. The minutes of the meeting may be sent to the Monitoring Committee as well as concerned Regional Office of PPCB.

- ii. It was informed that 63 villages of district Moga are discharging their untreated wastewater into drains of district Moga, out of which 2 villages have provided treatment system, whereas, in case of 16 villages, the work of construction of treatment systems is in progress.

The Chairman of the Monitoring Committee directed that the Department of Panchayat shall take up the issue for treatment of wastewater of remaining villages of the District with Deputy Commissioner, Moga, within 10 days the Deputy Commissioner, Moga shall hold meeting within 15 days with Department of Panchayat and other concerned officers for early installation of treatment system for the remaining villages of the District and the treated wastewater of villages may be utilized for irrigation purposes. In the meantime, in-situ remediation technology may be set up in the drains carrying untreated wastewater of remaining villages and not connected to any treatment mechanism within 02 months.

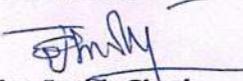
- iii. Punjab Pollution Control Board, Regional Office, Faridkot shall collect the effluent samples of STPs of the towns of District Moga in the month of September 2021 and analysis results be submitted to Monitoring Committee before 7.10.2021.

  
Dr. Babu Ram

Sd/-

Sant Balbir Singh Seechewal

  
S.C Agrawal

  
**Justice Jasbir Singh**  
Former Judge,  
Punjab and Haryana High Court  
and now as Chairman of the Monitoring  
Committee

**ANNEXURE -1**

**List of Officials present during visit of NGT monitoring committee in District Moga on 09.07.2021**

1.	Sh. Surinder Singh, PCS, ADC (Urban Development), Moga
2.	Er. Rajiv Goyal, Senior Environmental Engineer, PPCB, Zonal Office, Bathinda
3.	Er. Ramandeep Singh, Environmental Engineer, PPCB, Regional Office, Faridkot
4.	Er. Iqbal Singh, Executive Engineer, Punjab Water Supply & Sanitation Board, Baghapurana
5.	Er. Parul Goyal, Executive Engineer, Punjab Water Supply & Sewerage Board, Moga
6.	Er. Kartik jindal, Executive Engineer, Punjab Water Supply & Sanitation Board, Moga
7.	Er. Daljeet Singh, Assistant Environmental Engineer, PPCB, Regional Office, Faridkot
8.	Er. Aushpreet Singh, Assistant Environmental Engineer, PPCB, Regional Office, Faridkot
9.	Er. Maninder Singh, Assistant Executive Engineer, Punjab Water Supply & Sanitation Board, Moga
10.	Er. Gurdas Singh, Sub Divisional Officer, Deptt. of Panchayati Raj, Moga
11.	Mr. Sandeep Singh, Soil Conservation Officer, Moga
12.	Mrs. Sharanjeet Kaur, Executive Officer, Nagar Panchayat, Fathegarh Panjtoor & Kot ise khan
13.	Mr. Davinder Singh, Executive Officer, Municipal Council, Baghapurana & Dharamkot, Nagar Panchayat, Badhni Kalan
14.	Mr. Rajinder Singh Kalra , Executive Officer, Nagar Panchayat, Nihal Singh Wala

## OFFICE OF THE MONITORING COMMITTEE

Constituted by the Hon'ble National Green Tribunal in OA No. 360 of 2018 in the matter Shree Nath Sharma Vs Union of India & Ors and other Environmental issues.

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex,  
Sector 68, SAS Nagar) Tel. No. 0172-2298091  
Email: ceeswm606@gmail.com

To

The Deputy Commissioner,  
Moga

No. CMC/2021/236  
Dated: 7.10.2021

**Subject: Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and ors. - Visit to the plants for remediation of wastewater of the towns of District Moga by the Monitoring Committee, constituted by Hon'ble National Green Tribunal, on 05.10.2021.**

\*\*\*

Please find enclosed herewith a report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and ors. - Visit to the plants for remediation of wastewater of the towns of District Moga by the Monitoring Committee, constituted by Hon'ble National Green Tribunal, on 05.10.2021 for your kind information and necessary action.

It is requested that the concerned officer/official of District Administration may be directed to convey the report of the Monitoring Committee to all the Concerned Departments with the request to take immediate action on the recommendations made/directions given on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee within 15 days.

DA/-as above

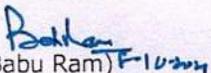
  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/237

Dated: 7.10.2021

A copy is forwarded to the Member Secretary, Punjab Pollution Control Board, Patiala for information and necessary action.

DA/-as above

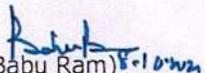
  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/238

Dated: 7.10.2021

A copy is forwarded to the Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda for information and necessary action.

DA/-as above

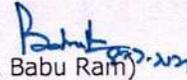
  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/239.

Dated: 7.10.2021

A copy is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, Faridkot for information and necessary action.

DA/-as above



(Dr. Babu Ram)

Technical Expert,  
Monitoring Committee

**Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and ors. - Visit to the plants for remediation of wastewater of the towns of District Moga by the Monitoring Committee, constituted by Hon'ble National Green Tribunal, on 05.10.2021.**

**1.0 Background**

The Hon'ble National Green Tribunal while considering the issue of remedial action for violation of the environmental norms due to discharge of untreated sewage and effluent into drains or other water bodies in Fazilka district has considered the report of the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, submitted to the Hon'ble Tribunal on 10.03.2021. The Hon'ble National Green Tribunal has passed the detailed order on 09.06.2021 in O.A. No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & Others, the relevant para no. 5 of which is reproduced as under:-

**Para 5.**

"None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we direct the State of Punjab to take further remedial action in terms of above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the Next date by email at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF / OCR support PDF and not in the form of image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of the monitor Sutlej River, the Committee may continue to function for operating other compliances in terms of specific orders of this tribunal.

**2.0 Visit to plants for remediation of wastewater of the towns of District Moga as part of compliance of recommendations of the Monitoring Committee as mentioned in order dated 9.6.2021 in OA No.596 of 2019 in the Matter of Vikram Ahuja vs State of Punjab and ors.**

The following were present during the visit:

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

<b>Sr. No.</b>	<b>Name &amp; Designation of authority/officer in the department</b>	<b>Designation in the Monitoring Committee</b>
1	Sant Balbir Singh Sechewal	Member
2	Dr. Babu Ram, Former Member Secretary	Technical Expert

**b) List of the officers present during the visit is as per Annexure-1.**

**2.1 Remediation of wastewater of NP Nihal Singh Wala.**

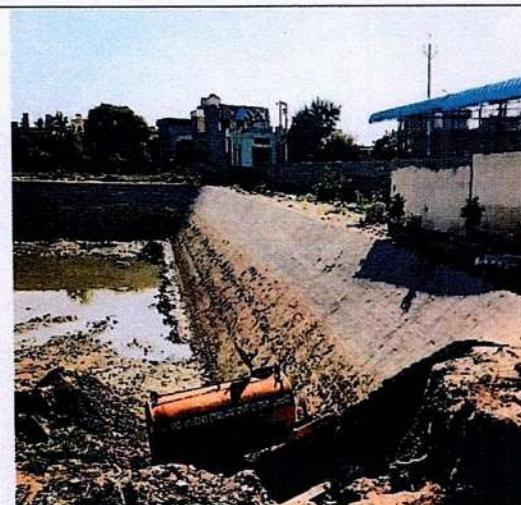
During the last visit of the Monitoring Committee, constituted by the National Green Tribunal made on 09.07.2021, the Monitoring Committee had made the following recommendations:-

- i. NP, Nihal Singh Wala shall accelerate the construction work of 6 ponds system and it may be completed without further delay.**
- ii. The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of the town for irrigation within 01 months.**
- iii. Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Nihal Singh Wala because of its failure to install STP and in-situ remediation technology by 31.03.2021.**

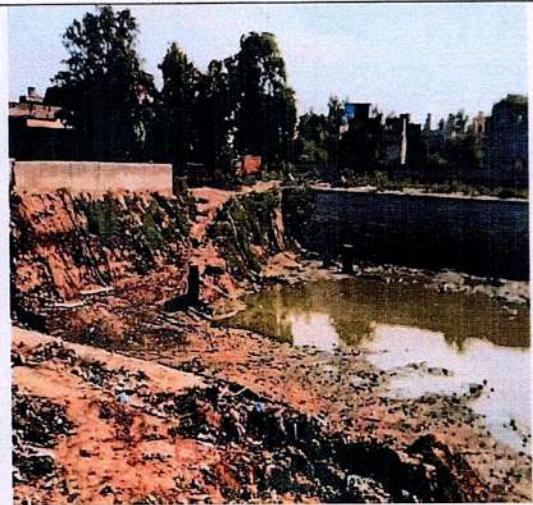
**2.1.1 Visit to the Treatment facility to treat the waste water of NP, Nihal Singh Wala on 05.10.2021**

The Monitoring Committee in the presence of officers of various departments including Punjab Pollution Control Board, visited the treatment facility to treat the wastewater of NP, Nihal Singh Wala on 05.10.2021 and the following observations were made:-

- i. NP, Nihal Singh Wala has constructed one pond. However, one of the wall of pond was found damaged due to the rain as informed by representative of NP.
- ii. The Monitoring Committee was informed that the pond shall be converted into six chambers by constructing brick walls in the pond to work as six ponds treatment system.
- iii. The representative of the Nagar Panchayat, Nihal Singh Wala informed that six pond systems shall be constructed within 1½ month.
- iv. Department of Soil & Water Conservation informed that the estimate of the project for laying of irrigation network to utilize the treated sewage for irrigation shall be prepared within 01 month.
- v. The photographs showing the status of construction of pond to treat wastewater of the Nagar Panchayat, Nihal Singh Wala are mentioning as per **Plates- 1 & 2.**



**Plate-1: Photograph showing pond with three Pucca walls.**



**Plate-2: Photograph showing pond with damaged fourth wall.**

### **2.1.2 Recommendations of the Monitoring Committee**

- i. The Nagar Panchayat, Nihal Singh Wala shall expedite the construction work of six ponds system and shall ensure that it may be completed by 31.10.2021.**
- ii. Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.**
- iii. Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount because of failure of the Nagar Panchayat, Nihal Singh Wala for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.**

### **2.2 Remediation of wastewater of NP Badhni Kalan**

During the last visit of the Monitoring Committee, constituted by the National Green Tribunal made on 09.07.2021, the Monitoring Committee had made the following recommendations:-

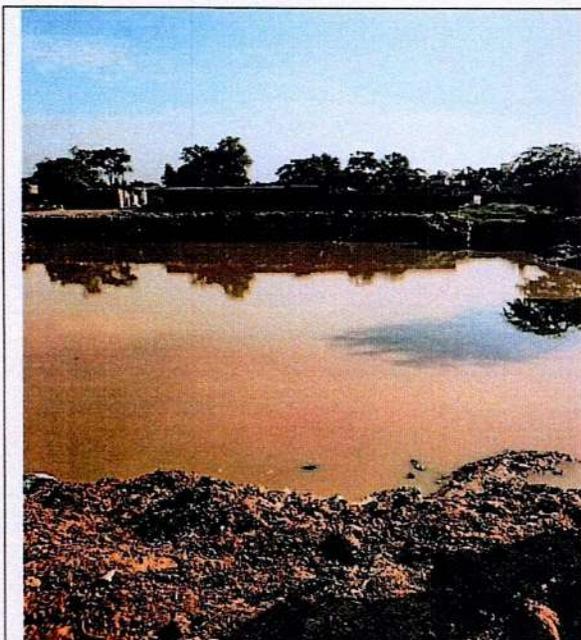
- i. NP Badhni Kalan shall increase number of machines to clear the site to make it available for construction of pond system to treat the sewage of the town within 10 days.**
- ii. NP Badhni Kalan shall connect all the ponds, containing untreated sewage of the town to the pond system to be developed at the site within 01 month.**
- iii. NP Badhni Kalan shall ensure that pond system as remediation of wastewater may be completed by 30.09.2021 as earlier committed by it, failing which PPCB shall impose environmental compensation for delay in execution of treatment system.**
- iv. The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation and shall take up the matter with the concerned department for release of funds to lay irrigation network in a time bound manner.**
- v. Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Badhni Kalan because of its failure to install STP and in-situ remediation technology by 31.03.2021.**

#### **2.2.1 Visit to the Treatment facility to treat the waste water of NP, Badhni Kalan on 05.10.2021**

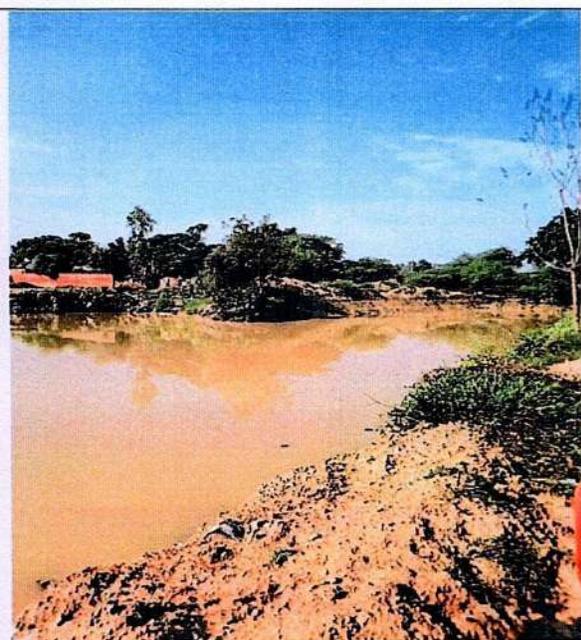
 The Monitoring Committee in the presence of officers of various departments including Punjab Pollution Control Board, visited the treatment facility to treat the wastewater of NP, Badhni Kalan on 05.10.2021 and the following observations were made:-

- i. The Nagar Panchyat has constructed one pond, whose walls were Katcha and it was found filled with rain water as informed by the representative of the Nagar Panchayat.**
- ii. It was further informed that the pond shall be converted into six chambers to work as six ponds system. The system shall be made operational within one month.**

- iii. The department of Soil & Water Conservation informed that the estimate of the project for laying of irrigation network to utilize the treated sewage for irrigation shall be prepared within one month.
- iv. The photographs showing the status of construction of pond to treat wastewater of the Nagar Panchayat, Badhni Kalan are mentioning as per **Plates- 3 & 4.**



**Plate-3: Photographs showing Katcha pond with Katcha walls filled with rain water.**



**Plate-4: Photographs showing Katcha pond with Katcha walls filled with rain water.**

### 2.2.2 Recommendations of Monitoring Committee

- i. **The Nagar Panchayat, Badhni Kalan shall expedite the construction work of six ponds system and shall ensure that it may be completed by 31.10.2021.**
- ii. **Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.**
- iii. **Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount because of failure of the Nagar Panchayat, Badhni Kalan for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.**

### 2.3 Remediation of wastewater of NP Fatehgarh Panjtoor

During the last visit of the Monitoring Committee, constituted by the National Green Tribunal made on 09.07.2021, the Monitoring Committee had made the following recommendations:-

- i. **NP Fatehgarh Panjtoor shall dewater the pond within 07 days.**
- ii. **The construction of pond system as remediation of wastewater may be started within 10 days and the same may be completed by 30.09.2021 as earlier committed by it.**
- iii. **The Department of Soil & Water Conversation shall prepare irrigation scheme to utilize treated sewage for irrigation within 01 month and**

proposal may be sent to the concerned department for release of funds.

- iv. **Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Fatehgarh Panjtoor because of its failure to install STP and in-situ remediation technology by 31.03.2021.**

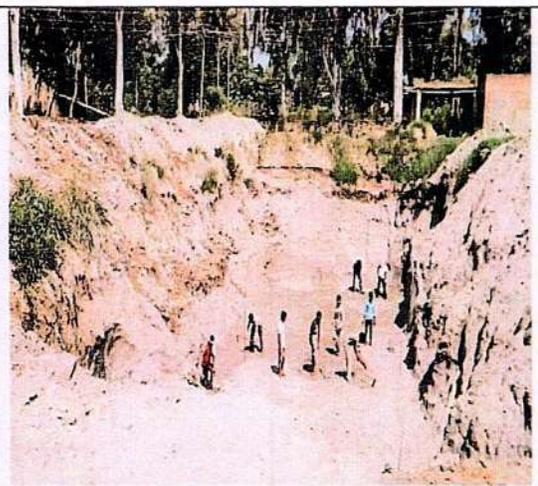
### 2.3.1. Observations of the Monitoring Committee

The Monitoring Committee in the presence of officers of various departments including Punjab Pollution Control Board, visited the treatment facility to treat the wastewater of NP, Fatehgarh Panjtoor on 05.10.2021 and the following observations were made:-

- i. The Nagar Panchyat, Fatehgarh Panjtoor has started the excavation work of pond system in the adjoining area to the existing pond from where dewatering was being done during the last visit made on 09.07.2021. It was informed that the bottom of the pond shall be made Pucca with cement concrete and thereafter treatment system based on Seechewal model shall be constructed for which period of 01 month is required.
- ii. The department of Soil & Water Conservation informed that the estimate of the project for laying of irrigation network to utilize the treated sewage for irrigation shall be prepared within 01 month.
- iii. Punjab Water Supply & Sewerage Board informed that tender for the installation of main sewerage system and STP has been opened and is under process.
- iv. The photographs showing the status of construction of pond to treat wastewater of the Nagar Panchayat, Fatehgarh Panjtoor are mentioning as per **Plates- 5 & 6.**



**Plate-5: Photograph showing existing pond adjoining to new treatment system where excavation work has been started.**



**Plate-6: Photograph showing new treatment system under excavation.**

### 2.3.2. Recommendations of Monitoring Committee

- i. **The Nagar Panchayat, Fatehgarh Panjtoor shall expedite the construction work of treatment facility and shall ensure that it may be completed by 31.10.2021.**
- ii. **Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.**

- iii. **Punjab Water Supply & Sewerage Board shall complete the work of laying of sewerage network and installation of STP to treat the sewage of the town in a time bound manner.**
- iv. **Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount on Nagar Panchayat, Fatehgarh Panjtoor because of its failure for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.**

#### **2.4 Remediation of wastewater of NP Kot Ise Khan.**

During the last visit of the Monitoring Committee, constituted by the National Green Tribunal made on 09.07.2021, the Monitoring Committee had made the following recommendations:-

- i. **Nagar Panchayat Kot Ise Khan shall construct and commission pond system as remediation of wastewater by 31.07.2021.**
- ii. **The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize treated sewage for irrigation within 01 month and proposal may be sent to the concerned department for release of funds.**
- iii. **Punjab Pollution Control Board shall start the process of imposing environment compensation on NP Kot Ise Khan because of its failure to install STP and in-situ remediation technology by 31.03.2021.**

##### **2.4.1. Observations of the Monitoring Committee**

The Monitoring Committee in the presence of officers of various departments including Punjab Pollution Control Board, visited the treatment facility to treat the wastewater of NP, Kot Ise Khan on 05.10.2021 and the following observations were made:-

- i. The Nagar Panchyat, Kot Ise Khan has constructed brick masonry circular tanks so called treatment system based on Seechewal Model. These circular tanks have been constructed on Pucca platform. It was claimed that the treatment system based on Seechewal model shall be made operational within 01 month.
- ii. The department of Soil & Water Conservation informed that the estimate of the project for laying of irrigation network to utilize the treated sewage for irrigation shall be prepared within one month.
- iii. Punjab Water Supply & Sewerage Board informed that tender for the installation of main sewerage system and STP has been called and the same shall be opened on 14.10.2021.
- iv. The photographs showing the status of construction of brick masonry circular tanks as treatment system are mentioned as per **Plates- 7 & 8.**



Plate-7: Photograph showing under construction brick masonry circular tanks as treatment system

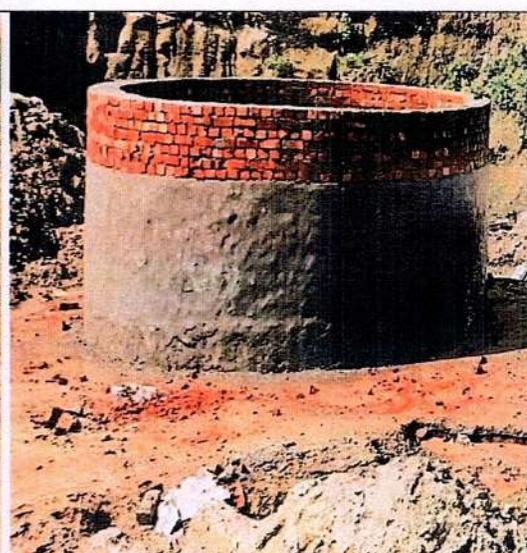
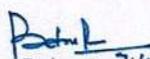


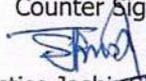
Plate-8: Photograph showing under construction brick masonry circular tanks as treatment system

#### 2.4.2 Recommendations of the Monitoring Committee

- i. The Nagar Panchayat, Kot Ise Khan shall expedite the construction work of treatment facility and shall ensure that it may be made operational by 31.10.2021.
- ii. Department of Soil & Water Conservation shall prepare detailed irrigation scheme mentioning the command area for utilization of treated sewage of the town for irrigation within 15 days.
- iii. Punjab Water Supply & Sewerage Board shall complete the work of laying of sewerage network and installation of STP to treat the sewage of the town in a time bound manner.
- iv. Punjab Pollution Control Board shall impose Environmental Compensation of suitable amount on Nagar Panchayat, Kot Ise Khan because of its failure for installation of STP by 31.03.2021 and in-situ remediation technology by 31.03.2020.

  
Dr. Babu Ran 2.10.2021

  
Sant Balbir Singh Seechewal

Counter Signed  
  
Justice Jasbir Singh,  
Former Judge, Punjab and  
Haryana High Court and now as  
Chairman of the Monitoring Committee

## OFFICE OF THE MONITORING COMMITTEE

Constituted by the Hon'ble National Green Tribunal in OA No. 360 of 2018 in the matter Shree Nath Sharma Vs Union of India & Ors and other Environmental issues.

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex,  
Sector 68, SAS Nagar) Tel. No. 0172-2298091  
Email: ceccswm606@gmail.com

To

The Deputy Commissioner,  
Sri Muktsar Sahib.

No. CMC/2021/161  
Dated: 19.8.2021

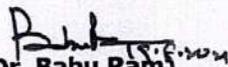
**Subject: Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns of District Sri Muktsar Sahib on 18.8.2021.**

\*\*\*

Please find enclosed herewith a report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns of District Sri Muktsar Sahib on 18.8.2021 for your kind information and necessary action.

It is requested that the concerned officer/official of District Administration may be directed to convey the report of the Monitoring Committee to all the Concerned Departments with the request to take immediate action on the recommendations made/directions given on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee within 15 days.

DA/-as above

  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/162

Dated: 19.8.2021

A copy is forwarded to the Member Secretary, Punjab Pollution Control Board, Patiala for information and necessary action.

DA/-as above

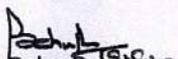
  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/163

Dated: 19.8.2021

A copy is forwarded to the Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda for information and necessary action.

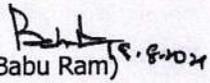
DA/-as above

  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/164

Dated: 19.8.2021

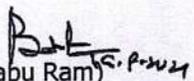
A copy is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, Bathinda for information and necessary action. He is requested to get the compliance report on the directions given/recommendations made by the Monitoring Committee on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee in a time bound manner.  
DA/-as above

  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/165

Dated: 19.8.2021

A copy is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, Faridkot for information and necessary action.  
DA/-as above

  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

**Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns of District Sri Muktsar Sahib on 18.8.2021.**

### **1.0 Background**

The Hon'ble National Green Tribunal while considering the issue of remedial action for violation of the environmental norms due to discharge of untreated sewage and effluent into drains or other water bodies in Fazilka district, has considered the report of the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, submitted to the Hon'ble Tribunal on 10.03.2021. The Hon'ble National Green Tribunal has passed the detailed order on 09.06.2021 in O.A. No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & Others, the relevant para no. 5 of which is reproduced as under.

#### **Para 5.**

**"None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we direct the State of Punjab to take further remedial action in terms of above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the Next date by email at judicial-ngt@gov.in preferably in the form of searchable PDF / OCR support PDF and not in the form of image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of the monitor Sutlej River, the Committee may continue to function for operating other compliances in terms of specific orders of this tribunal.**

**2.0 Visit to sewage treatment plants for the treatment of wastewater of the towns of District Sri Mukatsar Sahib as part of compliance of recommendations of the Monitoring Committee as mentioned in order dated 9.6.2021 in OA No.596 of 2019 in the Matter of Vikram Ahuja vs State of Punjab and ors.**

The following were present during the visit :

#### **a) Members of the Monitoring Committee.**

<b>Sr. No.</b>	<b>Name &amp; Designation of authority/officer in the department</b>	<b>Designation in the Monitoring Committee</b>
1	Justice Jasbir Singh, Former Judge, Punjab & Haryana High Court	Chairman
2	Sh. Subodh Agrawal, Former Chief Secretary, Punjab	Senior Member
3	Sant Balbir Singh Seechewal	Member
4	Dr. Babu Ram, Former Member Secretary, PPCB	Technical Expert

**b) List of the officers, present during the visit, is as per Annexure-1.**

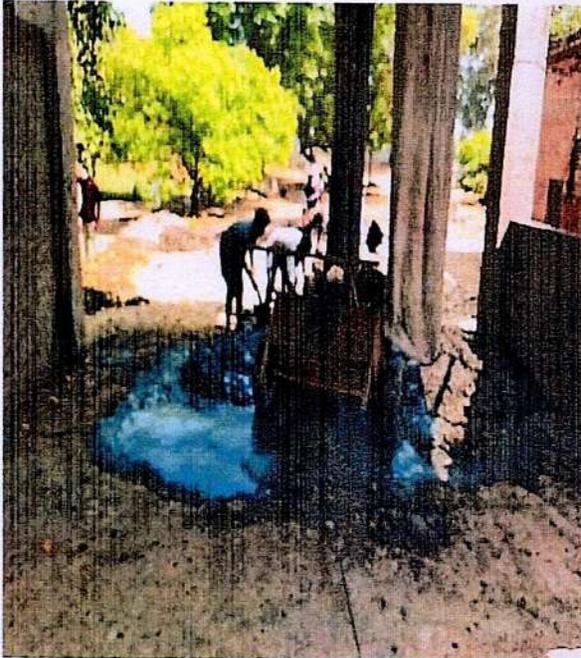
### **2.1 Sewage Treatment Plant of capacity 7 MLD at Gidderbaha**

Population of Gidderbaha town is 0.46 lakh as per census 2011 and present population is approx. 0.56 lakh and total discharge of sewage is 7 MLD and for treatment of sewage, STP of capacity 7 MLD, based on MBBR technology, has been installed, which was in operation at the time of visit.

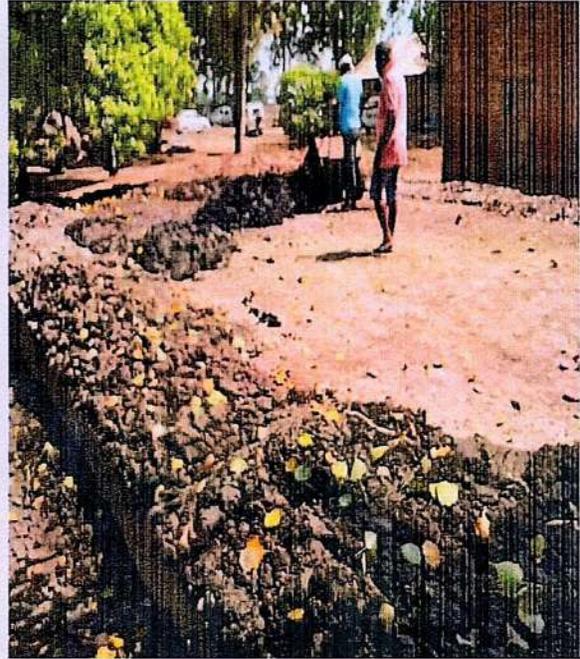
#### **2.1.1 Observations of the Monitoring Committee**

- i. For treatment of sewage of Gidderbaha town, MC Gidderbaha has installed STP of capacity 7 MLD, which was in operation at the time of visit.
- ii. The treated effluent is discharged into Babania drain, which further leads to Malout drain.
- iii. As per the analysis results of effluent samples collected by PPCB from March 2021 to July 2021, parameters namely pH, TSS, BOD & F.Coli. are within the prescribed norms except high value of F.Coli (1100 MPN/100 ml against permissible limits of 1000 MPN/100 ml) parameter in the month of June, 2021.
- iv. Sludge generated from the secondary clarifier is de-watered in centrifugal system, which was semi dried containing about 70 % moisture content. The record shown to the Monitoring Committee indicates that quantity of secondary sludge generated from operation of STP is varying from 1 - 1.5 TPD. However, no record was maintained regarding lifting and final disposal of said semi dried sludge.
- v. Primary sludge, containing inorganic constituents produced from bar screen, grit chamber and other primary components, was also found lying on Katcha ground for which, PWSSB was asked to provide Pucca platform for the storage of the primary sludge and thereafter dried primary sludge may be disposed of in an environmentally sound manner.
- vi. The department of Soil & Water Conservation informed that project costing Rs. 3.0 crores has been prepared for utilization of treated sewage of STP for irrigation. The command area of the agriculture land under irrigation shall be 600 acres.
- vii. PWSSB informed to the Monitoring Committee that electricity charges, amounting to Rs. 12.0 crores for operation of STP, have not been paid to PSPCL due to financial problem.
- viii. PPCB has collected the effluent samples of STPs from various points and the same have been sent to the lab. for analysis of various parameters.

The photographs showing primary sludge, secondary sludge, aeration chamber and treated effluent quality are mentioned as per **Plates 1 to 4.**



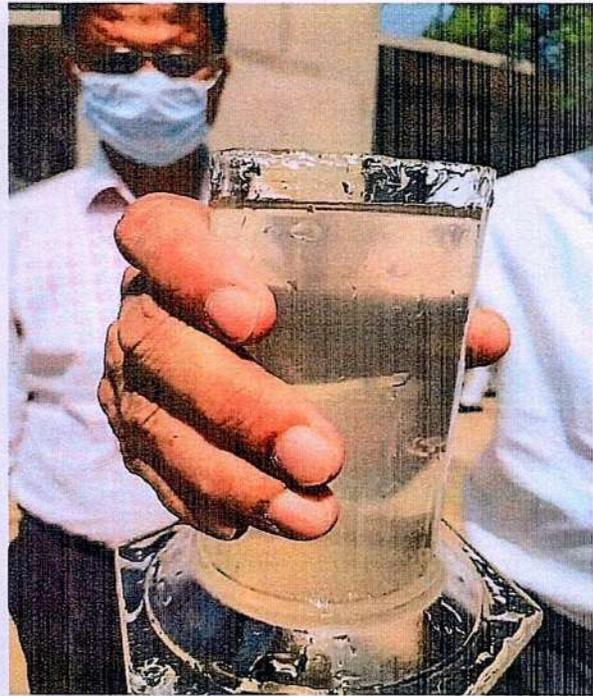
**Plate 1: Primary Sludge of STP**



**Plate 2 : Secondary Sludge of STP**



**Plate 3: Aeration chamber**



**Plate 4: Treated Wastewater quality**

### **2.1.2 Recommendations of the Monitoring Committee**

- i) **The secondary sludge generated from secondary clarifier of STP is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system contains lot of moisture and such type of sludge with high moisture content may not be allowed to be disposed of in low lying area as it may contaminate the underground water and even the farmers may not like to lift and use such type of sludge into their fields as manure.**

**Therefore, the Monitoring Committee recommends that Municipal Council, Gidderbaha shall either provide sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its**

sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.

- ii) For the utilization of treated sewage for irrigation, during visit, it was submitted that the Department of Soil & Water Conservation has prepared irrigation scheme costing Rs. 3 crore to lay irrigation network, covering a command area of 600 acres. The department has requested its higher authorities for early release of funds so as to enable it to lay irrigation network in a time bound manner.

The Monitoring Committee recommends that the Department of Soil & Water Conservation shall approach Deputy Commissioner, Sri Muktsar Sahib for early release of funds and the Deputy Commissioner, Sri Muktsar Sahib shall take up the matter with the Department of Finance for the same so that irrigation scheme to utilize the treated sewage of Gidderbaha town for irrigation may be laid in a time bound manner.

- iii) Regarding release of funds amounting to Rs. 12.0 crore to be paid to PSPCL, as electricity charges for operation of STP, PWSSB shall take up the matter with the Principal Secretary, Department of Urban Local Body for early release of funds so that the functioning of STP may not be hampered.
- iv) PWSSB, Department of Soil & Water Conservation, MC, Gidderbaha and PPCB shall jointly conduct IEC activities to educate the farmers of nearby villages to utilize the treated sewage for irrigation. Such IEC activities may be carried out atleast twice in a year.
- v) PWSSB shall maintain proper record regarding generation of primary and secondary sludge generated during the operation of STP, registration number of the vehicle used for transportation of sludge and mode of disposal of primary as well as secondary sludge.
- vi) PWSSB shall construct a Pucca platform for storage of primary sludge for its proper management before its final disposal. The said activity may be completed within 15 days.

## **2.2 Sewage Treatment Plants of capacity 10 MLD (MBBR) and 3 MLD (WSP) at Malout**

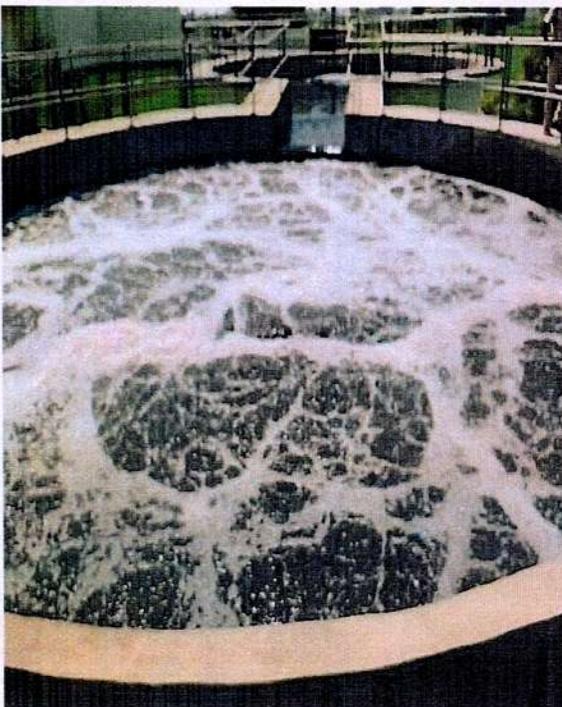
Population of Malout town is 0.81 lakh as per census 2011 and present population is approx. 0.90 lakh and total discharge of sewage is 20 MLD and for treatment of sewage, STPs of capacity 10 MLD, based on MBBR technology and 3 MLD based on WSP technology, have been installed, which were in operation at the time of visit.

### **2.2.1 Observations of the Monitoring Committee with regard to 10 MLD STP based on MBBR technology**

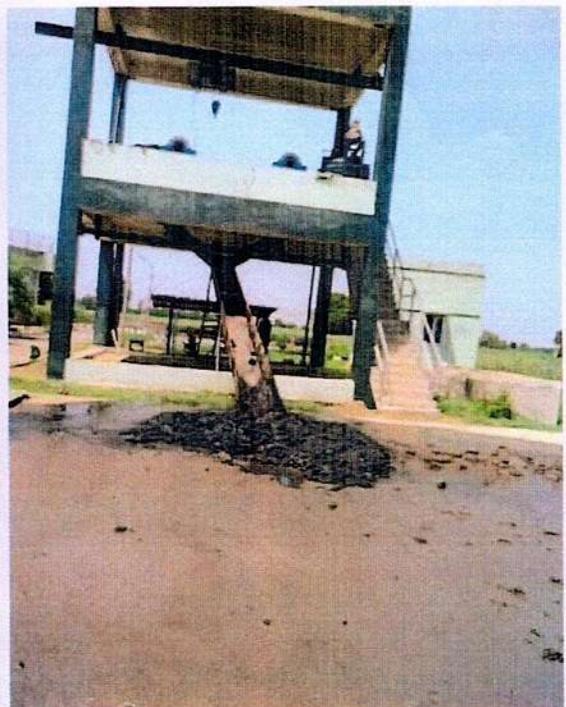
- i. STP of capacity 10 MLD is based on MBBR technology, which consists of primary treatment system, anoxic tank and MBBRs (2 nos. in parallel) followed by secondary clarifier and all the components of STP were in operation.

- ii. PPCB has collected the effluent samples of STP and the samples have been sent to PPCB laboratory for analysis of various parameters.
- iii. The treated effluent is discharged into Malout drain, which further leads to Sabuana drain.
- iv. As per the analysis results of effluent samples collected by PPCB from March 2021 to July 2021, parameters namely pH, TSS, BOD & F.Coli. are within the prescribed norms for the month of April, 2021, May, 2021 & July, 2021, whereas, the effluent samples were not meeting with the prescribed standards w.r.t. F.Coli parameter for the month March, 2021 and June, 2021.
- v. Sludge generated from the secondary clarifier is de-watered in centrifugal system, which was containing lot of moisture content and the effluent generated after dewatering system was found stagnating onto land adjoining to centrifuging system, whereas, it should have been discharged into influent collection tank. For further drying of sludge, 4 no. sludge drying beds have been provided, which were insufficient to dry the sludge properly and PWSSB needs to provide more sludge drying beds.
- vi. Primary sludge, containing inorganic constituents, produced from bar screen, grit chamber and other primary components, was also found lying on Katcha ground for which, PWSSB was asked to provide Pucca platform for the storage of the primary sludge and thereafter dried sludge may be disposed off in an environmentally sound manner.
- vii. The sewage generation of the town is 20 MLD, whereas, STPs of capacity 13 MLD have been installed and there is a gap of 7 MLD for which the DPR costing Rs. 10.78 crore has been prepared by PWSSB. Land for construction of STP has been acquired by the department.
- viii. The approach road leading to STP of capacity 10 MLD was Katcha & uneven and was not stabilized.

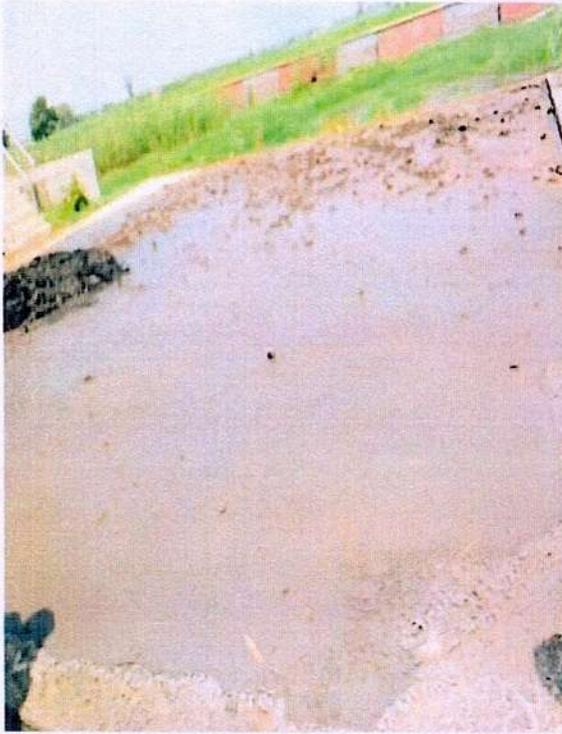
The photographs showing MBBR tank, secondary sludge, wastewater generated from dewatered sludge and treated effluent quality are mentioned as per **Plates 5 to 8**.



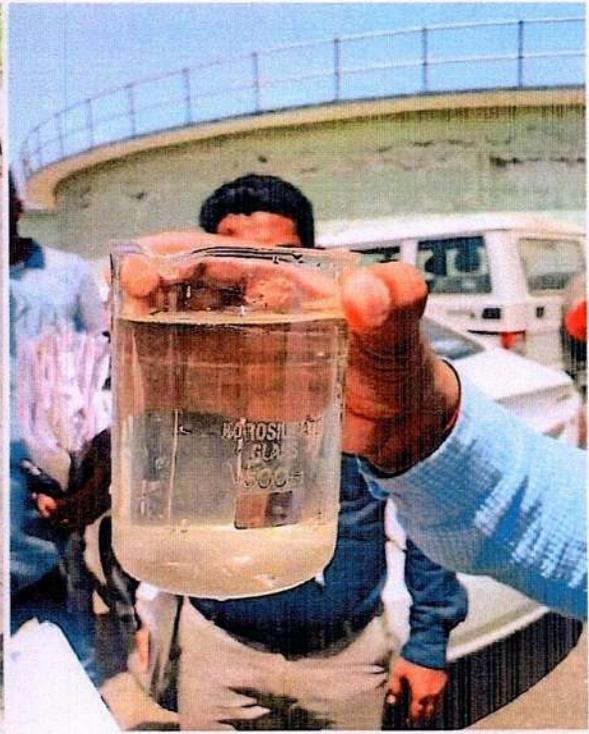
**Plate-5: MBBR tank**



**Plate-6: Secondary Sludge**



**Plate-7: Wastewater generated from Dewatered sludge**

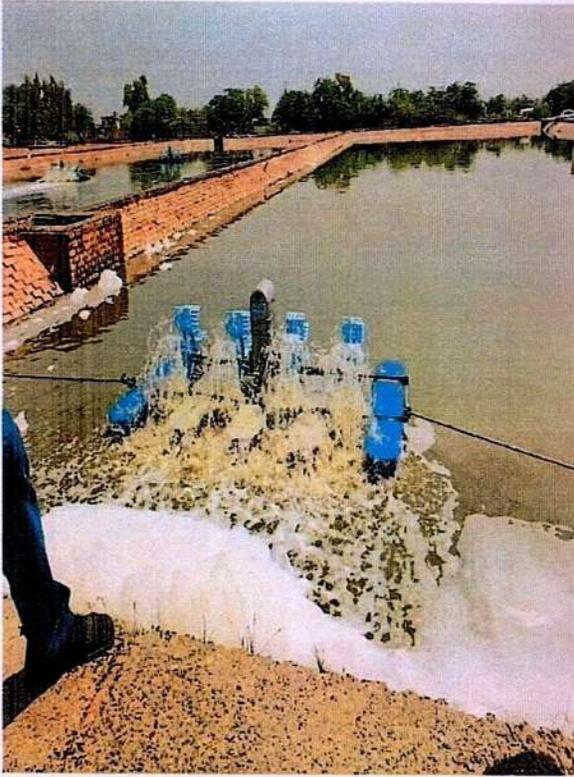


**Plate-8: Treated Wastewater quality**

### **2.2.2 Observations of the Monitoring Committee with regard to 3 MLD STP based on WSP technology**

- i. During the visit 3 MLD capacity STP, based on WSP technology, was in operation.
- ii. The treated sewage from STP is discharged into a link drain leading to Ena Khera drain further leading to Malout drain.
- iii. Most of the ponds of the STP require de-silting, which seems not been done for the long period.
- iv. PWSSB has installed solar based 3 aerators in 2 ponds to enhance the oxidation process of treatment system. The said technology has been set up recently on trial basis.
- v. In order to control F.Coli, it has started imparting chlorine dosing at the final outlet of STP and the said process has also started recently.
- vi. For the utilization of treated sewage for irrigation, the department of Soil & Water Conservation has laid irrigation network in command area of 300 acres. The treated sewage is being lifted from the last pond prior to chlorination dosing, whereas, a separate tank of adequate capacity may be provided for dosing of the chlorine to control F. Coli parameters.

Photographs showing solar based aerator (paddler aerator) and Chlorine dosing tank are mentioned as per **Plates 9 to 10**.



**Plate-9: Solar Based Aerator (Paddler Aerator)** **Plate-10: Chlorine Dosing Tank**

### 2.2.3 Recommendations of the Monitoring Committee

- i) The secondary sludge generated from secondary clarifier of 10 MLD capacity STP, based on MBBR technology, is taken into centrifuging system for dewatering but during visit, it was observed that the sludge generated from centrifuging system was found containing lot of moisture content and the effluent generated from dewatering of sludge was found stagnating adjoining to the system, which may contaminate the underground water. The farmers may not like to lift and use such type of sludge containing lot of moisture content into their fields as manure.

Therefore, the Monitoring Committee recommends as under:

- ✓ Municipal Council, Malout shall either provide more sludge drying beds of adequate capacity to dry the sludge to its optimum level or install new mechanism to dry its sludge effectively to its optimum level and the dried sludge may be utilized for agriculture fields as manure, for which the farmers may be educated and persuaded.
- ✓ The effluent generated from dewatering of secondary sludge may be taken into influent collection tank for its further treatment and the stagnation caused near the dewatering system may be removed within 7 days and photographs in this regard may be sent to PPCB, Regional Office, Bathinda.

- ii) PWSSB shall maintain proper record regarding generation of primary and secondary sludge generated during the operation of STP, registration number of the vehicles used for transportation of the sludge and mode of disposal of primary as well as secondary sludge.

iii) PWSSB shall construct a Pucca platform for storage of primary sludge for its proper management before its final disposal. The said activity may be completed within 15 days.

iv) The Monitoring Committee observed that the generation of sewage of Malout Town is about 20 MLD, whereas, STPs (2 Nos.) of capacity 13 MLD have been installed and there is a gap of 7 MLD, which is being discharged into the drain without any treatment and no steps have been taken to provide in-situ remediation technology for treatment of sewage till the STP for treatment of remaining quantity of sewage is installed.

The Monitoring Committee recommended that the PPCB shall impose environment compensation of suitable amount as cost of the damage caused to the environment due to discharge of untreated sewage into drainage system and affecting ecology and aquatic system.

v) As per the directions of the Hon'ble National Green Tribunal in OA No. 1069 of 2018 in the matter of Nitin Shanker Deshpande Vs Union of India & Others, it has directed that STPs may be installed to achieve stringent standards w.r.t. BOD, COD, TSS and other parameters. Such stringent standards may be achieved by providing such technology which may bring BOD less than 10 mg/l and probably SBR technology or any other latest best suited technology, which may be one of the best technology to achieve such stringent standards. Therefore, PWSSB may consider such technologies while finalizing the design of the STP.

vi) PWSSB shall de-silt ponds of 3 MLD capacity STP, based on WSP technology, within 01 month to improve the performance of the system.

vii) PWSSB shall construct a separate tank of adequate capacity for chlorine dosing to facilitate the department for lifting of treated sewage, conforming to norms for F. Coli parameter, for its utilization in the fields for irrigation.

viii) For the installation of additional STP of capacity 7 MLD (20 MLD – 13 MLD), Deputy Commissioner, Sri Muktsar Sahib shall hold meeting with PWSSB, MC, Malout and other concerned departments within 15 days and take up the matter with higher authorities for early release of funds for installation of said STP.

ix) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize its treated sewage of 10 MLD capacity STP and shall approach Deputy Commissioner, Sri Muktsar Sahib for early release of funds so that the same may be implemented in a time bound manner.

x) MC, Malout shall construct a bituminous / Pucca road, which is leading to STP of capacity 10 MLD in a time bound manner.

Note: As per the facts mentioned above, Municipal Council has caused enormous damage to the environment. There is half heartily compliance as required under the provisions of the Water Act, 1974. Despite the directions issued by the Hon'ble National Green Tribunal vide its order dated 22.8.2019 in OA No. 593 of 2017, no steps have been taken to remedy the same. Even in-situ remediation technology has

not been installed in the drain carrying untreated sewage and not connected to STP. Therefore, Punjab Pollution Control Board is bound to impose environmental compensation amounting to Rs. 5 Lakh per month per drain for default in in-situ remediation and Rs. 5 Lakh per STP for default in commencement of setting of the STP as mentioned in order dated 22.8.2019 in OA No. 593 of 2017 so that further damage can be avoided. PPCB, shall also realise the amount of environmental compensation to be imposed on the Municipal Council.

Deputy Commissioner, Sri Muktsar Sahib shall take up the matter with Chief Secretary, Punjab so that necessary scheme can be devised to treat sewage of the town.

### **2.3 Sewage Treatment Plants of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD installed for treatment of sewage of Sri Muktsar Sahib town**

Population of Sri Muktsar Sahib town is 1.16 lakh as per census 2011 and present population is approx. 1.25 lakh and total discharge of sewage is about 30 MLD.

In order to treat the sewage of the town, the department of Water Supply & Sanitation (DWSS) has installed 2 STPs of capacity 8.7 MLD and 3.5 MLD at Balamgarh Road and 3<sup>rd</sup> STP of capacity 5.7 MLD has been set up at Jalalabad Road. All the 3 STPs of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD are based on MBBR technology.

#### **2.3.1 Observations and recommendations of the Monitoring Committee**

- i) The Monitoring Committee observed that all the 3 STPs of capacity 8.7 MLD, 3.5 MLD and 5.7 MLD are lying defunct and the untreated sewage of 2 STPs (8.7 MLD & 3.5 MLD) is being discharged into sullage carrier leading to Chand Bhan drain, whereas, untreated sewage of 5.7 MLD STP, is being discharged into Sarainaga drain.
- ii) The STP of capacity 3.5 MLD was installed in the year 2008, whereas, the 2 STPs of capacity 8.7 MLD and 5.7 MLD were setup in the year 2013-14. The Chairman of the Monitoring Committee took a serious view when he came to know that all the 03 STPs had stopped functioning/ became defunct in a very short span of period. There appears to be a serious lapse on the part of the establishing / operating agency. Besides, the establishing / operating agency has not bothered to revive the functioning of the STPs and no steps have been taken in this regard so far.

The Monitoring Committee recommends that Deputy Commissioner, Sri Muktsar Sahib shall fix the responsibility of the concerned department / agency for becoming all the 03 STPs in a defunct stage in a very short period and not taking any step for revival of the same in a time bound manner and continue to discharge untreated sewage into drain.

- iii) PPCB shall impose environmental compensation of suitable amount on the establishing / operating agency as a cost of the damage caused to the environment due to discharge of untreated sewage into drains and affecting ecology and aquatic system.

- iv) PWSSB informed that estimate has been prepared for rehabilitation of all the 3 STPs of capacity 8.7 MLD, 5.7 MLD and 3.5 MLD along with operation and maintenance cost for 5 years. The Monitoring Committee recommended that these STPs may be revived in a time bound manner and shall ensure that no untreated sewage is discharged into drains. For this purpose, PWSSB shall submit timelines within 10 days for rehabilitation of all these STPs.
- v) PWSSB shall take up the matter with Deputy Commissioner, Sri Muktsar Sahib for early release of funds for rehabilitation of all the 3 STPs.
- vi) The present discharge of sewage of Sri Muktsar Sahib town is about 20 MLD, whereas, STPs of capacity 17.9 MLD have been installed and there is gap of about 2.5 MLD, for which new STP is required to be installed. PWSSB shall prepare DPR for installation of STP for the gap discharge within 01 month and install additional STP of adequate capacity in a time bound manner.
- vii) The Department of Soil & Water Conservation shall prepare irrigation schemes to utilize treated sewage of 3 STPs of capacity 8.7 MLD, 5.7 MLD and 3.5 MLD and shall approach Deputy Commissioner, Sri Muktsar Sahib for early release of funds so that the same may be implemented in a time bound manner.

Note: As per the facts mentioned above, Municipal Council has caused enormous damage to the environment. There is totally non-compliance of the provisions of the Water Act, 1974. Despite the directions issued by the Hon'ble National Green Tribunal vide its order dated 22.8.2019 in OA No. 593 of 2017, no steps have been taken to remedy the same. Even in-situ remediation technology has not been installed in the drains carrying untreated sewage and not connected to STPs. Therefore, Punjab Pollution Control Board is bound to impose environmental compensation amounting to Rs. 5 Lakh per month per drain for default in in-situ remediation and Rs. 5 Lakh per STP for default in commencement of setting of the STP as mentioned in order dated 22.8.2019 in OA No. 593 of 2017 so that further damage can be avoided. The Monitoring Committee was informed that CPCB vide its letter dated 28.7.2021 has issued show cause notice under section 5 of EPA, 1986 to impose environmental compensation of Rs. 15 Lakh for non compliance of STPs. Also, PPCB has imposed environmental compensation amounting to Rs. 45 Lakh for non compliance of STPs. PPCB, shall also realise the amount of environmental compensation from the Municipal Council.

Therefore, Deputy Commissioner, Sri Muktsar Sahib shall take up the matter with Chief Secretary, Punjab so that necessary scheme can be devised to treat sewage of the town.

Photographs showing various components of 8.7 MLD capacity STP in defunct stage have been mentioned as per Plates - 11 to 13. Plate -14 is showing untreated sewage flowing into sullage carrier.

Plates 11 to 14 are mentioned as under:

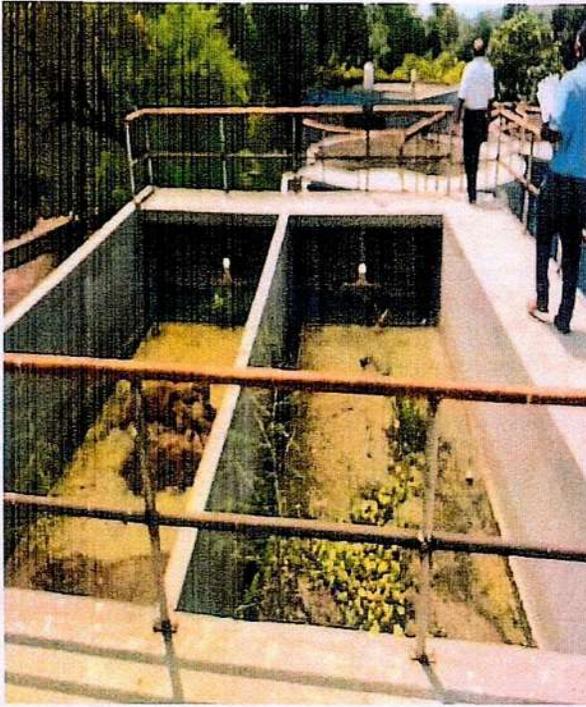


Plate-11: Defunct inlet chamber

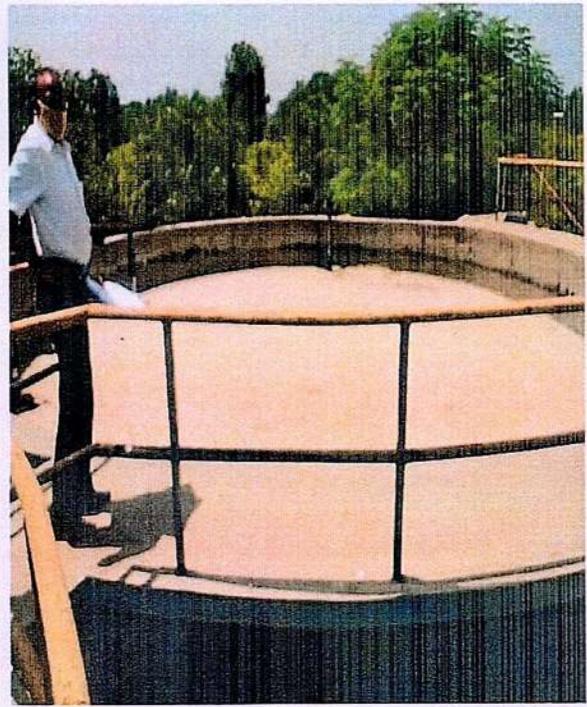


Plate-12: Defunct MBBR Tank



Plate-13: Defunct pumping system

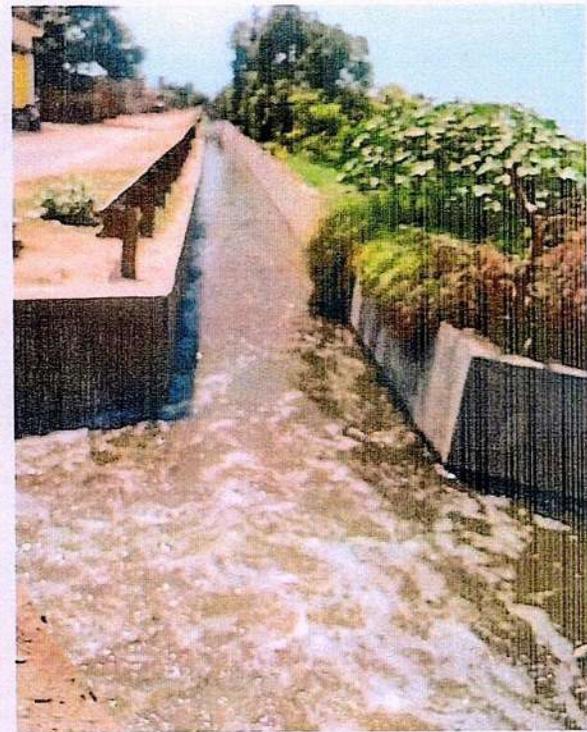


Plate-14: Untreated sewage flowing into sillage carrier leading to Chand Bhan drain.

## 2.4 Treatment of sewage of Nagar Panchayat, Bariwala

### 2.4.1 Background and Observations of the Monitoring Committee

- Re*
- i) Population of Bariwala town is 0.08 lakh as per census 2011 and present population is approx. 0.10 lakh and total discharge of sewage is about 2 MLD. Presently, no STP / treatment system or in-situ remediation has been installed by the Nagar Panchayat, Bariwala and untreated sewage is being discharged into Sarainaga drain.
  - ii) During the visit, PWSSB has shown map mentioning the location of various sites available for setting up of treatment facility.



road, Bariwala. However, the said land belongs to Mandi Board and inspite of their best efforts, the PWSSB is unable to avail the said land for setting up of the treatment facility.

- iv) It was informed that there are total 12 wards of Bariwala Nagar Panchayat including village area, out of which the wastewater of 9 wards is reaching to pumping house of Marketing Committee at Warring road, Bariwala, whereas, the wastewater of remaining 3 wards is collected in a pond situated along Chack Gadha Singh Wala road, which has needs to be treated in the treatment facility.
- v) PWSSB / NP, Bariwala has taken no steps for installation of in-situ remediation technology as directed by the Monitoring Committee during its last meeting held on 04.03.2021 at Moga.

#### **2.4.2 Recommendations of the Monitoring Committee :**

- i. **Deputy Commissioner, Sri Muktsar Sahib shall hold meeting with officers of Mandi Board, PWSSB, Nagar Panchayat, Bariwala and PPCB within 10 days so as to resolve the matter regarding availability of land for setting up of treatment facility to treat the sewage of Bariwala town.**
- ii. **PWSSB in coordination with Nagar Panchayat, Bariwala shall install in-situ remediation technology in the drain carrying untreated sewage at suitable location in a time bound manner as directed in the last meeting of Monitoring Committee held on 04.03.2021 at Moga.**
- iii. **The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of Nagar Panchayat, Bariwala and the same may be implemented in a time bound manner.**
- iv. **PWSSB shall separately take up the matter with the Deputy Commissioner, Sri Muktsar Sahib for early release of funds for laying sewerage network and installation of STP of adequate capacity to treat wastewater of Nagar Panchayat, Bariwala within 15 days and further Deputy Commissioner, Sri Muktsar Sahib shall take up the issue with Principal Secretary, Department of Local Government for release of funds for said work within 01 month.**
- v. **PPCB shall impose environmental compensation of suitable amount on Nagar Panchayat, Bariwala as a cost of the damage caused to the environment due to discharge of untreated wastewater into drain and affecting ecology and aquatic system and shall realise the same from the concerned MC.**

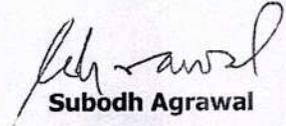
#### **2.5 General Recommendations:**

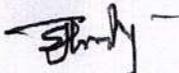
- i. **The department of Local Govt. / MCs shall release funds for operation and maintenance of STPs on regular basis so as to ensure the operation of STPs of the towns at all the times.**
- ii. **PPCB shall collect the effluent samples of operational STPs of the towns falling under the jurisdiction of district Sri Muktsar Sahib in the 2<sup>nd</sup> week of September, 2021 and analysis results may be provided to the Monitoring Committee in the 3<sup>rd</sup> week of September, 2021.**

- iii. **Additional Deputy Commissioner (Urban Development) shall be responsible for the proper treatment of sewage of all towns / cities falling in the district Sri Muktsar Sahib and thereafter utilization of treated wastewater onto land for irrigation / plantation.**

  
Dr. Babu Ram

sd/-  
SantBalbir Singh Seechewal

  
Subodh Agrawal

  
**Justice Jasbir Singh,**  
Former Judge, Punjab &  
Haryana High Court and now  
as Chairman of the Monitoring  
Committee

**Officers Present during visit of NGT Monitoring Committee to Sri Muktsar Sahib on 18.08.2021**

<b>Sr. No.</b>	<b>Name, Designation &amp; Department</b>
1	Sh. M.K. Aravind Kumar, IAS, Deputy Commissioner, Sri Muktsar Sahib
2	Sh. Gurjeet Singh, ADC (Urban Development), Sri Muktsar Sahib
3	Er. Rajeev Kumar Goyal, Senior Environmental Engineer, PPCB, Zonal Office, Bathinda
4	Er. Gurmeet Singh, Environmental Engineer, PPCB, Regional Office, Bathinda
5	Er. Ashiwani Kumar, Executive Engineer, PWSSB, Sri Muktsar Sahib
6	Er. Rakesh Mohan Makkar, SDO, PWSSB, Sri Muktsar Sahib
7	Sh. Jagmohan Singh, SDO, Soil Conservation, Gidderbaha, Distt. Sri Muktsar Sahib
8	Sh. Iqbal Singh Sidhu, SDO, Panchayati Raj, Sri Muktsar Sahib
9	Er. Manmohit Kumar, Junior Environmental Engineer, PPCB, Regional Office, Bathinda
10	Sh. Bipan Kumar, Executive Officer, Municipal Council, Sri Muktsar Sahib
11	Sh. Jagseer Singh, Executive Officer, Municipal Council, Gidderbaha
12	Sh. Vishal Deep, Executive Officer, Municipal Council, Malout
13	Sh. Narinder Kumar, Executive Officer, Nagar Panchayat, Bariwala
14	Sh. Kulwinder Singh, Accountant, Mandi Board, Bariwala

**OFFICE OF THE MONITORING COMMITTEE**

Constituted by the Hon'ble National Green Tribunal in OA No. 360 of 2018 in the matter  
Shree Nath Sharma Vs Union of India & Ors and other Environmental issues.

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex,  
Sector 68, SAS Nagar) Tel. No. 0172-2298091  
Email: cecswm606@gmail.com

To

The Deputy Commissioner,  
Faridkot.

No. CMC/2021/182  
Dated: 1.9.2021

**Subject: Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns of District Faridkot on 31.8.2021.**

\*\*\*\*\*

Please find enclosed herewith a report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns of District Faridkot on 31.8.2021 for your kind information and necessary action.

It is requested that the concerned officer/official of District Administration may be directed to convey the report of the Monitoring Committee to all the Concerned Departments with the request to take immediate action on the recommendations made/directions given on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee within 15 days.

DA/-as above

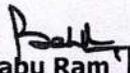
  
Dr. Babu Ram 1/9/2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/183

Dated: 1.9.2021

A copy is forwarded to the Member Secretary, Punjab Pollution Control Board, Patiala for information and necessary action.

DA/-as above

  
Dr. Babu Ram 1/9/2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/184

Dated: 1.9.2021

A copy is forwarded to the Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda for information and necessary action.

DA/-as above

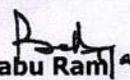
  
Dr. Babu Ram 1/9/2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/185

Dated: 1.9.2021

A copy is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, Faridkot for information and necessary action. He is requested to get the compliance report on the directions given/recommendations made by the Monitoring Committee on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee in a time bound manner.

DA/-as above

  
Dr. Babu Ram 1/9/2021  
Technical Expert,  
Monitoring Committee

**Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns of District Faridkot on 31.8.2021.**

### **1.0 Background**

The Hon'ble National Green Tribunal while considering the issue of remedial action for violation of the environmental norms due to discharge of untreated sewage and effluent into drains or other water bodies in Fazilka district, has considered the report of the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, submitted to the Hon'ble Tribunal on 10.03.2021. The Hon'ble National Green Tribunal has passed the detailed order on 09.06.2021 in O.A. No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & Others, the relevant para no. 5 of which is reproduced as under.

#### **Para 5.**

"None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we direct the State of Punjab to take further remedial action in terms of above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the Next date by email at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF / OCR support PDF and not in the form of image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of the monitor Sutlej River, the Committee may continue to function for operating other compliances in terms of specific orders of this tribunal".

**2.0 Visit to sewage treatment plants for the treatment of wastewater of the towns of District Faridkot as part of compliance of recommendations of the Monitoring Committee as mentioned in order dated 9.6.2021 in OA No.596 of 2019 in the Matter of Vikram Ahuja vs State of Punjab and ors.**

The following were present during the visit:

#### **a) Members of the Monitoring Committee.**

<b>Sr. No.</b>	<b>Name &amp; Designation of authority/officer in the department</b>	<b>Designation in the Monitoring Committee</b>
1	Justice Jasbir Singh, Former Judge, Punjab & Haryana High Court	Chairman
2	Sh. Subodh Agrawal, Former Chief Secretary, Punjab	Senior Member
3	Sant Balbir Singh Seechewal	Member
4	Dr. Babu Ram, Former Member Secretary, PPCB	Technical Expert

**b) List of the officers, present during the visit, is as per Annexure-1.**

## 2.1 Sewage Treatment Plant of capacity 14 MLD at Faridkot

### 2.1.1. Observations of the Monitoring Committee.

- Population of Faridkot town is 0.87 lakh as per census 2011 and present population is approx. 0.93 lakh
- Total discharge of sewage of the town is 9 MLD.
- For installation of STP of capacity 14 MLD, based on SBR technology, land has been purchased. Only boundary wall on two sides have been constructed and excavation/ foundation work of utility rooms has been started.
- No construction work of any component of STP has been started so far.
- PWSSB informed that STP shall be completed by 30.6.2022.
- Presently, the untreated sewage is discharged into Langana drain.
- Pipeline of diameter 1400 mm and 300 mtrs. length has been laid. Total length of pipeline to be laid is 1100 mtrs.

The photographs showing the status of boundary wall, administrative block and site without any component of STP are mentioned as per **Plates 1 to 2.**



**Plate-1: Photograph showing boundary wall constructed on two sides of STP site**



**Plate-2: Photograph showing excavation work started for utility rooms.**

### 2.1.2 Recommendations of the Monitoring Committee

- PWSSB shall start construction work of STP within 7 days and the same shall be completed and commissioned by 31.12.2021 as decided in the earlier meeting held on 04.03.2021.**
- PWSSB shall apply for release of electric connection with PSPCL for the operation of STP atleast 04 months before the completion of STP.**
- Pipeline of diameter 1400 mm shall be completed by 30.09.2021.**
- Department of Soil & Water Conservation shall prepare irrigation scheme for utilization of treated sewage for irrigation within 40 days for which, PWSSB shall supply necessary data w.r.t. STP to the said department within 10 days. Department of Soil & Water Conservation shall get the funds released from the Department of Finance through its Head Quarter for laying of irrigation network.**

- v) **Municipal Council, Faridkot and PWSSB have, respectively, failed to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commissioning the STP of capacity 14 MLD within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017, as such Punjab Pollution Control Board may take necessary action accordingly.**
- vi) **MC, Faridkot shall develop thick green belt with suitable varieties of plants all around the boundary wall especially towards the adjoining house within 02 months.**

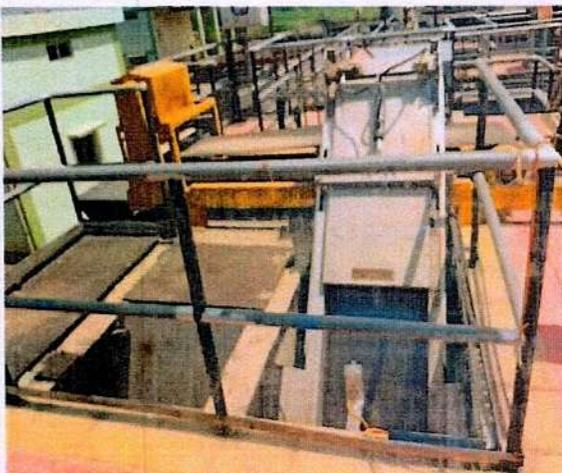
**2.2 Sewage Treatment Plants of capacity 8 MLD (SBR) and 6 MLD (SBR) at Kot Kapura**

Population of Kot Kapura town is 0.92 lakh as per census 2011 and present population is approx. 0.98 lakh and total discharge of sewage is 9 MLD and for treatment of sewage, 02 STPs of capacity 8 MLD and 6 MLD have been proposed.

**2.2.1 Observations w.r.t. 8 MLD capacity STP, Kotkapura**

- i. STP of capacity 8 MLD, based on SBR technology, consists of primary treatment system, aeration chamber and chlorine contact tank-cum-treated effluent collection tank, has been completed.
- ii. No electric connection has been released by PSPCL for operation of STP.
- iii. Presently, untreated sewage of the town is discharged into Deviwalla drain.
- iv. No irrigation scheme has been prepared by the department of Soil & Water Conservation.

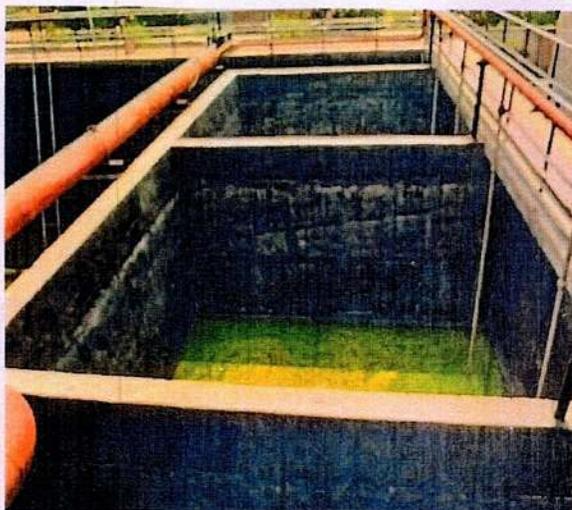
The photographs showing the various components of STP of capacity 8 MLD are mentioned as per **Plates 3 to 6**.



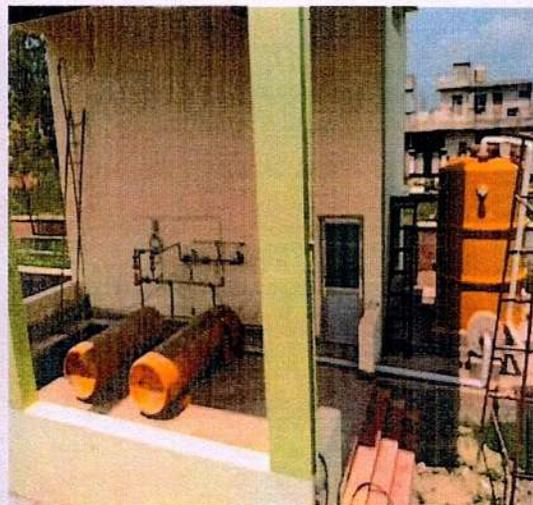
**Plate-3: Photograph showing primary treatment units of STP**



**Plate -4: Photograph showing SBR tank with air diffuser system**



**Plate-5: Photograph showing selector zone provided before SBR tank.**



**Plate-6: Photographs showing the chlorine cylinder lying near chlorine contact tank.**

### **2.2.1.1 Recommendations of the Monitoring Committee**

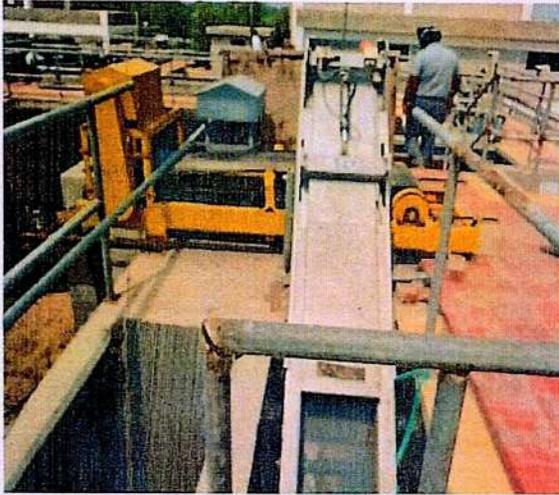
- i) PSPCL shall release electric connection for operation of STP of capacity 8 MLD to treat sewage of the town within 15 days as committed by the Executive Engineer, PSPCL during the visit of the Monitoring Committee to the STP. In case, no electric connection is released by PSPCL, PWSSB shall take up the matter with the Deputy Commissioner, Faridkot immediately.**
- ii) PWSSB shall start the operation of STP immediately after release connection by PSPCL.**
- iii) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of STP 8 MLD capacity within 01 month. For laying of irrigation network, necessary funds shall be got released from the department of Finance through its Head Quarter at the earliest.**
- iv) MC, Kotkapura shall develop thick green belt along the boundary of the STP within 01 month.**
- v) PWSSB shall close the bypass arrangement provided to discharge its effluent during exigency in the presence of officer of Punjab Pollution Control Board within 15 days. The said outlet in exigency may be opened only after getting prior permission from concerned officer of Punjab Pollution Control Board and reasons for the same may also be stated.**

### **2.2.2. Observations of Monitoring Committee w.r.t. STP of capacity 6 MLD**

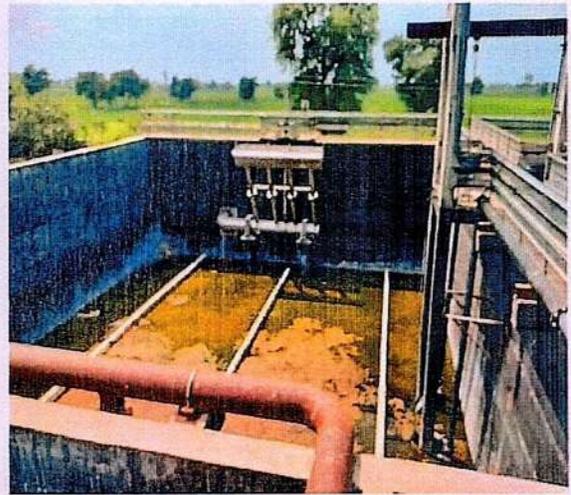
- i. STP of capacity 6 MLD, based on SBR technology, consists of primary treatment system, aeration chamber and chlorine contact tank-cum-treated effluent collection tank, has been completed. However, electrical fittings of STP are yet to be completed.**
- ii. No electric connection has been released by PSPCL for operation of STP. The Executive Engineer, PSPCL claimed that MC, Kotkapura has not released the pending payment of the PSPCL.**
- iii. Presently, untreated sewage of the town is discharged into Warring link drain.**

- iv. No irrigation scheme has been prepared by the department of Soil & Water Conservation.

The photographs showing the various components of STP of capacity 6 MLD are mentioned as per **Plates 7 to 10.**



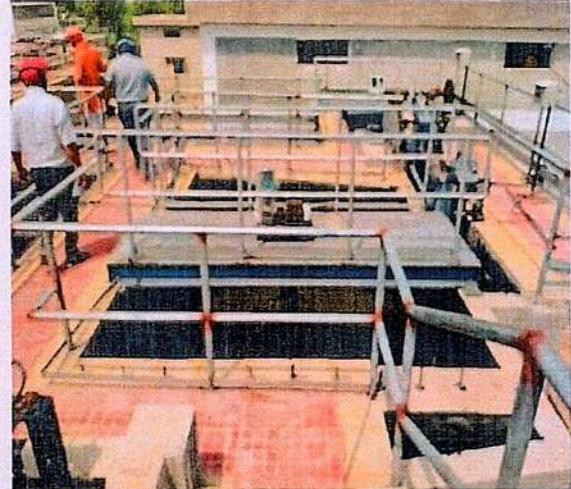
**Plate-7: Photograph showing primary treatment unit of STP**



**Plate-8: Photograph showing SBR tank of STP with air diffuser system.**



**Plate-9: Photograph showing selector unit of STP**



**Plate-10: Photograph showing various components of STP**

#### **2.2.2.1 Recommendations of the Monitoring Committee**

- i) PWSSB shall complete the electric fitting work within 15 days and STP shall be made operational within 01 month.**
- ii) MC, Kotkapura and PWSSB shall jointly take up the matter with Deputy Commissioner, Faridkot regarding release of electric connection by PSPCL for the operation of STP within 15 days and any issue w.r.t. release of electric connection shall be resolved accordingly.**
- iii) PWSSB shall start the operation of STP immediately after release of electric connection by PSPCL.**
- iv) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage of STP 6 MLD capacity within 01 month. For laying of irrigation network, necessary funds shall be got released from the department of Finance through its Head Quarter at the earliest.**
- v) MC, Kotkapura shall develop thick green belt along the boundary of the STP within 01 month.**

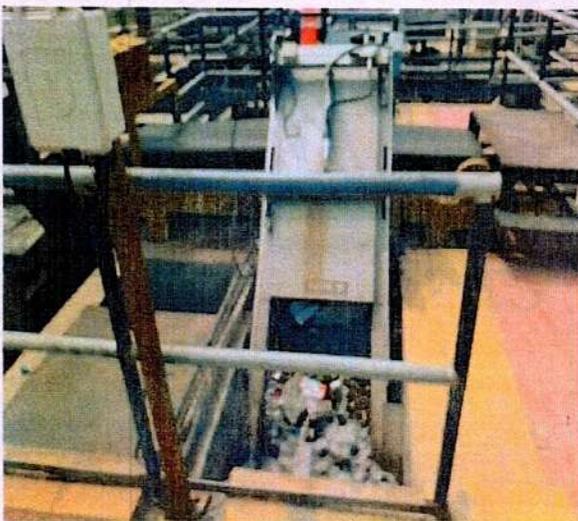
## 2.3 Sewage Treatment Plants of capacity 6 MLD (SBR) at Jaitu

Population of Jaitu town is 0.37 lakh as per census 2011 and present population is approx. 0.40 lakh and total discharge of sewage is 3 MLD and for treatment of sewage, STP of capacity 6 MLD has been installed and commissioned.

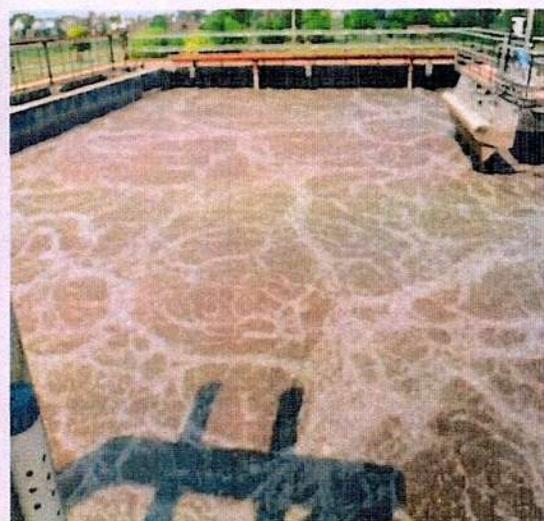
### 2.3.1. Observations of Monitoring Committee

- i) STP of capacity 6 MLD, based on SBR technology, has been installed and commissioned.
- ii) STP, consisting of primary treatment unit, secondary treatment and chlorine contact tank-cum-final treated effluent collection tank, was in operation.
- iii) For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and it was claimed by PWSSB that the dewatered sludge contains 30% moisture and 70% dry solid, whereas, lot of moisture content is available in the sludge. PWSSB shall make additional arrangements to dry the sludge to its optimum level so that it may be utilized by the farmers as manure in the agriculture fields.
- iv) For management and handling of primary sludge, no dedicated Pucca platform has been constructed.
- v) The treated sewage is discharged into Chand Bhan drain. As per the analysis results of treated effluent samples, collected by PPCB during the months of June & July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 7-8 mg/l, 8-10 mg/l and 200-980 MPN/100ml, respectively, which are within the prescribed limits.
- vi) The Department of Soil & Water Conservation informed that the irrigation scheme for utilization of treated sewage of the town has been prepared and the same has been submitted to its higher authorities for release of funds.
- vii) PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The photographs showing the various components of STP of capacity 6 MLD are mentioned as per **Plates 11 to 14**.



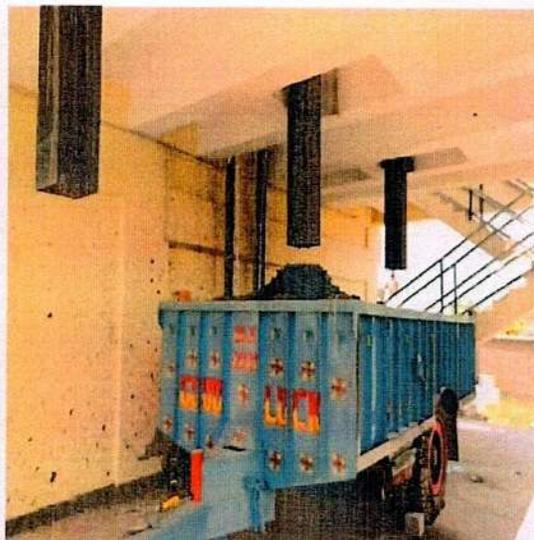
**Plate-11: Photograph showing primary treatment unit of STP**



**Plate-12: Photograph showing SBR tank in the aeration stage**



**Plate-13:** Photograph showing SBR tank in decanting stage



**Plate-14:** Photograph showing tractor trolley filled with secondary sludge.

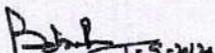
### **2.3.2. Recommendations of the Monitoring Committee**

- i) Department of Soil & Water Conservation shall take up the matter with its higher authorities for early release of funds for laying of irrigation network to utilize the treated effluent of STP for irrigation. The said irrigation network shall be completed within 03 months.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 02 months.
- v) PWSSB shall install OCEMS for monitoring of required parameters at the outlet of STP within 03 months.
- vi) PWSSB shall install CCTV cameras at various components of STP within 02 months.
- vii) PWSSB shall close bypass arrangement, made to discharge untreated wastewater in exigency, in the presence of officer of PPCB within 7 days.

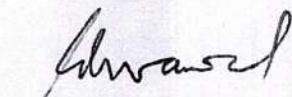
### **2.4 General Recommendations:**

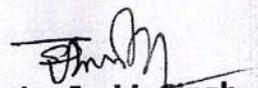
- i. The department of Local Govt. / MCs shall release funds for operation and maintenance of STPs on regular basis so as to ensure regular operation of STPs of the towns at all the times.
- ii. PPCB shall collect the effluent samples of operational STPs of the towns falling under the jurisdiction of district Faridkot on 20<sup>th</sup> September, 2021 and analysis results may be provided to the Monitoring Committee by the end of September, 2021.

iii. Additional Deputy Commissioner (Urban Development) shall ensure that the timelines given by Municipal Councils for completion of STPs are achieved well in time so that STPs may be completed and commissioned in time bound manner.

  
Dr. Babu Ram

sd/-  
Sant Balbir Singh Seechewal

  
Subodh Agrawal

  
Justice Jasbir Singh,  
Former Judge, Punjab &  
Haryana High Court and  
now as Chairman of the  
Monitoring Committee

## OFFICE OF THE MONITORING COMMITTEE

Constituted by the Hon'ble National Green Tribunal in OA No. 360 of 2018 in the matter Shree Nath Sharma Vs Union of India & Ors and other Environmental issues.

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex,  
Sector 68, SAS Nagar) Tel. No. 0172-2298091  
Email: ceeswm606@gmail.com

To

The Deputy Commissioner,  
Ferozepur.

No. CMC/2021/186

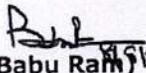
Dated: 8.9.2021

**Subject: Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - visit to the sewage treatment plants for the treatment of wastewater of the towns of District Ferozepur on 7.9.2021.**

Please find enclosed herewith the report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - visit to the sewage treatment plants for the treatment of wastewater of the towns of District Ferozepur on 7.9.2021 for information and necessary action, please.

It is requested that the concerned officer/official of District Administration may be directed to convey the report of the Monitoring Committee to all the concerned departments with the request to take immediate action on the recommendations made/directions given on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee within 15 days.

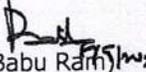
**DA/-as above**

  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/187

A copy is forwarded to the Member Secretary, Punjab Pollution Control Board, Patiala for information and necessary action.

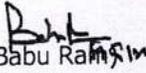
**DA/-as above**

Dated: 8.9.2021  
  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/188

A copy is forwarded to the Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda for information and necessary action.

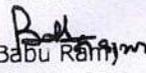
**DA/-as above**

Dated: 8.9.2021  
  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/189

A copy is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, Faridkot for information and necessary action. He is requested to get the compliance report on the directions given/recommendations made by the Monitoring Committee on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee in a time bound manner.

**DA/-as above**

Dated: 8.9.2021  
  
(Dr. Babu Ram)  
Technical Expert,  
Monitoring Committee

**Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns of District Ferozepur on 7.9.2021.**

### **1.0 Background**

The Hon'ble National Green Tribunal while considering the issue of remedial action for violation of the environmental norms due to discharge of untreated sewage and effluent into drains or other water bodies in Fazilka district, has considered the report of the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, submitted to the Hon'ble Tribunal on 10.03.2021. The Hon'ble National Green Tribunal has passed the detailed order on 09.06.2021 in O.A. No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & Others, the relevant para no. 5 of which is reproduced as under.

### **Para 5.**

**"None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we direct the State of Punjab to take further remedial action in terms of above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the Next date by email at judicial-ngt@gov.in preferably in the form of searchable PDF / OCR support PDF and not in the form of image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of the monitor Sutlej River, the Committee may continue to function for operating other compliances in terms of specific orders of this tribunal".**

**2.0 Visit to sewage treatment plants for the treatment of wastewater of the towns of District Ferozepur as part of compliance of recommendations of the Monitoring Committee as mentioned in order dated 9.6.2021 in OA No.596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and ors.**

The following were present during the visit:

#### **a) Members of the Monitoring Committee.**

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<b>Sr. No.</b>	<b>Name &amp; Designation of authority/officer in the department</b>	<b>Designation in the Monitoring Committee</b>
1	Sh. Subodh Agrawal, Former Chief Secretary, Punjab	Senior Member
2	Sant Balbir Singh Seechewal	Member
3	Dr. Babu Ram, Former Member Secretary, PPCB	Technical Expert

b) List of the officers, present during the visit, is as per Annexure-1.

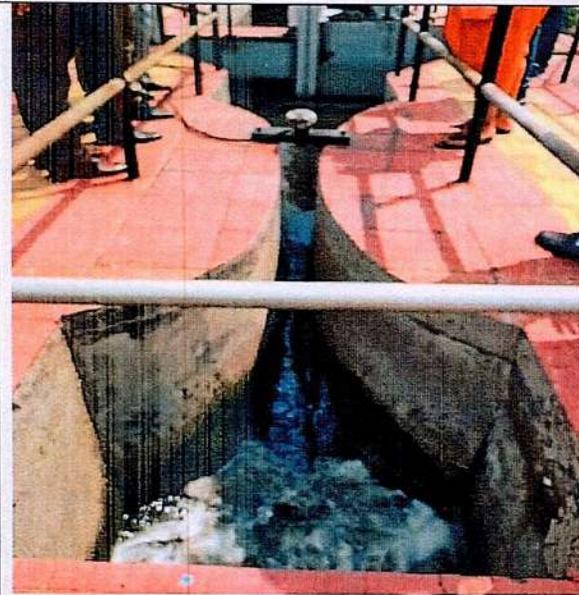
## 2.1 Sewage Treatment Plant of capacity 4 MLD at Talwandi Bhai

### 2.1.1. Observations of the Monitoring Committee.

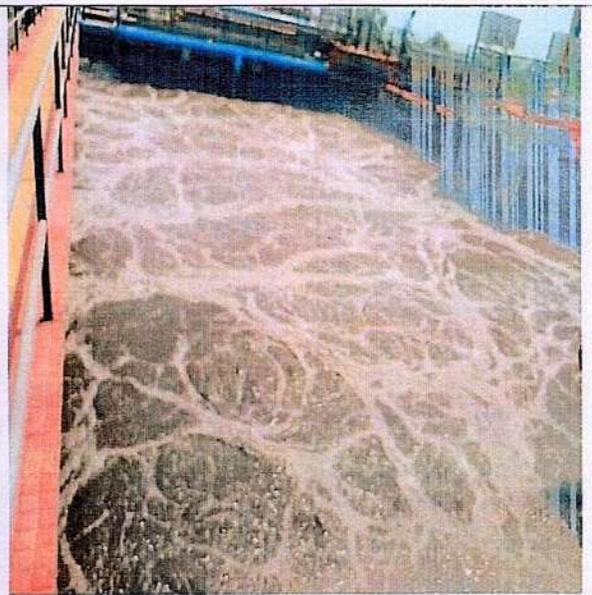
- Population of Talwandi Bhai town is 0.17 lakh as per census 2011 and present population is approx. 0.19 lakh
- Total discharge of sewage of the town is 2.5 MLD.
- STP of capacity 4 MLD, based on SBR technology, has been installed and commissioned.
- STP, consisting of primary treatment unit, secondary treatment and chlorine contact tank-cum-final treated effluent collection tank, was in operation.
- For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and in the dewatered sludge, lot of moisture content was found available. For further drying of the sludge, PWSSB is required to provide additional dewatering mechanism so as to dry the sludge to its optimum level in order to make it acceptable to the farmers for its utilization as manure in the agriculture fields.
- The treated sewage is discharged into Talwandi Bhai drain. As per the analysis results of treated effluent samples, collected by PPCB during the months of April to July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 8-12 mg/l, 7-19 mg/l and 200-920 MPN/100ml, respectively, which are within the prescribed limits.
- The Department of Soil & Water Conservation informed that in order to lay irrigation network to utilize treated sewage for irrigation, an estimate amounting to Rs. 1.41 crore has been sanctioned by the department and tender has been allotted to an agency and irrigation scheme shall be completed by 31.12.2021.
- During the visit, it was informed to the Monitoring Committee that M.C.Talwandi Bhai has to pay the pending payment of Rs. 87 Lakh as operation & maintenance charges of STP to the operating agency.
- PWSSB has installed OCEMS for monitoring the required parameters of treated sewage.
- PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

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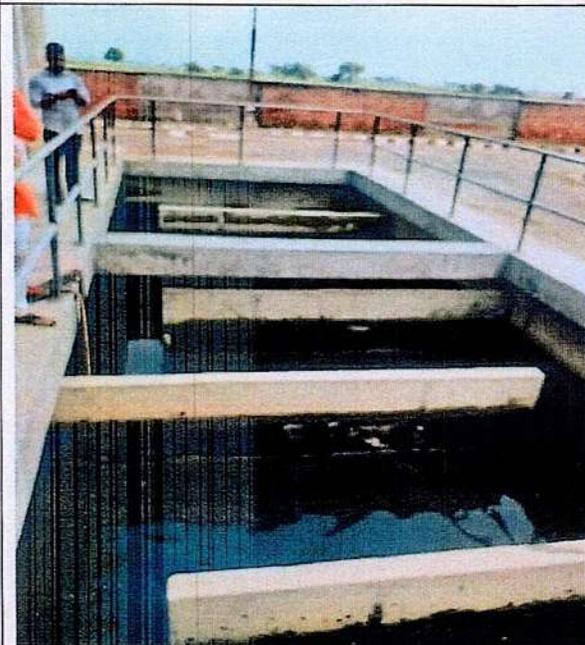
The photographs showing the various components of STP are mentioned as per **Plates 1 to 4.**



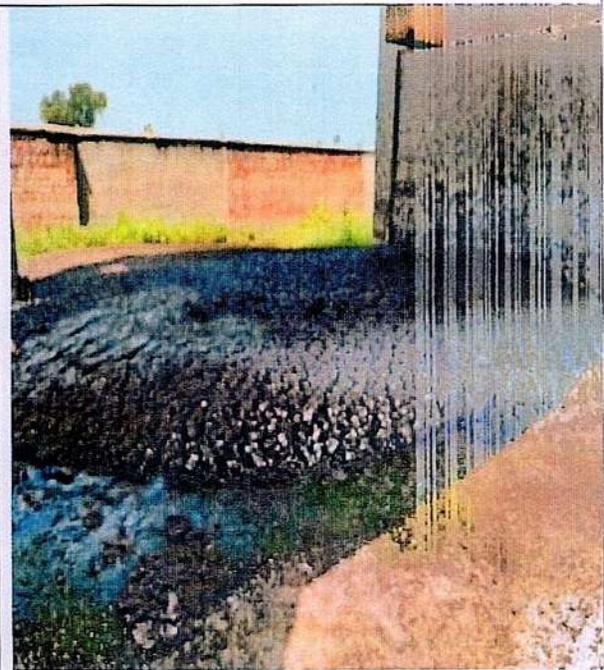
**Plate-1: Primary Treatment Unit**



**Plate-2: Aeration Basin of SBR**



**Plate-3: Chlorine Contact Tank-cum-final treated effluent collection tank**



**Plate-4: Secondary Sludge from Centrifuging System.**

#### **2.1.2 Recommendations of the Monitoring Committee**

- i) Department of Soil & Water Conservation shall lay irrigation network to utilize the treated sewage of STP by 31.12.2021.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.

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vii) PWSSB shall ensure that bypass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of Punjab Pollution Control Board.

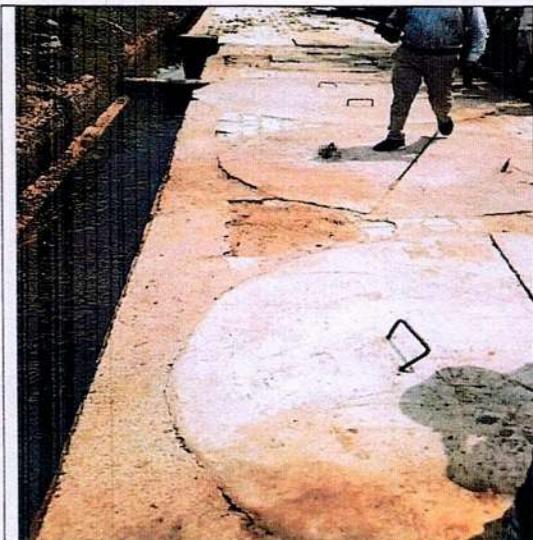
viii) The Municipal Council, Talwandi Bhai shall ensure that the pending payment of operation and maintenance charges of STP to the operating agency is made within 6 months. Municipal Council, Talwandi Bhai shall also continue to make regular payment of operation and maintenance charges of STP to the operating agency.

**2.2 Treatment System for treatment of sewage of Mudki town**

**2.2.1. Observations of the Monitoring Committee.**

- Population of Mudki town is 0.10 lakh as per census 2011 and present population is approx. 0.11 lakh
- Total discharge of sewage of the town is 1 MLD.
- No sewerage system has been provided in the town.
- For the treatment of sewage of the town, Municipal Council, Mudki has provided 4 tanks, which have been closed from the top due to which the operational mechanism could not be observed by the Monitoring Committee. Municipal Council, Mudki claimed that out of 4 tanks, in the first tank, screening system has been provided. These tanks are interconnected to each other and finally the effluent from the last tank is discharged into Mudki drain. The Monitoring Committee observed that the present treatment system is required to be modified to make it functional as aerobic biological treatment system.
- In the Mudki drain, most of the untreated sewage of the town is discharged and no in-situ remediation technology has installed into the drain.
- PPCB has collected the effluent samples from the inlet and outlet of treatment system provided by the Municipal Council.

The photographs, showing the units of the treatment system, are mentioned as per **Plates 5 to 6.**



**Plate-5: Photograph showing Closed Chambers of Treatment System**



**Plate-6: Photograph showing outlet of closed chambered of treatment system into drain**

## 2.2.2 Recommendations of the Monitoring Committee

- i) Municipal Council, Mudki shall modify its treatment mechanism to make it as biological treatment system within 15 days.
- ii) Municipal Council, Mudki shall provide additional treatment system to treat whole of the wastewater of the town by 15.11.2021 and no untreated sewage may be discharged into Mudki drain.
- iii) The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 01 month.
- iv) PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant for treatment of sewage of the town within 01 month.
- v) The Municipal Council, Mudki through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP for treatment of sewage of the town within 02 months.
- vi) PPCB shall impose environmental compensation on Municipal Council, Mudki for its failure to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

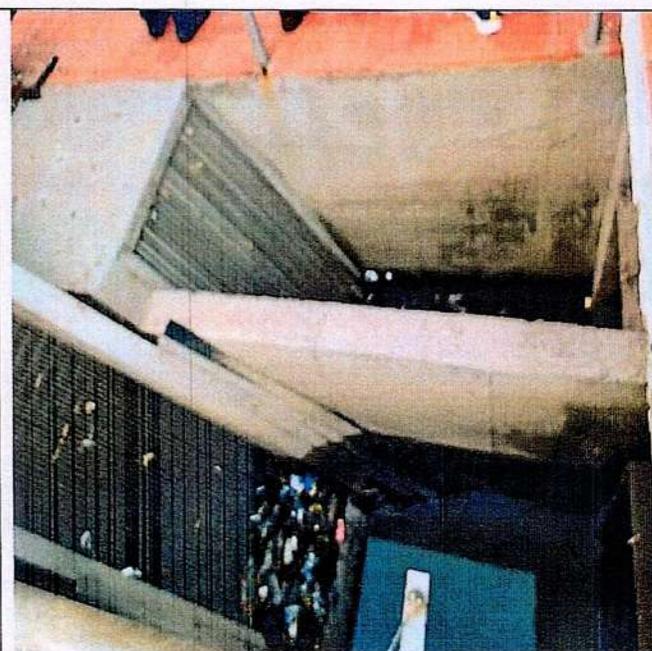
## 2.3 Sewage Treatment Plant of Capacity 8 MLD for Zira Town

### 2.3.1. Observations of the Monitoring Committee.

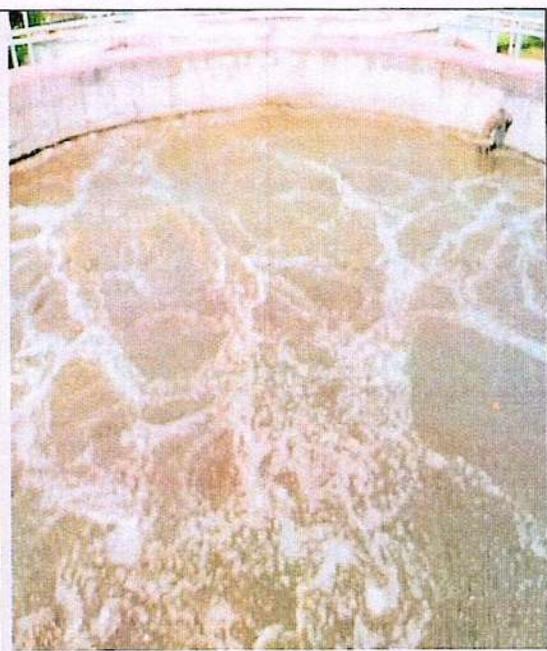
- Population of Zira town is 1.10 lakh as per census 2011 and present population is approx. 1.18 lakh
- Total discharge of sewage of the town is 6 MLD.
- STP of capacity 8 MLD, based on MBBR technology, has been installed and commissioned.
- STP, consisting of primary treatment unit, aeration system (MBBR) and secondary clarifier, has been installed and the same was in operation.
- For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and in the dewatered sludge, lot of moisture content was found available. For further drying of the sludge, PWSSB is required to provide additional dewatering mechanism so as to dry the sludge to its optimum level in order to make it acceptable to the farmers for its utilization as manure in the agriculture fields.
- The treated sewage is discharged into Zira link drain. As per the analysis results of treated effluent samples, collected by PPCB during the months of April to July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 7-12 mg/l, 7-16 mg/l and 200-910 MPN/100ml, respectively, which are within the prescribed limits.

- The Department of Soil & Water Conservation informed that in order to lay irrigation network to utilize treated sewage for irrigation, an estimate amounting to Rs. 3.04 crore has been sanctioned by the department and tender has been allotted to an agency and irrigation scheme shall be completed by 31.12.2021.
- During the visit, it was informed to the Monitoring Committee that the operating agency has to get the pending payment amounting to Rs. 2.0 crore as operation & maintenance charges of STP from Municipal Council, Zira.
- PWSSB has installed OCEMS for monitoring of the required parameters of treated sewage. CCTV camera and flow meter at outlet of STP have also been provided.
- PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

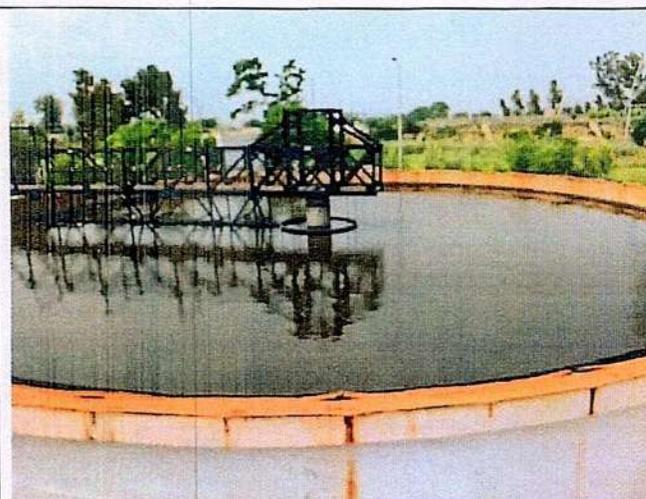
The photographs, showing the various components of STP, are mentioned as per **Plates 7 to 10.**



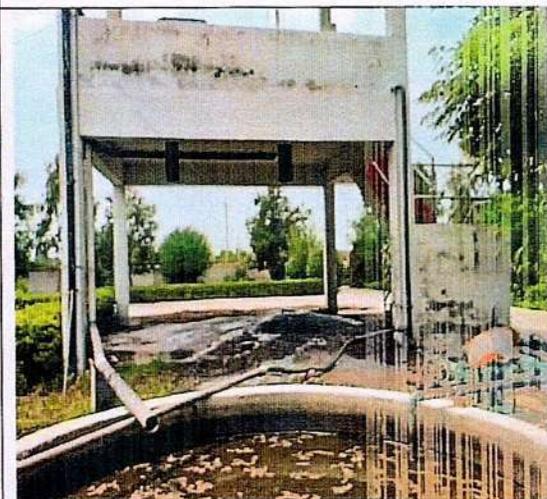
**Plate-7: Primary Treatment unit**



**Plate-8: MBBR Basin with Aeration System**



**Plate-9: Secondary Clarifier**



**Plate-10: Secondary Sludge after Centrifuging System**

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### 2.3.2 Recommendations of the Monitoring Committee

- i) Department of Soil & Water Conservation shall lay irrigation network to utilize the treated sewage of STP by 31.12.2021.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- iv) PWSSB shall also install electromagnetic flow meter at the inlet of STP within 01 month.
- vii) PWSSB shall ensure that bye-pass arrangement, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to PPCB and the same may be sealed in the presence of the officer of PPCB .
- viii) The Municipal Council, Zira shall ensure that the pending payment of operation and maintenance of STP to the operating agency is made within 6 months. Municipal Council, Zira shall also continue to make regular payment of operation and maintenance charges of STP to the operating agency.

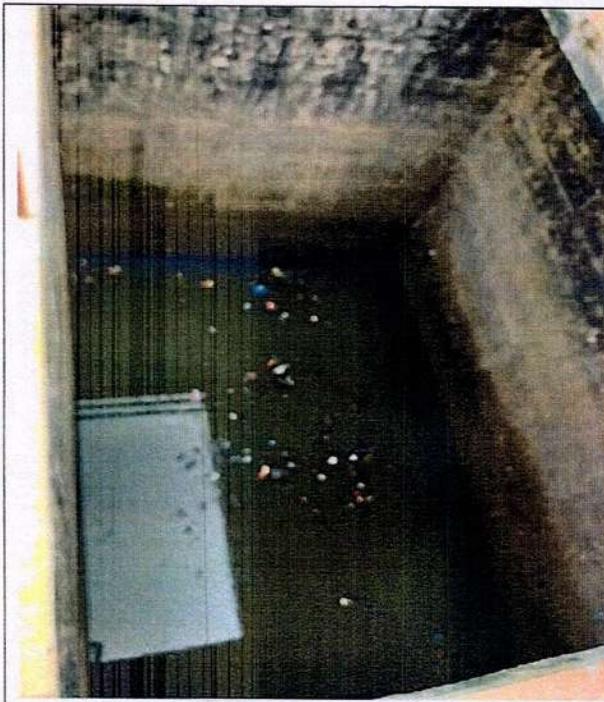
### 2.4 Sewage Treatment Plant of Capacity 4 MLD for Makhu Town

#### 2.4.1. Observations of the Monitoring Committee.

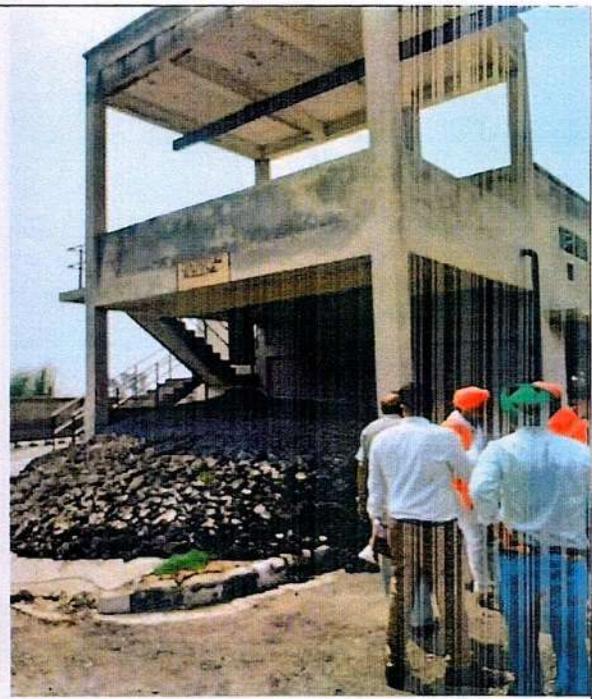
- Population of Makhu town is 0.14 lakh as per census 2011 and present population is approx. 0.16 lakh
- Total discharge of sewage of the town is 2.5 MLD.
- STP of capacity 4 MLD, based on SBR technology, has been installed and commissioned.
- STP, consisting of primary treatment unit, secondary treatment system and chlorine contact tank-cum-final treated sewage storage tank, has been provided and the same was in operation.
- For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and in the dewatered sludge, lot of moisture content was found available. For further drying of the sludge, PWSSB is required to provide additional dewatering mechanism so as to dry the sludge to its optimum level in order to make it acceptable to the farmers for its utilization as manure in the agriculture fields.
- The treated sewage is discharged into Makhu drain. As per the analysis results of treated effluent samples, collected by PPCB during the months of April to July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 7-10 mg/l, 8-18 mg/l and 180-680 MPN/100ml, respectively, which are within the prescribed limits.

- The Department of Soil & Water Conservation informed that survey work for laying irrigation network has been completed.
- During the visit, it was informed to the Monitoring Committee that Municipal council, Makhu has to pay pending payment about Rs. 82 Lakh as operation & maintenance charges of STP to the operating agency.
- PWSSB has installed OCEMS for monitoring of the required parameters of treated sewage.
- PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The photographs, showing inlet chamber of STP and secondary sludge after centrifuging system, are mentioned as per **Plates 11 & 12**.



**Plate-11: Inlet chamber of STP**



**Plate-12: Secondary Sludge after Centrifuging System**

#### 2.4.2 Recommendations of the Monitoring Committee

- Re
- Department of Soil & Water Conservation shall get the DPR prepared from the authorized agency and shall take up the matter with higher authorities for release of funds for laying of irrigation network to utilize the treated sewage of STP by 31.10.2021. The said department shall complete the project for laying of irrigation network to utilize the treated sewage for irrigation by 31.12.2021.
  - PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
  - PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.

- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.
- vii) PWSSB shall ensure that bye-pass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of PPCB.
- viii) The Municipal Council, Makhu shall ensure that the pending payment of operation and maintenance of STP to the operating agency is made within 6 months. Municipal Council, Makhu shall also continue to make regular payment of operation and maintenance charges of STP to the operating agency.

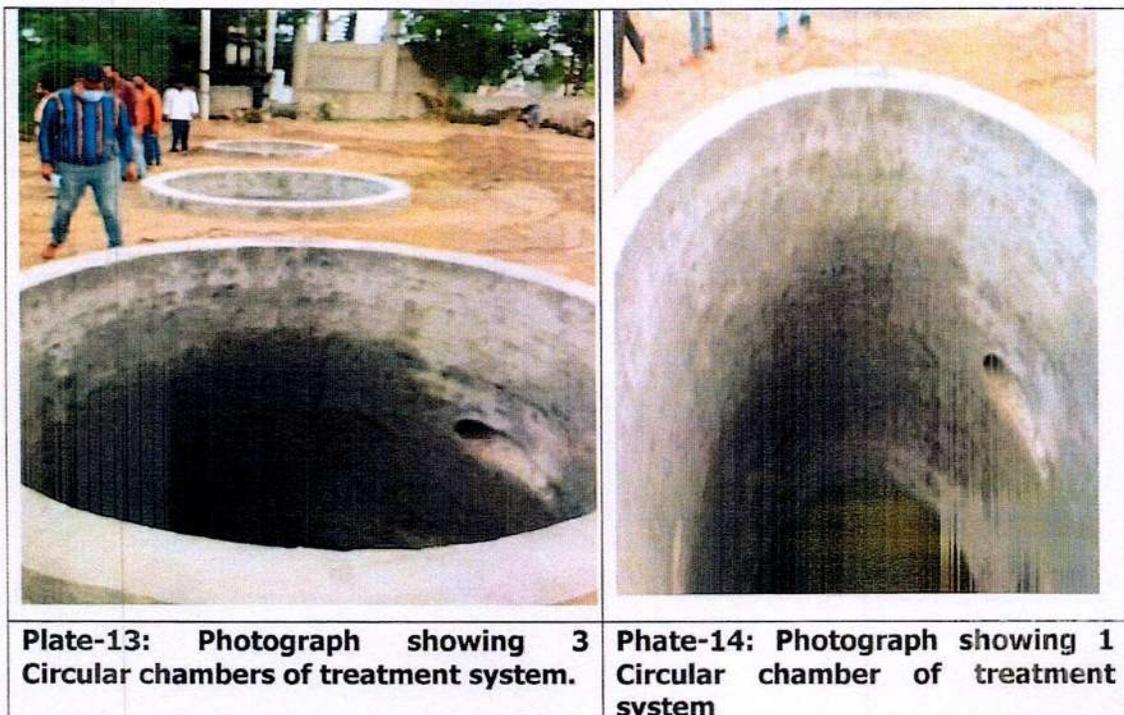
**2.5 Treatment System for treatment of sewage of Mallanwala Khas**

**2.5.1. Observations of the Monitoring Committee.**

- Population of Mallanwala Khas town is 0.16 lakh as per census 2011 and present population is approx. 0.17 lakh
- Total discharge of sewage of the town is 1.5 MLD.
- No sewerage system has been provided in the town.
- For the treatment of sewage of the town, Municipal Council, Mallanwala Khas has provided 4 chambers, having interconnectivity to each other, as components of treatment system based on Seechewal Model. The treatment mechanism has not been commissioned.
- Presently, untreated sewage is being discharged into Sukkarnallah drain.

The photographs, showing the units of the treatment system, are mentioned as per **Plates 13 & 14.**

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## 2.5.2 Recommendations of the Monitoring Committee

- i) **Municipal Council, Mallanwala Khas shall commission treatment system within 10 days.**
- ii) **Municipal Council, Mallanwala Khas shall provide additional treatment systems to treat whole of the wastewater of the town by 15.11.2021 and shall ensure that no untreated sewage is discharged into Sukkarnallah drain.**
- iii) **The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 01 month.**
- iv) **PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant for treatment of sewage of the town within 01 month.**
- v) **The Municipal Council, Mallanwala Khas through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP for treatment of sewage of the town within 02 months.**
- vii) **PPCB shall impose environmental compensation on Municipal Council, Mallanwala Khas for its failure to provide in-situ remediation technology in the drain carrying untreated sewage and not connecting to STP and not commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.**

## 2.6 Sewage Treatment Plant of capacity 18 MLD at Ferozpur

### 2.6.1. Observations of the Monitoring Committee.

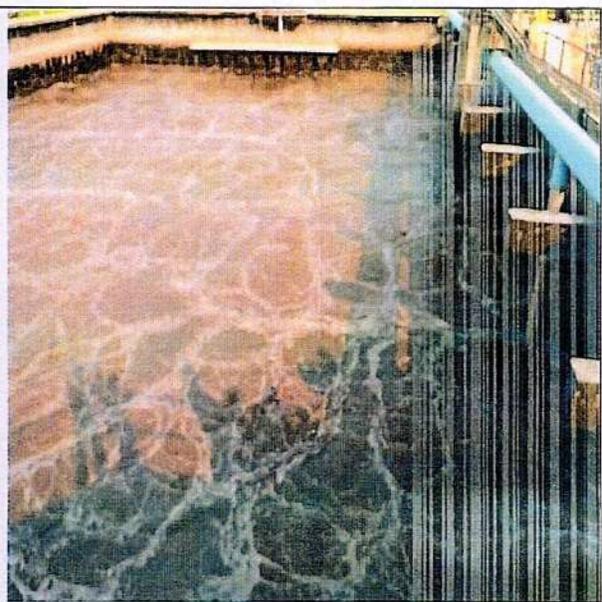
- Population of Ferozpur town is 1.10 lakh as per census 2011 and present population is approx. 1.18 lakh
- Total discharge of sewage of the town is 16 MLD.
- STP of capacity 18 MLD, based on SBR technology, has been installed and commissioned.
- STP, consisting of primary treatment unit, secondary treatment and chlorine contact tank-cum-final treated effluent collection tank, was in operation.
- For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed and in the dewatered sludge, lot of moisture content was found available. For further drying of sludge, PWSSB is required to provide additional dewatering mechanism so as to dry the sludge to its optimum level in order to make it acceptable to the farmers for its utilization as manure in the agriculture fields.
- The treated sewage is discharged into Sullage carrier. As per the analysis results of treated effluent samples, collected by PPCB during the months of April to July, 2021, the values of the parameters namely BOD, TSS & F.Coli have been found varying between 6-11 mg/l, 8-14 mg/l and 200-980 MPN/100ml, respectively, which are within the prescribed limits.

- The Department of Soil & Water Conservation informed that survey work for laying of irrigation network has been completed.
- PWSSB has installed OCEMS for monitoring of the required parameters of treated sewage.
- PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

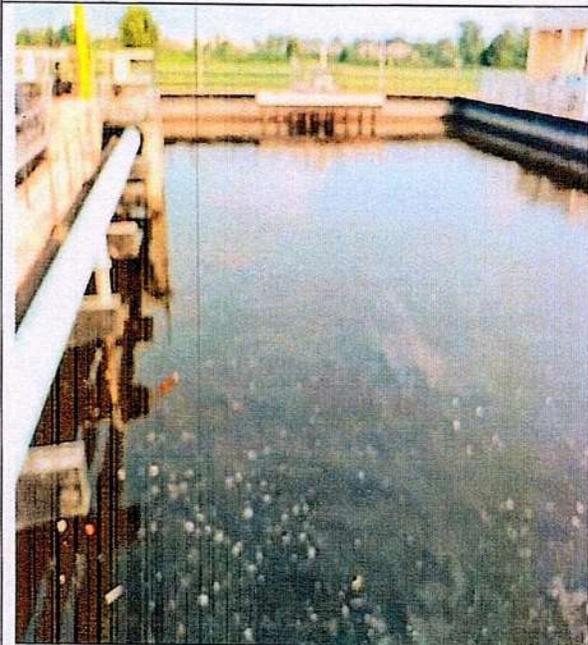
The photographs, showing the various components of STP, are mentioned as per **Plates 15 to 18.**



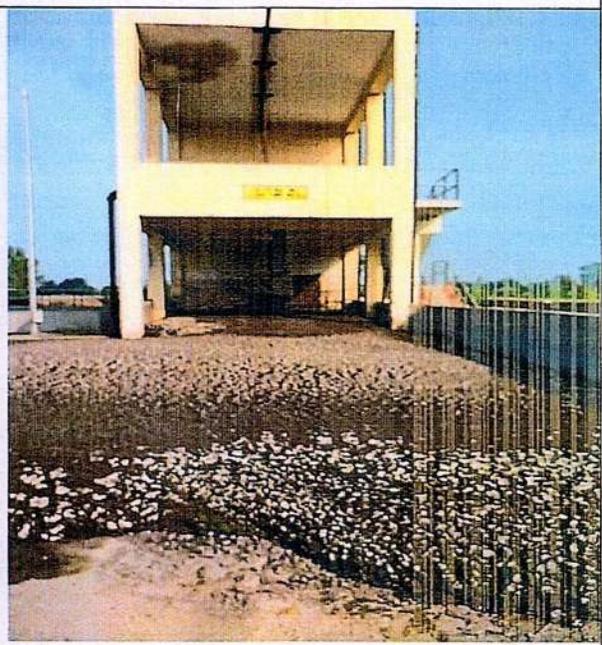
**Plate-15: Photograph showing Primary Treatment Unit**



**Plate-16: Photograph showing aeration basin of SBR**



**Plate-17: Photograph showing filling stage of SBR**



**Plate-18: Photograph showing secondary sludge after Centrifuging System**

## 2.6.2 Recommendations of the Monitoring Committee

- i) Department of Soil & Water Conservation shall get the DPR prepared from the authorized agency and shall take up the matter with higher authorities for release of funds for laying of irrigation network to utilize the treated sewage of STP by 31.10.2021. The said department shall complete the project for laying of irrigation network to utilize the treated sewage for irrigation by 31.12.2021.
- ii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level and the same may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.
- vii) PWSSB shall ensure that bye-pass arrangement, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of PPCB.

## 2.7 Treatment System for treatment of sewage of Mamdot town.

### 2.7.1. Observations of the Monitoring Committee.

- Population of Mamdot town is 0.06 lakh as per census 2011 and present population is approx. 0.07 lakh
- Total discharge of sewage of the town is 1 MLD.
- No sewerage system has been provided in the town.
- Presently, wastewater of the town is discharged into ponds.
- For the treatment of sewage of the town, Municipal Council, Mamdot has provided 4 chambers, having interconnectivity to each other, as components of treatment system based on Seechewal Model. The Monitoring Committee observed that the interconnectivity of the chambers 3 and 4 is not as per the treatment technology and it requires necessary modification. The Executive Officer, Municipal Council, Mamdot informed that the said technology has also been provided at 03 other locations of the town for treatment of sewage.

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- The photographs, showing the units of the treatment system, are mentioned as per **Plates 19 & 20.**



#### 2.7.2 Recommendations of the Monitoring Committee

- i) Municipal Council, Mamdot shall make necessary modification in the treatment system provided by it as per the treatment technology and shall be commissioned the same within 15 days.
- ii) Municipal Council, Mamdot shall ensure that with the installation of treatment system provided at different locations, no untreated wastewater is discharged into ponds.
- iii) The treated sewage of the town shall be utilized for irrigation in the nearby fields.
- iii) The department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 02 month.
- iv) PWSSB shall prepare detailed project report for installation of sewerage system and sewage treatment plant for treatment of sewage of the town within 01 month.
- v) The Municipal Council, Mamdot through the department of Local Govt. shall make arrangements for the release of funds for installation of sewerage network and STP for treatment of sewage of the town within 02 months.
- viii) PPCB shall impose environmental compensation on Municipal Council, Mamdot for not commencing the STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

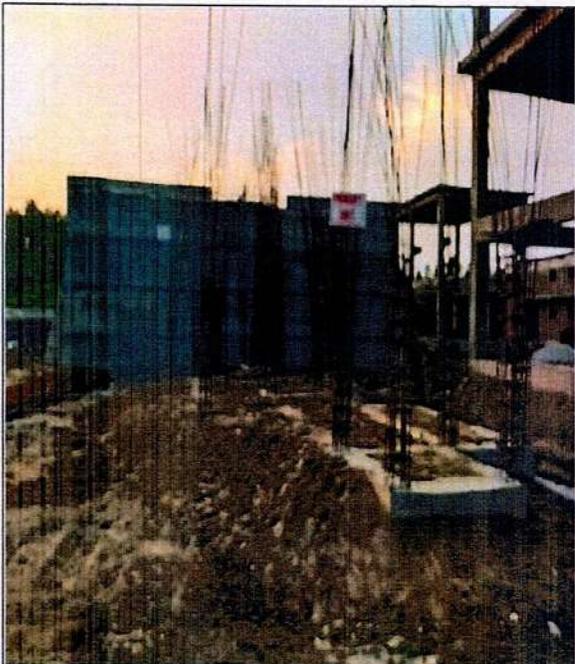
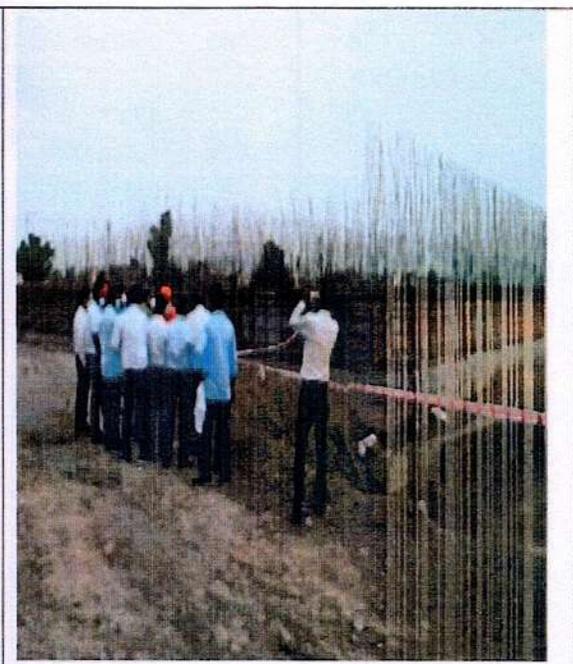
#### 2.8 Sewage Treatment Plants for treatment of sewage of Guruharsahai town

The Population of Guruharsahai town is 0.29 lakh as per census 2011 and present population is approx. 0.31 lakh and total discharge of sewage is 3.5 MLD and for treatment of sewage, 02 STPs of capacity, 4 MLD and 1 MLD, have been proposed.

**2.8.1 Observations w.r.t. 1 MLD and 4 MLD capacity STPs for treatment of sewage of Guruharsahai town**

- i. STP of capacity 1 MLD is under construction. Most of components of STP at foundation stage except the construction of walls of SBR basin to its about 75% of actual height.
- ii. PWSSB informed that about 25% of construction work of STP of capacity 1 MLD has been completed and STP shall be completed by 31.03.2022.
- iii. The components of STP of capacity 4 MLD are almost at foundation stage and PWSSB informed that about 10% of construction work of STP has been completed and STP is likely to completed by 31.03.2022.

The photographs, showing the components of STP under construction of capacity 1 MLD and 4 MLD, are mentioned as per **Plates 21 to 22**.

	
<b>Plate-21: Photograph showing construction status of 1 MLD capacity STP</b>	<b>Plate-22: Photograph showing construction status of 4 MLD capacity STP</b>

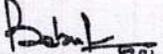
**2.8.2. Recommendations of the Monitoring Committee**

- i) PWSSB shall complete and commission both the STPs of capacity 1 MLD and 4 MLD by 31.03.2022 as committed by the department.
- ii) The department of Soil & Water Conservation shall prepare detailed project report for laying of irrigation network to utilize treated sewage for irrigation within 01 month. The department shall also take up the matter for release of funds for laying of irrigation network with its higher authorities and shall ensure that irrigation network to utilize the treated sewage is commissioned by 31.03.2022 i.e. simultaneously with the commissioning of the STPs of the town.
- iii) PPCB shall impose environmental compensation on Municipal Council, Guruharsahai for failure of Municipal Council to provide in-situ

remediation technology in the drain carrying untreated sewage and not connecting to STP and on PWSSB for not commissioning both the STPs of capacity 1 MLD and 4 MLD within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

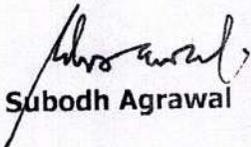
**2.9 General Recommendations:**

- i. The department of Local Govt. / MCs shall release funds for operation and maintenance of STPs on regular basis so as to ensure the regular operation of STPs of the towns at all the times.
- ii. PPCB shall provide analysis results of effluent samples collected during the visit on 07.09.2021 within 15 days.
- iii. Additional Deputy Commissioner (Urban Development) shall ensure that the timelines given by Municipal Councils for completion of STPs are achieved well in time so that STPs may be completed and commissioned in time bound manner.

  
Dr. Babu Ram

sd/-

Sant Balbir Singh Seechewal

  
Subodh Agrawal

List of officials present during visit of NGT monitoring committee in District Ferozepur on 07.09.2021

1.	Sh. Latif Ahmed, PCS, ADC (Urban Development), Ferozepur.
2.	Er. Rajiv Goyal, Senior Environmental Engineer, PPCB, Zonal Office, Bathinda
3.	Er. Ramandeep Singh Sidhu, Environmental Engineer, PPCB, Regional Office, Faridkot
4.	Er. Parul Goyal, Executive Engineer, Punjab Water Supply & Sewerage Board, Moga
5.	Er. Pritpal Singh, Executive Engineer, Punjab Water Supply & Sewerage Board, Ferozepur
6.	Sh. Kulwant Brar, Joint Deputy Director, Department of Local Bodies, Ferozepur
7.	Sh. Gurdas Singh, Executive Officer, Municipal Council, Ferozepur
8.	Sh. Dharampal Singh, Executive Officer, Municipal Council, Zira, Nagar Panchayat Mallanwala Khas and Nagar Panchayat Makhu
9.	Sh. Narinder Kumar, Executive Officer, Nagar Panchayat, Mamdot and Nagar Panchayat Mudki
10.	Sh. Amrinder Singh, Executive Officer, Municipal Council, Talwandi Bhai
11.	Sh. Mangat Ram, Executive Officer, Municipal Council, Guru Har Sahai
12.	Smt. Rupinder Kaur, Sub Divisional Soil Conservation Officer, Ferozepur
13.	Sh. Arshdeep Singh, Sub Divisional Soil Conservation Officer, Zira
14.	Er. Anish Sharma, Assistant Environmental Engineer, PPCB RO Faridkot

**OFFICE OF THE MONITORING COMMITTEE**

Constituted by the Hon'ble National Green Tribunal in OA No. 360 of 2018 in the matter  
Shree Nath Sharma Vs Union of India & Ors and other Environmental issues.

(Official Address: Tower No.5, 4<sup>th</sup> Floor, Forest Complex,  
Sector 68, SAS Nagar) Tel. No. 0172-2298091  
Email: cecswm606@gmail.com

To

The Deputy Commissioner,  
Fazilka.

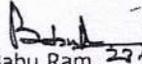
No. CMC/2021/206  
Dated: 23.9.2021

**Subject: Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns and drains of District Fazilka on 21.9.2021 & 22.9.2021.**

Please find enclosed herewith the report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns and drains of District Fazilka on 21.9.2021 & 22.9.2021 for information and necessary action, please.

It is requested that the concerned officer/official of District Administration may be directed to convey the report of the Monitoring Committee to all the concerned departments with the request to take immediate action on the recommendations made/directions given on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee within 07 days.

DA/-as above

  
Dr. Babu Ram 23.9.2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/207

Dated: 23.9.2021

A copy is forwarded to the Member Secretary, Punjab Pollution Control Board, Patiala for information and necessary action.

DA/-as above

  
Dr. Babu Ram 23.9.2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/208

Dated: 23.9.2021

A copy is forwarded to the Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda for information and necessary action.

DA/-as above

  
Dr. Babu Ram 23.9.2021  
Technical Expert,  
Monitoring Committee

Endst. No. CMC/2021/209

Dated: 23.9.2021

A copy is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, Faridkot for information and necessary action. He is requested to get the compliance report on the directions given/recommendations made by the Monitoring Committee on the various activities w.r.t remediation action to be taken to control water pollution in the area and action taken report be sent to the Monitoring Committee immediately.

DA/-as above

  
Dr. Babu Ram 23.9.2021  
Technical Expert,  
Monitoring Committee

**Report on verification of part of compliance of the recommendations made by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal, as mentioned in order dated 9.6.2021 in OA No. 596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and Ors. - Visit to the Sewage treatment plants for the treatment of wastewater of the towns and drains of District Fazilka on 21.9.2021 & 22.9.2021.**

### **1.0 Background**

The Hon'ble National Green Tribunal, while considering the issue of remedial action for violation of the environmental norms due to discharge of untreated sewage and effluent into drains or other water bodies in Fazilka district, has considered the report of the Monitoring Committee, submitted to the Hon'ble Tribunal on 10.03.2021. The Hon'ble National Green Tribunal has passed the detailed order on 09.06.2021 in O.A. No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & others, the relevant para no. 5 of which is reproduced as under.

### **Para 5.**

"None appears for the State of Punjab and its authorities. Since there is no objection to the recommendations of the Committee, we direct the State of Punjab to take further remedial action in terms of above recommendations. The Chief Secretary, Punjab may issue appropriate directions in terms of the above recommendations to the concerned officers. We also request the Monitoring Committee to continue monitoring compliance and furnish a further status report as on 30.09.2021 before the Next date by email at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF / OCR support PDF and not in the form of image PDF. It is made clear that though the Monitoring Committee has concluded the proceedings of the monitor Sutlej River, the Committee may continue to function for operating other compliances in terms of specific orders of this tribunal'.

**2.0 Visit to sewage treatment plants for the treatment of wastewater of the towns and drains of District Fazilka as part of compliance of recommendations of the Monitoring Committee as mentioned in order dated 9.6.2021 in OA No.596 of 2019 in the matter of Vikram Ahuja vs State of Punjab and ors.**

The following were present during the visit:

#### **a) Members of the Monitoring Committee.**

<b>Sr. No.</b>	<b>Name &amp; Designation of authority/officer in the department</b>	<b>Designation in the Monitoring Committee</b>
1	Justice Jasbir Singh, Former Judge, Punjab & Haryana High Court	Chairman
2	Sh. Subodh Agrawal, Former Chief Secretary, Punjab	Senior Member
3	Sant Balbir Singh Seechewal	Member
4	Dr. Babu Ram, Former Member Secretary, PPCB	Technical Expert

b) List of the officers, present during the visit, is as per Annexure-1.

**2.1 Sewage Treatment Plant of capacity 25 MLD at Abohar**

**2.1.1. Observations of the Monitoring Committee.**

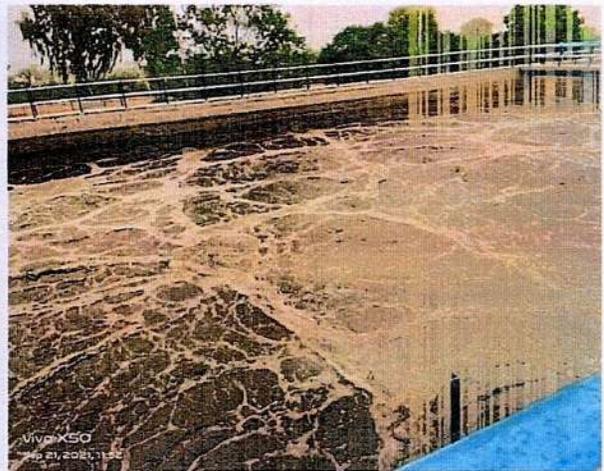
- Population of Abohar town is 1.45 lakh as per census 2011 and present population is approx. 1.89 lakh.
- Total discharge of sewage of the town is 23 MLD and the same is discharged in Abul Khurana drain through sullage carrier.
- STP of capacity 25 MLD, based on SBR technology, has been installed and commissioned.
- STP, consisting of primary treatment unit, secondary treatment and chlorine contact tank-cum-final treated effluent collection tank, was in operation.
- For management of secondary sludge, centrifuging system/mechanical dewatering system has been installed but the same was not in operation and the wastewater in slurry form after sludge thickener was being taken at the inlet of the STP, resulting inefficient performance of SBR system. During the visit, it was observed that treated wastewater after decanting stage of SBR was found turbid.
- No secondary sludge from centrifugal system was being disposed of.
- Turbid treated sewage was being discharged into Abul Khurana drain through sullage carrier. As per the analysis results of treated effluent samples, collected by PPCB during the months of April & May 2021, the parameters (pH: 7.1 – 7.4, BOD: 7-8 mg/l, COD: 21-30 mg/l, TSS: 9-14 mg/l, F.Coli: 180-370 MPN/100 ml) were within the permissible limits, whereas, the effluent sample collected in the month of June & July 2021, the parameter namely F.Coli (1300-3400 MPN/100 ml) was found beyond the permissible limits of 1000 MPN/100 ml.
- The Department of Soil & Water Conservation informed that in order to utilize the treated sewage for irrigation, detailed irrigation scheme costing Rs. 22 Crore in command area of 700 hectares has been prepared but the funds have not been received.
- PWSSB has installed OCEMS for monitoring the required parameters of treated sewage.
- PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

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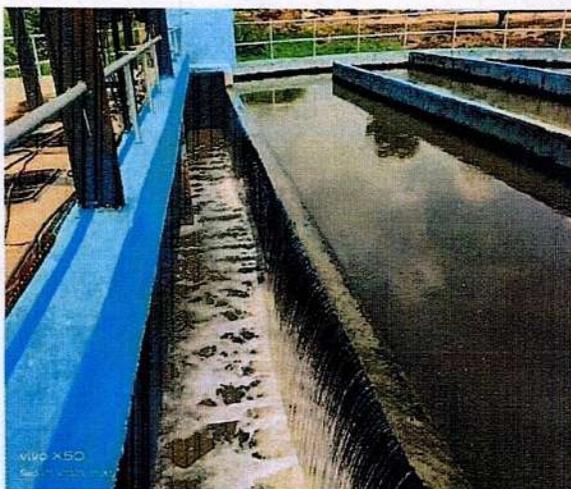
The photographs showing the various components of STP are mentioned as per **Plates 1 to 4.**



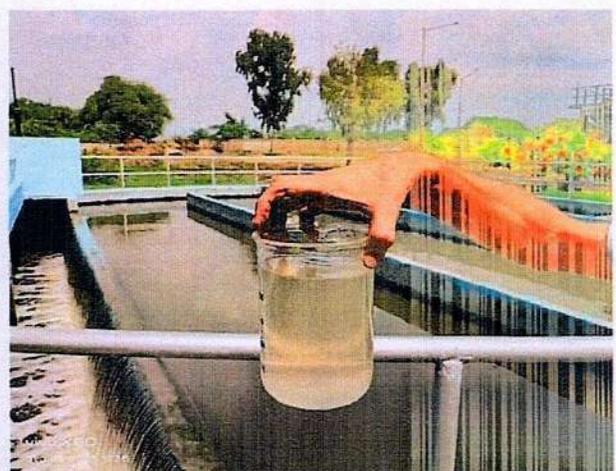
**Plate-1: Primary Treatment Unit**



**Plate-2: Aeration Basin of SBR**



**Plate-3: Chlorine Contact Tank-cum-final treated effluent collection tank**



**Plate-4: Photograph showing quality of treated wastewater**

#### **2.1.2 Recommendations of the Monitoring Committee**

- i) Department of Soil & Water Conservation shall take up the matter with the Deputy Commissioner, Fazilka regarding release of funds for laying of irrigation network to utilize the treated sewage of STP Abohar for irrigation within 15 days. Further, the Deputy Commissioner shall raise the issue with the Department of Finance for early release of funds and the Department of Soil & Water Conservation shall follow up the matter. The irrigation network to utilize treated sewage for irrigation may be completed by 31.12.2021.
- ii) PWSSB shall make centrifugal system in operation within 07 days and ensure that no wastewater in slurry form is taken back into the influent collection tank and only the effluent after dewatering/decanting of sludge in the centrifugal system may be taken at the inlet chamber of STP.
- iii) PWSSB shall provide additional arrangements to dry the secondary sludge to its optimum level in case secondary sludge is not dried properly by existing centrifugal system. The dewatered/decanted sludge in dry form

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may be utilized as manure in green belt/parks and agriculture fields through farmers. PWSSB shall also maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner.

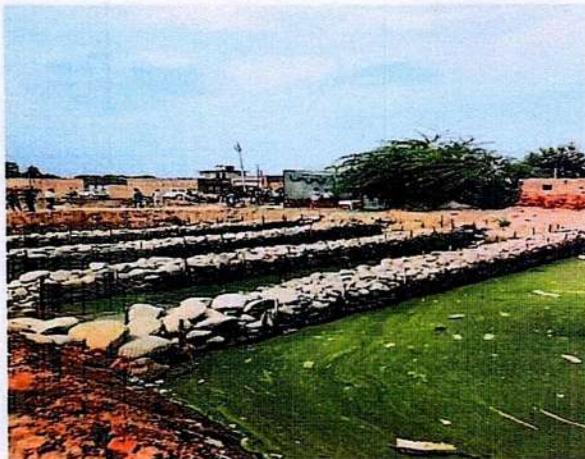
- iii) PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.
- iv) PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.
- vii) PWSSB shall ensure that bypass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of Punjab Pollution Control Board.

## 2.2 Treatment system for treatment of sewage of Arniwala Shiekh Subhan town

### 2.2.1. Observations of the Monitoring Committee.

- Population of Arniwala Shiekh Subhan town is 0.09 lakh as per census 2011 and present population is approx. 0.12 lakh
- Total discharge of sewage of the town is 1.25 MLD and the same is discharged in Baarn drain.
- No sewerage system has been provided in the town.
- For the treatment of sewage of the town, Municipal Council, Arniwala Shiekh Subhan has provided so called in-situ remediation technology by providing chambers separated by wire mesh filled with stones. However, the said system needs modification by providing additional mechanism to achieve its better performance of the system.
- PWSSB informed that for laying of sewerage network and installation of sewage treatment plant of capacity 2 MLD, tender has been called and work shall be allotted within 01 month.
- PPCB has collected the effluent samples from the inlet and outlet of so called in-situ remediation technology provided by the Municipal Council.

The photographs, showing the units of the treatment system, are mentioned as per **Plates 5 to 6.**



**Plate-5: Photograph showing the chambers separated by wire mesh filled with stones**



**Plate-6: Photograph showing the inlet of treatment facility**

### 2.2.2 Recommendations of the Monitoring Committee

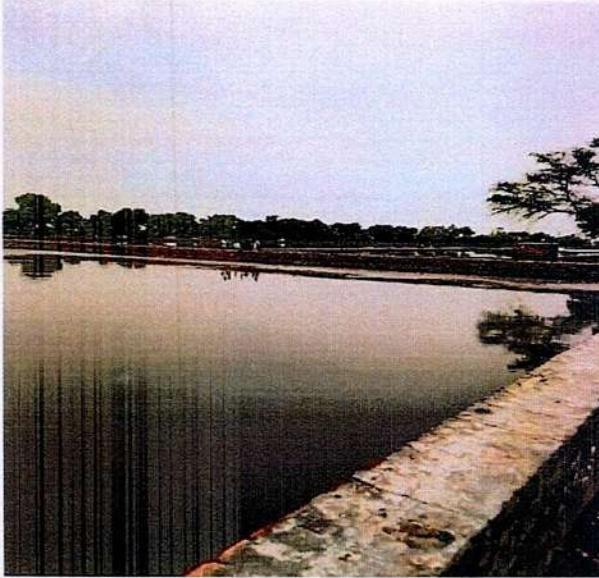
- i) As demonstration projects for in-situ remediation of wastewater, PPCB has tried some technologies in flowing water but technology is yet to be tried in static effluent/pond effluent. Thus, Municipal Council, Arniwala Shiekh Subhan in consultation with PPCB may modify/upgrade in-situ remediation technology which may work in static effluent/pond effluent to get better performance of the system, within 01 month.
- ii) PWSSB shall allot the work regarding laying of sewerage network and installation of sewage treatment plant within 02 month and work of the STP may be started within 03 months and the same may be completed in a time bound manner.
- iii) The Department of Soil & Water Conservation shall prepare irrigation scheme to utilize the treated sewage for irrigation within 01 month.
- vi) PPCB shall impose environmental compensation on Municipal Council, Arniwala Shiekh Subhan for its failure to commence STP of adequate capacity within the time schedule as directed by the Hon'ble National Green Tribunal in its order dated 06.12.2019 in OA no. 673 of 2018 and order dated 22.08.2019 in OA no. 593 of 2017.

### 2.3 Sewage Treatment Plant of Capacity 8 MLD for Fazilka Town

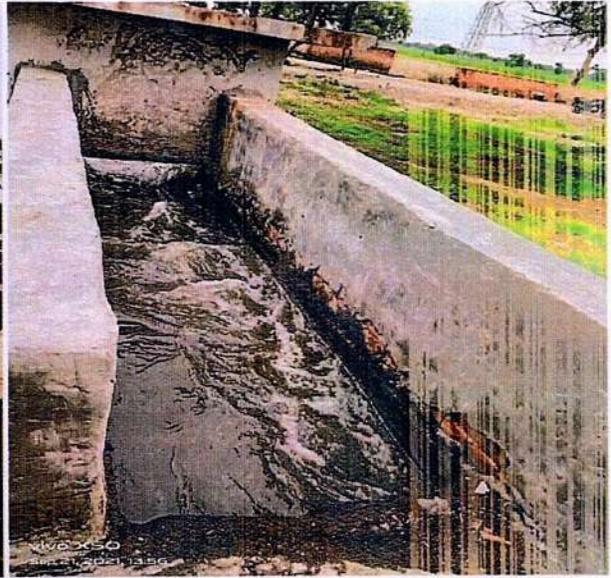
#### 2.3.1. Observations of the Monitoring Committee.

- Population of Fazilka town is 0.76 lakh as per census 2011 and present population is approx. 0.99 lakh.
- Total discharge of sewage of the town is 11 MLD and the same is discharged into Fazilka drain.
- STP of capacity 8 MLD, based on waste stabilization pond, has been installed and commissioned.
- The treated sewage is discharged into Fazilka drain. The analysis results of treated effluent samples, collected by PPCB during the months of June to August, 2021 have been found beyond the permissible limits (BOD: 32-78 mg/l, F.Coli: 1400-25000 MPN/100 ml).
- PWSSB has started the construction work of STP of capacity 13 MLD for which SBR tanks (2 nos.) are at foundation stage and it was claimed that STP shall be completed by 31.05.2022.
- The Department of Soil & Water Conservation informed that in order to utilize the treated sewage of existing 8 MLD capacity STP, irrigation network has been laid.
- PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

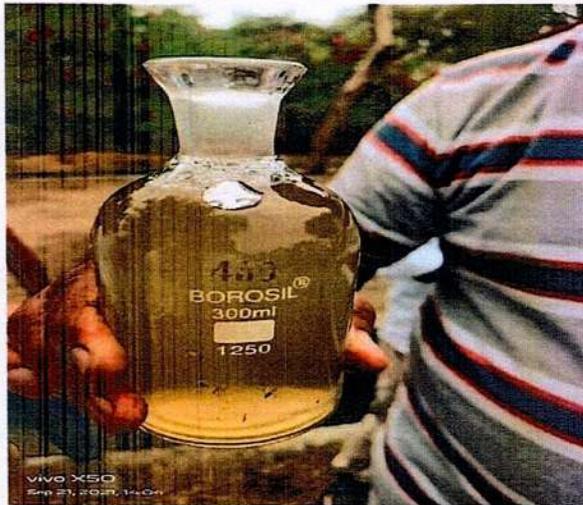
The photographs, showing the various components of STP, are mentioned as per Plates 7 to 10.



**Plate-7: Photograph showing Waste Stabilization Pond**



**Plate-8: photograph showing outlet of Waste Stabilization Ponds**



**Plate-9: photograph showing quality of treated effluent of WSP**



**Plate-10: photograph showing foundation work of SBR basin of new STP of capacity 13 MLD**

### 2.3.2 Recommendations of the Monitoring Committee

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- i) Department of Soil & Water Conservation shall start operating its existing irrigation network system to utilize treated sewage of 8 MLD capacity STP for irrigation within 02 month. The department shall also prepare irrigation scheme to utilize remaining additional quantity of 5 MLD treated sewage, within 01 month.
- ii) For the removal of floating matter and other solid material, MC/PWSSB shall provide additional component at the inlet of first pond of waste stabilization pond within 03 months.
- iii) In order to bring F.Coli. parameter within the prescribed norms, MC / PWSSB shall provide chlorine contact tank at the outlet of the WSP within 02 months.

iv) PWSSB shall complete the construction work of new STP of capacity 13 MLD within the timeline as committed by the department.

#### 2.4 Sewage Treatment Plant of Capacity 8 MLD for Jalalabad Town

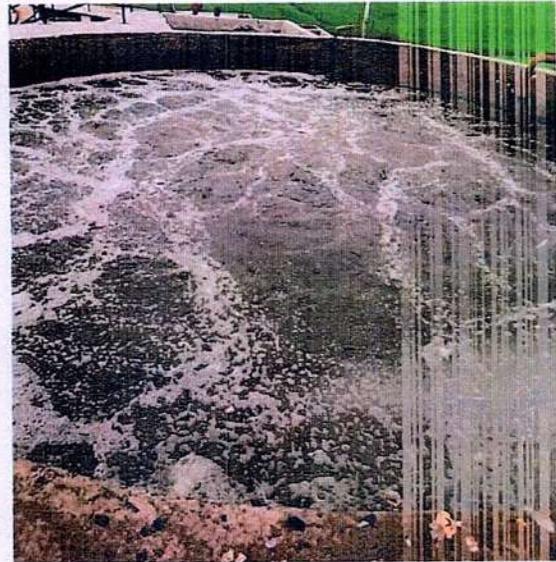
##### 2.4.1. Observations of the Monitoring Committee.

- Population of Jalalabad town is 0.39 lakh as per census 2011 and present population is approx. 0.51 lakh.
- Total discharge of sewage of the town is 12 MLD and the same is discharged into Jalalabad drain.
- STP of capacity 8 MLD, based on MBBR technology, has been installed and commissioned and there is gap of 4 MLD sewage which is required to be treated by providing separate STP by MC Jalalabad.
- STP, consisting of primary treatment unit, MBBR (2 nos. in series), secondary clarifier, final treated effluent collected tank, has been provided.
- During the visit, the Monitoring Committee observed that though the aeration system in the MBBR tanks was in operation but no aerobic biological activity was seen being happened in the aeration chamber resulting in no improvement in the quality of wastewater effluent. No primary and secondary sludge was found removed from the treatment system which indicates that the STP was lying non-operational. It appears that STP was made operational only after receiving the information about the visit of the Monitoring Committee in the area and the capacity of the STP is 8 MLD, whereas, 12 MLD sewage was being passed through the STP, which has resulted into ineffective performance of STP.
- No primary and secondary sludge was observed at the site. Centrifugal system of the STP was not being operated.
- Department of Soil & Water Conservation has laid the irrigation network for the utilization of treated effluent.
- PPCB has collected the effluent samples of STP and the same have been sent to PPCB lab. for analysis of various parameters.

The photographs, showing components of the STP, are mentioned as per **Plates 11 & 14**.



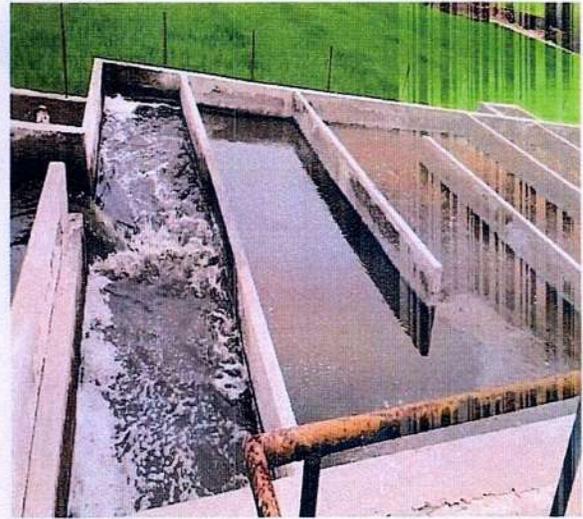
**Plate-11: Photograph showing components of primary treatment system**



**Plate-12: MBBR basin with aeration system**



**Plate-13: Clarifier of STP**



**Plate-14: Final Collection System of effluent**

#### **2.4.2 Recommendations of the Monitoring Committee**

- i) MC/PWSSB shall upgrade/rehabilitate the components of STP within 01 month so that it may meet with the prescribed standards.**
- ii) MC/PWSSB shall prepare DPR for providing additional STP of adequate capacity to treat whole of the quantity of sewage of Jalalabad area, within 01 month and funds for the same may be arranged within 02 months. The work of additional STP may be started within 03 months and the same may be completed in a time bound manner.**
- iii) Department of Soil & Water Conservation shall continue to operate its existing irrigation network to utilize treated sewage of 8 MLD capacity STP for irrigation. The department shall also prepare irrigation scheme within 02 months to utilize treated sewage of additional STP of adequate capacity to be provided by MC/ PWSSB.**
- iv) MC/PWSSB shall make the centrifugal system provided for dewatering of secondary sludge in operation within 15 days and if required, upgradation of the same may be made within 01 month. For the storage of secondary sludge, MC/PWSSB shall provide dedicated storage shed/room and shall maintain proper record w.r.t. generation of secondary sludge, transportation and its utilization for various usage in an environmentally sound manner. The secondary sludge may be utilized for parks/green belts/agriculture areas as manure and proper record in this regard may be maintained.**
- v) MC/PWSSB shall construct Pucca platform for handling and management of primary sludge in an environmentally sound manner within 01 month.**
- vi) MC/PWSSB shall install electromagnetic flow meters at the inlet and outlet of STP within 01 month.**
- vii) MC/PWSSB shall install online continuous effluent monitoring system at the outlet of STP within 02 months.**
- viii) PWSSB shall ensure that bye-pass arrangements, presently lying sealed, shall only be opened to discharge the excess flow during exigency or**

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**excessive rains only after the prior intimation to Punjab Pollution Control Board and the same may be sealed in the presence of the officer of PPCB.**

**2.5 Other issues as discussed in the meeting held on 4.3.2021 and recommendations made by the Monitoring Committee in its report dated 10.3.2021 submitted to Hon'ble National National Green Tribunal.**

During the meeting of the Monitoring Committee held on 4.3.2021 with the District level officers of concerned departments of five Districts (Moga, Sri Mukatsar Sahib, Ferozepur, Faridkot and Fazilka), the directions given to the concerned departments and recommendations made by the Monitoring Committee in its report dated 10.3.2021 w.r.t remedial action to be taken to control water pollution in Fazilka area by the concerned departments, submitted to the Hon'ble National Green Tribunal, are mentioned as under.

**2.5.1 Department Water Supply & Sanitation**

- i. Safe drinking water, based on canal water supply scheme, may be given to the inhabitants of the area by the Dept. of Water Supply & Sanitation.
- ii. The Dept. of Water Supply & Sanitation shall also implement the water supply scheme prepared for 205 villages, based on canal water at the earliest.
- iii. The department shall continue to monitor ground water sources whose water is supplied to the inhabitants for drinking purpose from time to time and data in this regard may be sent to PPCB.
- iv. PPCB and officers / officials of DWSS shall monitor ground water quality of 10 hand pumps of the area within 15 days and in case, the contamination is observed in the ground water samples, the ground water source may be sealed and display board mentioning that the ground water source is not fit for drinking purposes may be erected at the sites.

During the discussion held with the department of Water Supply & Sanitation on 21.9.2021 at Fazilka, it was informed that data is available with the department and same shall be submitted within 07 days.

**The Monitoring Committee directed that the department of Water Supply and Sanitation shall submit the data/report covering all the points, relating to the department, to PPCB within 07 days and the same shall be forwarded to Monitoring Committee for further action.**

**2.5.2 Department of Water Resources (Canal Division)**

- i) Keeping in view the situation of Fazilka area, canal water is supplied through seasonal canal for 6 months in a year for irrigation of agriculture fields. However, taking note of the situation and to ensure proper cropping in the area, the Monitoring Committee directed that in the remaining 6 months (December to May) period, sufficient quantity of canal water may be supplied for irrigation of agriculture fields atleast once in a month.
- ii) The temporarily closed regulator may be opened only during exigency and proper record alongwith reasons mentioned therein shall be maintained by the department and the same may brought in the notice to Deputy Commissioner, Fazilka immediately.

With regard to point no. i), the Sub Divisional Engineer, Department of Water Resources (Canal Division) informed that the proposal for regular supply of canal water to irrigate the agriculture fields is under process and a report in this regard shall be submitted within 07 days.

Regarding point no. ii), the Monitoring Committee visited the regulator installed at Sabuana drain on 22.9.2021 and it was observed that the said regulator has been closed temporarily with gunny bags filled sand and no flow was observed on the other side of the temporarily closed regulator. The said action has resulted into diversion of drain water from entry into big pond. The photograph showing the closed regulator with gunny bags filled with sand is mentioned as per **plate 15**.



**Plate 15 : photograph showing the closed regulator with gunny bags**

**In view of the above, the Monitoring Committee directed as under**

- i) The Department of Water Resources shall submit the report to PPCB within 07 days and the same shall be forwarded to Monitoring Committee.**
- ii) The Deptt. of Water Resources shall continue to maintain temporarily closed regulator with sand gunny bags and it may be opened only during exigency to discharge the excess flow and proper record alongwith reasons mentioned therein shall be maintained by the department and same may be brought into the notice of Deputy Commissioner, Fazilka immediately.**

### **2.5.3 Department of Animal Husbandry**

The Deputy Director, Dept. of Animal Husbandry Fazilka shall continue to conduct health survey of animals and the animal affected with any diseases may be identified and reported to the District Administration of further action.

During discussion with the department on 21.7.2021 at Fazilka, it was informed that the health survey data of animals in the the area is available with the department and same shall be provided within 07 days.

**The Monitoring Committee directed the Department of Animal Husbandary shall submit the report w.r.t health survey of animals to PPCB within 07 days and the same shall be forwarded to Monitoring Committee.**

#### **2.5.4 Department of Health**

Civil Surgeon, Fazilka shall continue to conduct health check up camps and the persons affected with water borne diseases, if any, may be identified and the list of the same may be sent to the District Administration of further action.

**During discussion with the department, it was informed that health survey data of the inhabitants of the area is available and same shall be provided within 07 days.**

**The Monitoring Committee directed that the Department of Health shall submit the report w.r.t health survey of inhabitants of the District to PPCB within 07 days and the same shall be forwarded to the Monitoring Committee.**

#### **2.5.5 Department of Agriculture**

Chief Agriculture Officer shall continue to monitor crop yield data of both the seasons of the year and its impact on yield, if any and data of the same may be maintained. The monitoring process may be continued in every season for next 03 years.

During discussion with the Department of Agriculture on 21.9.2021 at Fazilka, it was informed that data is being monitored by the department and same shall be provided within 07 days.

**The Monitoring Committee directed the Department of Agriculture to submit the required data/report to PPCB within 07 days and the same shall be forwarded to Monitoring Committee.**

#### **2.5.6 Department of Rural Development & Panchayats**

District Development & Panchayat Officer, Fazilka informed that 83 villages have been identified which discharge their wastewater into the drains of Fazilka area. Out of these 83 villages, funds for 16 villages have been sanctioned, out of which treatment facilities in 03 villages have been provided.

**The Monitoring Committee directed the department of Rural Development & Panchayats shall submit the detailed report/data alongwith timelines for providing the treatment facility for the remaining 67 villages of the District may be submitted to PPCB within 07 days and the same may be forwarded to the Monitoring Committee.**

#### **2.5.7 Punjab Pollution Control Board**

PPCB was directed to continue to monitor the water quality of the drains and pond wastewater to assess any improvement of quality of water in these water bodies with the installation of STPs in the area.

The Monitoring Committee visited the various drains of Fazilka area on 22.09.2021, the report of which is mentioned as under :

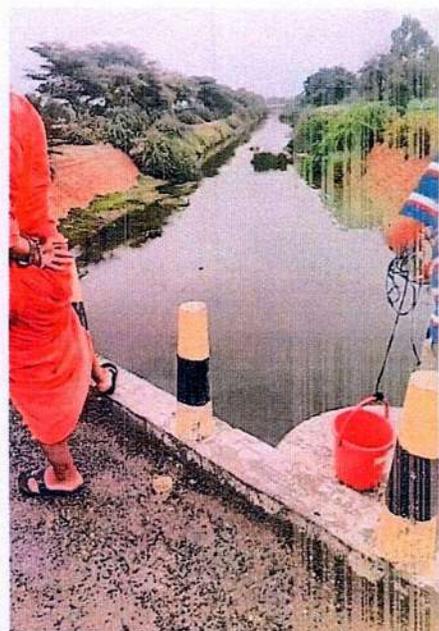
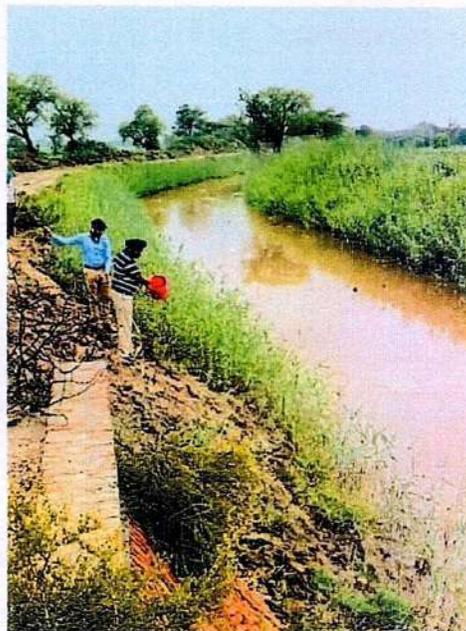
**2.5.7.1 Abul Khurana out fall Drain :**

PPCB in the presence of the monitoring Committee collected the water sample of Abul Khurana drain on 22.09.2021 and the same has been sent to PPCB, Lab. at Patiala for analysis of various parameters.

**2.5.7.2 Sabuana Drain :**

PPCB in the presence of the monitoring Committee collected the water sample of Sabuana drain on 22.09.2021 and the same has been sent to PPCB, Lab. at Patiala for analysis of various parameters.

It is mentioned here that with the temporary closing of regulator with sand gunny bags, the flow of drain water of these two drains has been diverted from entering into big pond and same has been diverted to Ditch channel. The photograph showing the Sabuana drain before meeting Abul Khurana drain and Abul Khurana drain before meeting Sabuana drain are mentioned as per **plate no. 16 & 17.**



**Plate no. 16 : photograph showing the Sabuana drain before meeting Abul Khurana drain**

**Plate no. 17 : photograph showing the Abul Khurana drain before meeting Sabuana drain**

**2.5.7.3 Ditch Channel also known as Aspal Extension Drain**

PPCB in the presence of the Monitoring Committee collected the water sample of ditch channel which is also known as Aspal Extension drain on 22.09.2021 and the same has sent to PPCB, Lab at Patiala for analysis of various parameters.

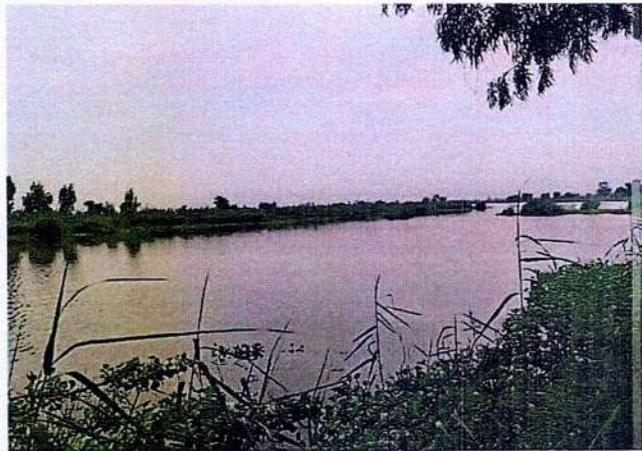
**2.5.7.4 Fazilka Drain**

During the visit to the Fazilka drain by the Monitoring Committee on 22.09.2021, it was observed that treated sewage of STP, Fazilka town and sullage of 03 villages existing along the said drain, are discharged into Fazilka

drain. PPCB in the presence of the Monitoring Committee collected the drain water samples on 22.9.2021 from the points i.e after the discharge of treated sewage of Fazilka town and before merging into Muazzam DCB drain. These drain water samples have been sent to PPCB, Lab. at Patiala for analysis of various parameters.

**2.5.7.5 Muazzam DCB Drain and formation of big pond**

During the visit to the Muazzam DCB drain on 22.09.2021, drain water sample was collected by PPCB in the presence of the Monitoring Committee and the same has been sent to PPCB Laboratory for analysis of various parameters. It was also observed that Mauzzam DCB drain has its gradient towards International boundary. However, flow of drain has been obstructed from the other side of the international boundary, resulting in formation of big pond. Pond water sample was also collected for analysis of various parameters and the same has been sent to PPCB laboratory, Patiala for analysis of various parameters. The photograph showing the big pond is mentioned as per **plate 18**.



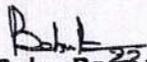
**Plate 18 : Photograph showing the big pond, the flow of which has been obstructed at the International boundary**

**2.6 General Recommendations of the Monitoring Committee.**

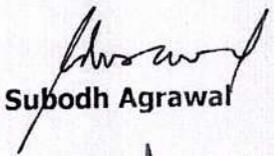
- i. The Department of Local Govt. / MCs shall release funds for operation and maintenance of STPs on regular basis so as to ensure the regular operation of STPs of the towns at all the times.
- ii. PPCB shall provide analysis results of effluent samples collected from STPs and drains of Fazilka area during its visit to Fazilka area on 21.09.2021 and 22.09.2021 within 10 days.
- iii. Additional Deputy Commissioner (Urban Development) shall ensure that the timelines given by Municipal Councils for completion of new STPs/ upgradation/rehabilitation of existing STPS are achieved well in time so that STPs may be completed and commissioned in time bound manner.

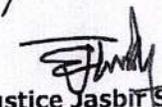
The Monitoring Committee further apprised that as per the directions of the Hon'ble National Green Tribunal in its order dated 9.6.2021 in O.A. No. 596 of 2019 in the matter of Vikram Ahuja Vs State of Punjab & Ors, the Monitoring Committee has to prepare its report, based on the status as on 30.9.2021, in

the first week of October, 2021 and the same is to submitted before 10.10.2021, therefore, all the departments were directed to submit the data/report by 28.7.2021 and PPCB was directed to submit the analysis results of effluent samples of STPs and drains water samples by 30.9.2021.

  
Dr. Babu Ram 30.9.2021

sd/-  
Sant Balbir Singh Seechewal

  
Subodh Agrawal

  
Justice Jasbir Singh,  
Former Judge, Punjab &  
Haryana High Court and now  
as Chairman of the Monitoring  
Committee