

Vikram Ahuja vs State Of Punjab on 29 October, 2021

Author: Adarsh Kumar Goel

Bench: Adarsh Kumar Goel

Item No. 03

(Court No. 1)

BEFORE THE NATIONAL GREEN TRIBUNAL

(By Video Conferencing)

Original Application No. 596/2019

Vikram Ahuja

Applicant

Versus

State of Punjab & Ors.

Respondent

Date of hearing: 29.10.2021

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

Respondent: Mr. Naginder Benipal, Advocate for Punjab Water Supply & Sewage Board

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.

In the course of consideration of the issue, scope of the matter has extended to other adjoining Districts facing such problem.

2. Having regard to the seriousness of the problem and to get credible information, the Tribunal requested the monitoring Committee earlier constituted to monitor compliance of certain issues in the State of Punjab, headed by Justice Jasbir Singh, former Judge of Punjab and Haryana High Court with a former Chief Secretary, Punjab and a former Member Secretary of the State PCB as members, to undertake visit to the site and give a report to the Tribunal. The matter was then considered on 29.06.2020 in the light of report of the Committee 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 then considered on 25.11.2020 in the light of report of the State PCB dated 21.11.2020 showing that certain steps had 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 further remedial measures were directed to be taken, to be monitored by the Monitoring Committee

4. The matter was then considered on 9.6.2021 in the light of further report dated 10.03.2021 of the Monitoring Committee. The report recommended remedial action by concerned Departments of the State Accordingly, the Tribunal directed the State of Punjab to take further remedial action in terms of recommendations of the Committee as follows:-

"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. The Tribunal also directed the Chief Secretary, Punjab to issue directions to the concerned officers accordingly. The Monitoring Committee was requested to continue monitoring and furnish status report as on 30.09.2021 which has accordingly been furnished.

6. We have perused the report dated 13.10.2021 filed by the Committee which gives compliance status with reference to each of the recommendations exhaustively, followed by conclusions and further recommendations as follows:

"6.o 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/I 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 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, Malian 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 Beriawala, 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 Beriawala) 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 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 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 Dhar mkot 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.

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.

V II. R e m e d i a t i o n o f w a s t e w a t e r o f N P K o t I s e K h a n

- 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 to wn

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 Ziratown

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 Guruaharsahai 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, Guruaharsahai 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 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/I, 14 mg/I, 68 mg/I, 7.9 mg/I & 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/I , 18mg/I , 84mg/I, 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.

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 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 Beriwal).

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 Beriwal, 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 main tenance 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. "

7. From the above it is seen that there still remain gaps in compliance at various places in different Districts affected by the water pollution.

Specific Recommendations have been made for remedying the situation at appropriate higher levels of the State. Thus, such steps need to be taken and necessary funds arranged in the interest of public health and protection of environment to enforce the inalienable constitutional obligation of the citizens to clean environment and preventing water pollution. There are binding directions of the Hon'ble Supreme Court on the subject in *Paryavaran Suraksha v. UOI*, (2017) 5 SCC 326 and also directions of this Tribunal.

8. Having regard to proceedings before this Tribunal in the last more than two years and the entirety of situation emerging from the report of the monitoring Committee, there is need for involvement of highest level State authority to remedy the situation. We direct the Chief Secretary, Punjab to hold a joint meeting with the Monitoring Committee, Chairman of the State PCB, CPCB and the concerned Departments of the State, including Public Health Engineering Department, State Sewage Board, Irrigation Department and Urban Development Department, for planning further course of action for implementation of the recommendations quoted hereinabove. Such meeting be held preferably within one month.

The course of action to be adopted may include exploring technology options for different sizes of locations, like places with one lac or lesser population etc and monitoring and review at appropriate level, not below the level of Additional Chief Secretary to be nominated by the Chief Secretary, for coordinated action.

The application stands disposed of but if the situation requires, this Tribunal can be approached for any appropriate direction.

A copy of this order be forwarded to the Chief Secretary, Punjab, Chairman, Punjab Pollution Control Board and Justice Jasbir Singh, Former Judge of Punjab and Haryana High Court by e-mail.

Adarsh Kumar Goel, CP Sudhir Agarwal, JM Brijesh Sethi, JM Dr. Nagin Nanda, EM
October 29, 2021 Original Application No. 596/2019 SN