

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI
(PRINCIPAL BENCH)**

Appeal No. 48 of 2024

In the matter of

M/s Bahadurke Textile and Knitwear Association, 15 MLD CETP, Ludhiana

..... Applicant

V/s

Punjab Pollution Control Board & Ors.

..... Respondents

Reply of Er. Gurmit Singh, Environmental Engineer, Regional Office-3,
Ludhiana on behalf of respondent Punjab Pollution Control Board.

RESPECTFULLY SHOWETH

- 1) That the subject cited appeal has been filed by the Bahadurke Textile and Knitwear Association, 15 MLD CETP, Ludhiana through its director Mr. Rajnish Gupta before the Hon'ble National Green Tribunal against the orders dated 26.09.2024 issued by the Punjab Pollution Control Board vide which directions u/s 33-A of the Water (Prevention & Control of Pollution) Act, 1974 have been issued to the Bahadurke Textile and Knitwear Association, 15 MLD CETP,

Ludhiana for meeting with the prescribed discharge standards and to stop the discharge of effluent from the CETP 15 MLD into Buddha Nallah.

- 2) That, briefly submitted initially M/s Punjab Dyers Association (PDA), Ludhiana had envisaged a proposal to set up a Common Effluent Treatment Plant (CETP) of 117 MLD capacity at Jamalpur-Awana, Tajpur Road, Ludhiana to cater to the dyeing / textile industries located within M.C. limit of Ludhiana which were discharging treated effluent from their captive Effluent Treatment Plants (ETPs) into the municipal sewer.
- 3) That initially the treated effluent of the CETP was proposed to be discharged onto land for irrigation with the assistance of the Government. A series of meetings were held with the stakeholder departments including Central Pollution Control Board, Punjab Pollution Control Board, Municipal Corporation Ludhiana, Department of Irrigation (now the Department of Water Resources), Department of Industries & Commerce, Punjab Agricultural University and representatives of Punjab Dyers Association, Ludhiana to finalize the standards to be fixed for discharge of treated effluent from CETP onto land for irrigation. In one such meeting held under the Chairmanship of Prof. S.P. Gautam, the then Chairman of the Central Pollution Control Board on 25/11/2010 at New Delhi. After deliberations and discussions with the stakeholder departments, the following standards were decided to be fixed at the out let of the 117 MLD CETP.

Sr. No.	Parameters Concentration in mg/l except pH, SAR, RSC & Bio-assay	Parameters Concentration in mg/l except pH, SAR, RSC & Bio-assay
1.	pH	6.5-8.5
2.	TSS	20
3.	BOD (3 Days at 27°C)	10
4.	COD	50
5.	TDS	2100
6.	Oil & Grease	Nil
7.	Total Chromium	Nil
8.	Phenolic Compounds	Nil
9.	Sulfide	0.01
10.	Bio-assay	90% survival of fish after 96 hours of 100% effluent.
11.	SAR	7
12.	RSC (meq/litre)	4

However, considering side effects of some parameters for usage as irrigation, it was decided that the following parameters of SAR, EC and RSC shall be maintained after mixing of treated wastewater from the CETP and treated domestic wastewater of STPs of Ludhiana and Municipal Corporation, Ludhiana shall ensure that enough dilution is made available through treated domestic wastewater so that the values of the above parameters as mentioned below are achieved:

Sr. No.	Parameter	Concentration
1.	Sodium absorption ratio (SAR)	3.5
2.	Electrical Conductivity (EC) $\mu\text{S}/\text{cm}$	2000
3.	Residual Sodium Carbonate (RSC) meq/litre	2.5

Thus, achievement of standard by way of dilution of CETP treated water by mixing STP treated water was allowed to the extent of the above 03 parameters namely Sodium absorption ratio (SAR), Electrical Conductivity (EC) & Residual Sodium Carbonate (RSC). A copy of the minutes of the meeting dated 25.11.2010 chaired by the then Chairman of CPCB is enclosed as **Annexure-A**.

- 4) That it is relevant to mention here that at the initial stage, the Ministry of Environment and Forests, Government of India had granted 'Environmental Clearance' for the establishment of CETP plant of capacity 117 MLD at Jamalpur, Ludhiana for use of treated wastewater for irrigation in an area of 80,000 acres of land, however, due to certain practical difficulties in the construction of Dedicated Conveyance System for one single CETP, it was proposed to split the 117 MLD CETP project at Tajpur Road, Ludhiana into two CETPs of 50 MLD and 40 MLD capacity for cluster of dyeing industries at Tajpur Road and Focal Point, Ludhiana respectively. Thus, three clusters of dyeing industries at Tajpur Road, Rahon Road and Focal Point were covered in the proposed CETP of 50 MLD and 40 MLD modules and one more CETP of 15 MLD capacity for Bhadurke Road cluster of dyeing industries was proposed by Bahadurke Textile and Knitwear Association, 15 MLD CETP, Ludhiana location

for which Separate Environmental Clearance was granted by MoEF&CC vide memo F.No. 10-119/2011-IA.III dated 08.12.2014 subject to the special condition that the project proponent shall maintain Zero discharge.

A copy of the Environmental Clearance granted by MoEF&CC is enclosed as **Annexure-B**.

- 5) That the Special Purpose Vehicle (SPV) of the 15 MLD project had prepared a Detailed Project Report (DPR) based on stringent environmental standards. Cases of 40 MLD CETP of M/s Punjab Dyers Association (PDA), Focal Point Module, Ludhiana and 15 MLD CETP of Bahadur Ke Textiles and Knitwear Associations at Bahadur Ke Road, Ludhiana were appraised by the Appraisal Committee of the Government of India, Ministry of Environment, Forest and Climate Change on 03.03.2016 for the purpose of releasing the Grants-in-Aid for the installation of the said CETPs. The Appraisal Committee has recommended and approved the CETP proposal of M/s Bahadur Ke Textiles and Knitwear Associations at Bahadur Ke Road, Ludhiana with the following main and relevant aspects:
- a) Earlier, the proposal of CETP was based on Zero Liquid Discharge (ZLD) Technology was duly recommended and forwarded by Punjab Pollution Control Board (PPCB) for financial assistance for 15 MLD CETP. But due to reluctance of Bankers for the disbursement of finance for ZLD, the proposal was reformulated/recommended for financial assistance which is based on aerobic biological system for tertiary treatment in the Phase-I. The ZLD will be considered in Phase-II.
 - b) The project proponent has indicated their intention to initiate the CETP based on conventional treatment system in Phase-I. They may adopt ZLD in the Phase-II for which they will apply to the MoEF&CC at a later stage as an up-gradation case.
 - c) Member Secretary, Punjab State Pollution Control Board has confirmed that the Consent to Establish (CTE) has been issued by PPCB based on the ZLD.

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- d) The proponent informed the Committee that they have already got commitment from the State Government for assistance to the tune of 10 crores and requested GOI to provide financial assistance and permission to initiate a non-ZLD based CETP in Phase-I and then upgrade to ZLD based CETP subject to support from the financial institutions. However, the Committee recommended that the Association should submit a fresh proposal for Zero Liquid Discharge at a later stage so that the CETP is installed in a phased manner. The CETP shall treat the effluents to meet the norms prescribed for CETP.

A copy of the Minutes of the Appraisal Committee Meeting on Common Effluent Treatment Plants (CETPs) held in the Ministry of Environment, Forest and Climate Change on 03.03.2016 was issued by the Government of India, MoEF&CC vide letter F.No. Q-15017/22/2014-CPW dated 18.03.2016 and copy of the same is attached as **Annexure-C**.

- 6) That from the perusal of the Minutes of the Appraisal Committee Meeting dated 03.03.2016, it is clear that the proposal of the Appellant Project Proponent with intention to initiate the CETP based on Conventional Treatment System in Phase-I was allowed subject to the adoption of ZLD in Phase-II for which the Project Proponent had to apply to the MoEF&CC at a later stage as an up-gradation case.
- 7) That it is pertinent to mention here that the Hon'ble Supreme Court of India has considered the subject matter of setting up of CETPs and STEPs in Writ Petition (Civil) No. 375 of 2012 in the matter of Paryavaran Suraksha Samiti Vs. Union of India and vide judgement dated 22.02.2017 issued directions that the setting up of 'Common Effluent Treatment Plants' should be taken up as an urgent mission. CETPs which are already under implementation should be completed within the time lines already postulated. CETPs which are yet to be setup, concerned State Governments/Union Territories shall complete the same within three years. The State Pollution Control Boards were issued directions to ensure setting up of functional Common Effluent Treatment Plants within the time lines mentioned above.

- 8) That considering the above-mentioned facts and the directions issued by the Hon'ble Supreme Court of India in Writ Petition (Civil) No. 375 of 2012 titled as Paryavaran Suraksha Samiti and another v/s Union of India and Others, the Punjab Pollution Control Board has facilitated the setting up of the Common Effluent Treatment Plants of 40 MLD, 50 MLD and 15 MLD at Ludhiana and carried out sincere efforts so as to ensure that the Common Effluent Treatment Plant are made operational at the earliest.
- 9) That further it is submitted that the Government of Punjab has issued directions dated 10.10.2019 for abatement of pollution in Buddha Nallah wherein amongst other directions, one of the directions issued was that " all CETPs are to be made operational as per time schedule given in the action plan failing which PPCB shall take action against the industry including levying of Environmental Compensation". The CETP of 15 MLD capacity at Bahadurke Road, Ludhiana was accordingly setup and inaugurated in July 2020.
- 10) That before the establishment of the Common Effluent Treatment Plants, the effluent from dyeing and textile industrial units was being discharged after treatment through Captive Effluent Treatment Plants (ETPs) into the sewer system, ultimately leading to Buddha Nallah and the said treatment plants were operated by non-technical personnel. The CETPs were aimed to provide a technically efficient, single-point treatment solution for industrial effluent and were designed, installed and operated by the reputed companies namely L&T Constructions Ltd (40 MLD CETP), M/S Triveni Engineering and Industries Ltd (50 MLD CETP) and M/S Saurabh Construction Pvt. Ltd. (15 MLD CETP). The establishment of CETPs in Ludhiana for the treatment of wastewater of textile and dyeing industries thus lead to the achievement of twin objectives relating to the diversion and separation of industrial effluent from the Sewage Treatment Plants (STPs), enhancing the functioning of the STPs coupled with quality treatment of industrial effluent of Dyeing and Textile Units.
- 11) That due to the commissioning of the first phase of the CETP of 15 MLD capacity and also considering the urgent commissioning of the said CETP, the Board has granted fresh 'Consent to Operate' by temporarily allowing discharge of treated

trade effluent into Buddha Nallah with additional condition that the SPV shall comply with all the terms and conditions imposed by Appraisal Committee of MoEF&CC in meeting dated 18.03.2016. A copy of 'Consent to Operate' dated 10.09.2020 granted to the Bahadurke Textile and Knitwear Association, 15 MLD CETP is enclosed as **Annexure-D**.

12) That the CETP is yet to achieve the stringent standards proposed in the DPR of the CETP submitted at the time of appraising their project for financial assistance by the MoEF&CC, Government of India and has also not submitted any proposal for ZLD for 2nd Phase as per decisions of the meeting dated 18.03.2016 of Appraisal Committee of MoEF&CC. The CETP has also failed to achieve the standards prescribed by MoEF&CC for discharge of effluent from textile units into inland surface water bodies with respect to one parameter. The CETP has not been able to achieve the FDS/TDS parameter of 2100 mg/l as prescribed by MoEF&CC.

13) That it is relevant to mention here that the Central Pollution Control Board (CPCB) had visited CETPs of Ludhiana on 22.04.2024 & 23.04.2024. Gist of the deficiencies observed by the CPCB team is as under:

a) The analysis results of sample collected from CETP outlet reveals that BOD: 243 mg/l, COD: 587 mg/l, Chloride: 1904 and Sulphide: 16 mg/l exceeds the notified effluent discharge standards for CETP. Remaining monitored parameters were found within the prescribed standards.

b) Sample analysis results collected reveals that the biomass concentration in the SBR basins MLSS 2639 mg/l (against the designed value of 4840 mg/l) MLVSS 1179 mg/l (against the designed value of 3832mg/l) were respectively. The MLSS and MLVSS were found less against designed range which indicates poor operation of the SBR. 7/24

c) The CETP has installed Online Continuous Effluent Monitoring System (OCEMS) at the final outlet of treated effluent for the parameters pH, TSS, COD, BOD with connectivity to PPCB & CPCB servers. During the visit, the OCEMS was found operational and variation in OCEMS reading

compared with monitored results was also reported which indicates the improper working/validation/calibration of OCEMS system.

- d) As per EC issued by MoEF & CC dated 08.12.2014, the CETP is to be established as per ZLD system. However, treated effluent of CETP is discharged into Budha Nallah through underground pipeline. The Buddha Nallah is ultimately meeting into River Sutlej.
- 14) That the Central Pollution Control Board had issued directions dated 12.08.2024 u/s 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to the Punjab Pollution Control Board to stop discharging of treated effluent into Buddha Nallah from 15 MLD CETP due to non-compliance of EC conditions and due to non-achievement of results in monitoring carried out by CPCB. The CPCB had asked the Board to submit Action Taken Report in the matter. A copy of directions dated 12.08.2024 issued by CPCB is enclosed as **Annexure-E**.
- 15) That having been bound by the directions issued by the Central Pollution Control Board, the Punjab Pollution Control Board has issued directions u/s 33-A of the Water (Prevention & Control of Pollution) Act, 1974 to the Bahadurke Textile and Knitwear Association, 15 MLD, Ludhiana as under:
- A. That, the SPV shall meet with the prescribed discharge standards and to comply with the disposal conditions mentioned in the Environmental Clearance granted by the Ministry of Environment, Forest and Climate Change dated 03.05.2013.
- B. That, the SPV shall immediately stop the discharge of effluent from the CETP of 15 MLD capacity into Buddha Nallah or any other surface water body.
- A copy of directions dated 25.09.2024 issued by PPCB is enclosed as **Annexure-F**.
- 16) That it is pertinent to mention here that the Board had issued directions dated 25/26.09.2024 under section 33-A of the Water (Prevention and Control of Pollution) Act, 1974 to all the CETPs in pursuance to the directions issued by the Central Pollution Control Board under section 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974. Aggrieved by the directions

- issued by the Board, the CETPs of 50 MLD and 40 MLD have filed appeal no. 40 of 2024 and Appeal no. 41 of 2024 respectively against the directions dated 25.09.2024/26.09.2024 of the Punjab Pollution Control Board before the Hon'ble National Green Tribunal. The Hon'ble Tribunal vide Order dated 04.12.2024 has issued directions that no coercive steps shall be taken against the 50 MLD CETP and 40 MLD CETP subject to the compliance of Environmental norms and the case was adjourned to 20.03.2025.
- 17) That the appellant herein has also filed an appeal against the directions dated 25.09.2024 issued by the Board before this Hon'ble Tribunal. Considering the Appeal No. 48 of 2024 filed by the CETP of 15 MLD capacity and also the Intervention Application filed by Public Action Committee, the Hon'ble National Green Tribunal was pleased to prepone the date of hearing in all the cases from 20.03.2025 to 23.12.2024. After consideration of the matter, the Hon'ble National Green Tribunal while hearing the appeal cases of 50 MLD CETP, 40 MLD CETP and 15 MLD CETP had directed the respondent Board vide Order dated 23.12.2024 to file reply to the said appeals with the direction that no coercive action shall be taken against the said CETPs subject to the compliance of environmental norms.
- 18) That it is relevant to mention here that though the Punjab Pollution Control Board having been bound by the directions of the Central Pollution Control Board given under section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 had issued further directions to the Appellant CETP of 15 MLD capacity not to discharge any treated effluent into Buddha Nallah, but the issuance of such directions is not a permanent solution to the problem existing at the moment. At present, Ludhiana City has been declared as Critically Polluted Area by the Central Pollution Control Board and in the given circumstances, the matter falls under the preview of the Central Pollution Control Board to suggest the alternate method for discharge of treated trade effluent of the Common Effluent Treatment Plant other than the discharge of treated effluent into the Buddha Nallah.
- 19) That it is pertinent to mention here that the CETP of 15 MLD capacity during the hearing before the Competent Authority of the Board has disclosed that the

CETP has approached the MoEF&CC, Government of India for annulling the condition in the Environmental Clearance that the Project Proponent shall maintain zero discharge and to allow the CETP to discharge treated effluent as per MoEF&CC standards. The case was considered by the EAC-II of the MoEF&CC in its meeting held on 17.12.2024 but the case was deferred to seek clarification from the policy section of the MoEF&CC with regard to the amendment in the conditions of earlier granted Environmental Clearance since as of now the CETP of textile/dyeing units are not covered under the ambit of EIA notification in light of the notification dated 19.12.2024. With respect to the allowing of discharge of treated water into Buddha Nallah, the committee of MoEF&CC during the above meeting held on 17.12.2024 observed that the instant project lies in CPA-Ludhiana and in CEPI SCORE, the component of water is higher, accordingly technicality for giving such relaxation for discharge of treated water may be obtained from Central Pollution Control Board by the project proponent.

- 20) It is further pertinent to mention here that a similar matter relating to the issue of discharge of effluent through sewer by the dyeing units in Buddha Nallah in the State of Punjab is under consideration of the Hon'ble Tribunal in Original Application No. 225 of 2022 titled as Nitin Dhiman V/s State of Punjab and Others. The case is Original Application No. 225 of 2022 is being heard by the Hon'ble Tribunal with Original Application No. 546 of 2024 in which the Hon'ble Tribunal has taken suo-moto cognizance on the basis of a news item titled "Ludhiana PPCB report flags 54 dyeing units in Buddha Nallah's catchment" appearing in the Hindustan Times dated 25.4.2024. After consideration of the matter, the Hon'ble Tribunal was pleased to pass an Order dated 27.11.2024 in the said cases with direction to the Central Pollution Control Board to file compliance report disclosing the performance of the CETPs and required actions to be taken by issuing necessary directions under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 or under section 5 of the Environment (Protection) Act, 1986. In order to make compliance of the directions of the Hon'ble National Green Tribunal, the Central Pollution Control Board has carried out performance analysis of all the

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CETPs of 50 MLD, 40 MLD and 15 MLD at Ludhiana and the report of the Central Pollution Control Board is awaited. The above cases (O.A. No. 225 of 2022 and O.A. No. 546 of 2024) are listed for hearing before this Hon'ble Tribunal on 20.03.2025.

- 21) That the above reply of relevant facts is hereby submitted for kind consideration and appropriate orders of this Hon'ble Tribunal.

Submitted by

Gurmit Singh
18/02/2025

(Gurmit Singh)

Environmental Engineer,
Punjab Pollution Control Board
Regional Office-3, Ludhiana

(On behalf of Punjab Pollution Control Board)

Date: 18-02-2025

Place: Ludhiana


Annexure - A

14. The Chief Conservator of Soil
Punjab, Chandigarh
15. Sh. Ashok Kumar Malhotra,
Managing Director,
Punjab Dyers Association, Ludhiana
16. The Managing Director,
H&S Water Ltd.,
A4-A6, Navin's Presidium,
103-Nelson Manickam Road, Aminjikarai,
Chennai-600029.
17. Sh. Harsh Bhanwala,
Senior Vice President, H&S Water Ltd.,
Jaipur

Memo No: Tech/CETP-Dyeing/LDH/Mtg/2010/ 21632-5329
Dated: 31/11/10

Subject: Minutes of the meeting organized with Prof.S.P.Gautam, Chairman, Central Pollution Control Board on 25-11-2010 at 11.00 a.m. at Parivesh Bhawan, East Arjun Nagar, New Delhi to sort out the issue regarding fixing up of the values of parameters namely Sodium Absorption Ratio (SAR), Electric Conductivity (EC) & Residual Sodium Carbonate (RSC) for discharge of treated wastewater of CETP of dyeing industries of Ludhiana for irrigation purpose.

Please find enclosed herewith a copy of minutes of the meeting organized with Prof.S.P.Gautam, Chairman, Central Pollution Control Board on 25-11-2010 at 11.00 a.m. at Parivesh Bhawan, East Arjun Nagar, New Delhi to sort out the issue regarding fixing up of the values of parameters namely Sodium Absorption Ratio (SAR), Electric Conductivity (EC) & Residual Sodium Carbonate (RSC) for discharge of treated wastewater of CETP of dyeing industries of Ludhiana for irrigation purpose. same is sent to you for information and necessary action please.



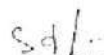
Officer on Special Duty
For Additional Secretary-cum-Director
of Industries & Commerce, Punjab.

Endst.No. Tech/CETP-Dyeing/LDH/Mtg/2010/

Dated:

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

1. The PS to PSCM for the kind information of worthy Principal Secretary to Hon'ble Chief Minister, Punjab.
2. The PS/PSIC for information of worthy Principal Secretary Industries & Commerce, Punjab, Chandigarh.
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Near Karkar Duma Court Complex, New Delhi.



Officer on Special Duty
For Additional Secretary-cum-Director
of Industries & Commerce, Punjab.

Minutes of the meeting organized with Prof. S.P. Gautam, Chairman, Central Pollution Control Board, on 25/11/2010 at 11.00 a.m. in his office at Parivesh Bhawan, East Arjun Nagar, New Delhi to sort out the issue regarding fixing up of the values of parameters namely Sodium Absorption Ratio (SAR), Electric Conductivity (EC) & Residual Sodium Carbonate (RSC) for discharge of treated wastewater of CETP of dyeing industries of Ludhiana for irrigation purposes.

Following were present:

1. Sh. S.S. Channy, Principal Secretary to Govt. of Punjab Deptt. of Industries & Commerce, Chandigarh
2. Sh. J.S. Kaymotra, Member Secretary, Central Pollution Control Board, New Delhi
3. Dr. Babu Ram, Member Secretary, Punjab Pollution Control Board, Patiala
4. Sh. Vinod Chaudhary, Chief Engineer (Drainage), Punjab
5. Dr. G.P. Choudhary, Sr. Soil Chemist, Punjab Agricultural University, Ludhiana
6. Sh. S.P. Singh, OSD, Department of Industries & Commerce, Punjab, Chandigarh.
7. Sh. V.P. Singh, Superintending Engineer, (O & M) Municipal Corporation, Ludhiana
8. Sh. K.S. Walia, Executive Engineer, Sidhwan Canal Division, Ludhiana
9. G.S. Majithia, SEE, Punjab Pollution Control Board, Zonal Office-2, Ludhiana
10. Sh. Harsh Bhanwala, Sr. Vice President, M/s IL & FS Water Ltd., Jaipur
11. Sr. Sudhir Mathur, Manager, M/s IL & FS Water Ltd., Jaipur
12. Sh. Ashok Kumar Makkar, Managing Director, Punjab Dyers Association, Ludhiana
13. Sr. Yash Kumar Jindal, Secretary, Punjab Dyers Association, Ludhiana

At the outset, Dr. Babu Ram, Member Secretary, Punjab Pollution Control Board apprised that earlier, Punjab Pollution Control Board in consultation with Central Pollution Control Board on 26/11/2009 had prescribed the following standards to be achieved at the outlet of CETP:

Sr. No.	Parameters	Concentration (mg/l except pH, SAR & Bio-assay)
1.	pH	6.5-8.5
2.	TSS	20
3.	BOD (3 DAYS AT 27°C)	10
4.	COD	50
5.	TDS	2100
6.	Oil & Grease	Nil
7.	Total Chromium	Nil
8.	Phenolic Compounds	Nil
9.	Sulfide	0.01
10.	Bio-assay	90% survival of fish after 96 hours of 100% effluent.
11.	Sodium Absorption Ratio (SAR)	3

Annexure - A

He added that Punjab Dyers Association (PDA), Ludhiana vide its office letter no. 32/PDA/CETP/LOH dated 23/9/2010 informed that the value of SAR is more stringent than required for irrigation and it will have huge impact on the treatment technology and in order to attain this value of 3, much expensive equipments/treatment systems are required to be installed. Thus, the revised standards as prescribed for general standards for discharge into in land surface water/ discharge of irrigation may be fixed at the outler of CETP. The matter was also discussed by PDA in the meeting held under the Chairmanship of Principal Secretary to Hon'ble Chief Minister, Punjab on 27/10/2010 at 5.00 p.m., wherein, the issue regarding relaxation of value of SAR to 18 was also raised by Sh. Harsh Bhanwala, Senior Vice President, M/s IL & FS Water Ltd. However, in the meeting, it was apprised that the value of SAR must be maintained 3 because no treated water having SAR more than 3 can be allowed to discharge into Budha Nallah further leading to River Sutlej whose water is used for irrigation and drinking purposes in the South-Western District of State of Punjab. Therefore, in the said meeting, it was decided that Hon'ble Chief Minister, Punjab shall hold a meeting with Chairman, Central Pollution Control Board in this regard very shortly, where the issue of SAR shall be discussed. Accordingly, Hon'ble Chief Minister, Punjab convened a meeting on 2/11/2010 with Chairman, Central Pollution Control Board with regard to setting of CETP by PDA. In the said meeting, it was decided that another meeting may be convened with expert of PAU, Ludhiana on 10/11/2010 under the Chairmanship of Hon'ble Chief Minister, Punjab as the Chairman, Central Pollution Control Board desired to know a report of Agricultural Department on the issue that for how long the soil can be irrigated with the discharge water coming out from the CETP.

Thus, during the meeting held on 10/11/2010 under the Chairmanship of Hon'ble Chief Minister, Punjab, Dr. O.P. Chaudhary, an expert in water quality from Punjab Agricultural University, Ludhiana informed that the standard for SAR fixed as 3 is acceptable value in view of end use of treated wastewater on to land for irrigation for about 50 years and also its discharge into River Sutlej. He further opined that the TDS parameter may be replaced with Electrical Conductivity (EC) to be equivalent to 2000 $\mu\text{S}/\text{cm}$ for making the water useable for irrigation. He further added that one more parameter namely Residual Sodium Carbonate (RSC) to assess the alkalinity hazard of the effluent may also be introduced, the limit of which may be 2.5 meq/litre. He further felt that the limit of irrigable land measuring 40,000 acres in catchment area of River Sutlej, can be doubled for wheat crop. During the said meeting, it was informed by Sh. Amarjit Singh Dault, Chief Engineer (Canals), that they have got adequate land measuring approximately 80,000 acres which include 18000 acres in the upstream of Budha Nallah and 22000 acres in catchment area besides 40,000 acres already available for irrigation. But excess treated effluent during no demand period particularly in

wheat season would be released into GR distributary and would be sufficiently diluted for irrigation purpose. After detailed deliberations following decisions were taken:-

1. Department of Industries and Commerce shall go ahead for finalization of DPR by Project Management Consultant (PMC) and further implementation of the project.
2. PAU and PPCB shall collect and analyze the dyeing effluent samples for studying the value of SAR, EC, and RSC parameters and shall submit its report within one week. In this regard PAU, PPCB and Irrigation Department shall sit together and work out the modalities of dilution of treated waste water and adequacy of land available in the command area in view of the standards fixed above for utilizing the treated wastewater for irrigation as well as for its release (if any) into River Sutlej during monsoon season.

Accordingly, Punjab Pollution Control Board and Punjab Agricultural University, Ludhiana have collected the effluent samples of 32 industries on 12/11/2010 and their analysis results in terms of SAR, EC and RSC are as under:

Sr. no.	Name and Address of the Industry	Industrial process	Type of sample collected	Colour of the samples	Parameters Tested			
					Effluent dish. (KLD)	SAR	EC ($\mu\text{S}/\text{cm}$)	RSC (mg/L)
1.	M/s Modern Processors, 24-A, Industrial Area-A (Extn),	Dyeing of acrylic yarn/ polyester	un-treated	Light blue	100	1.84	1118	-2
2.	M/s Pritam Scientific Dyers, 16-A, Industrial Area A, (Extn), Ludhiana	Dyeing of acrylic	un-treated	Light green	250	1.64	1400	3.5
3.	M/s Sunshine Dyeing Pvt. Ltd, 261-A, Industrial Area-A, Ludhiana	Cotton/ PC	un-treated	Violet	500	135.54	16710	36.5
4.	M/s R.P. Processors,	PC/ cotton mix	un-treated	Light violet	450	18.44	4520	12

Annexure-A

	848/11, Industrial Area-A, Ludhiana							
5.	M/s Rajneesh Dyeing House, 17-B, Industrial Area-A (Extn), Ludhiana	Acrylic/ wool	un- treated	Light blue	100	12.56	3800	2.5
6.	M/s Madan Dyeing and Finishing Factory, Textile Colony, Ludhiana	Acrylic yarn/ polyester	un- treated	Dark black	450	2.13	984	2
	Average Industrial Area-A				308	28.7	47.55	9.08
	Average Industrial Area-A excluding Sunshine Industry mentioned as at Sr. no. 3				270	7.33	2364	3.6
	Weighted average					8.23	2458	5.35
7.	M/s A.K. Dyeing House, Geeta Nagar, Tajpur Road,	Acrylic	un- treated	Slight pink	370	2.02	687	2.5
8.	M/s K.B. Dyeing, Geeta Nagar, Tajpur Road, Ludhiana	Acrylic	un- treated	Brown	100	1.56	1325	0.5
9.	M/s R.S. Dyeing, Geeta Nagar, Tajpur Road, Ludhiana	Acrylic yarn	un- treated	Light violet	200	1.89	853	3.5
10.	M/s Woolco Dyers, St. no. 6, Geeta Nagar, Tajpur Road, Ludhiana	Acrylic yarn	un- treated	Brownish violet	100	1.50	802	5
11.	M/s M.R. Dyeing and Finishing Mill, Geeta Nagar, Tajpur Road, Ludhiana	Acrylic/ polyester	un- treated	Violet	400	1.39	898	5.5

12.	M/s G.P. Dyeing, Geeta Nagar, Tajpur Road, Ludhiana	Acrylic	un-treated	Grey	150	1.45	962	7
13.	M/s Master Art Processors, Mata Karam Kaur Colony, Tajpur Road, Ludhiana	Cotton garments	un-treated	Grey	60	2.30	1165	5.5
14.	M/s Lovely Industries, Tajpur Road, Ludhiana	Acrylic/ polyester	un-treated	Light black	400	3.1	1370	4
15.	M/s New Amba Dye, Tajpur Road, Ludhiana	Acrylic yarn	un-treated	Light green	120	2.32	1156	10
16.	M/s N.V. Processors, 117, Mahavir Jain Colony, Tajpur Road,	Acrylic/ polyester, PC	un-treated	Violet	400	15.93	3690	8
17.	M/s Madhok Scientific Dyers, Tajpur Road, Ludhiana	Acrylic yarn/ polyester	un-treated	Brownish	120	3.08	1035	7
18.	M/s Kaini Processors, Tajpur Road, Ludhiana	Acrylic yarn/ polyester	un-treated	Dark violet	150	2.24	726	8.5
19.	M/s Yogi Dyeing, Tajpur Road, Ludhiana	Polyester cotton	un-treated	Light pink.	600	12.17	1683	9
	Average Tajpur Road				244	3.92	1258	5.77
	Weighted average					5.75	1455	5.84
20.	M/s Marvel dyers and Processors Ltd., Rahon Road, Ludhiana	Polyester / cotton	un-treated	Blackish	1000	12.06	1860	20
21.	M/s B.L. Malhotra Dyeing Works, Rahon Road, Ludhiana	Acrylic/ polyester	un-treated	Light violet	300	8.77	3040	2.5
22.	M/s Bhandari Hosiery, Rahon Road, Ludhiana	Cotton	un-treated	Light blue	400	3.71	1076	5
	Average Rahon Road				567	8.19	1992	9.17

	Weighted average					9.52	1883	13.38
23.	M/s BM Processors, Focal Point, Phase-8, Ludhiana	Acrylic	un-treated	Light pink	350	1.50	835	3.5
24.	M/s Ramal Dyeing House, Focal Point, Phase-8, Ludhiana	Acrylic/ polyester mix	un-treated	Greyish	600	5.69	1854	9
25.	-do-	Acrylic/ polyester mix	un-treated	Light blue	600	5.60	1800	15.5
26.	M/s Rubby Dyeing and Finishing Mills, D-277-A, Focal Point, Phase-8, Ludhiana	Acrylic/ polyester	un-treated	Light grey	400	1.33	840	6
27.	M/s S.K. Kohli Textile Industry, E-664, Focal Point, Phase-8, Ludhiana	Acrylic	un-treated	Dark grey	250	2.29	1024	6.5
28.	M/s PVM Enterprises, Focal Point, Phase-8, Ludhiana	Cotton polyester mix	un-treated	Yellowish	600	1.46	1115	3
29.	M/s Amar Industries Ltd., Plot no. C-258, Focal Point, Phase-8, Ludhiana	Polyester	un-treated	Light grey	800	2.81	975	16.5
30.	M/s Manash Dyeing House, 287, Focal Point, Phase-8, Ludhiana	Acrylic	un-treated	Light pink	350	1.80	792	6
31.	M/s Scientific Dyers, Focal Point, Phase-8, Ludhiana	Acrylic/ polyester	un-treated	Grey	400	12.67	3340	14
32.	M/s Dhawan Processors, E-670, Focal Point, Phase-8, Ludhiana	Acrylic/ polyester	un-treated	Dark grey	250	1.57	754	7.5
	Average Phase-8, Focal				460	3.68	1333	8.75

Point, Ludhiana							
Weighted average					3.83	1375	9.67
AVERAGE of Total Samples Excluding Sunshine Industry mentioned at Sr. no. 3					4.74	1538	7.18

The above analysis results indicate that 6 effluent samples collected from Industrial Area-A had average discharge of 308 KLD, the values of SAR = 28.7, EC = 4755 $\mu\text{S/cm}$ and RSC = 9.1 meq/litre. Effluent of the one industry namely M/s Sunshine Dyeing Pvt. Ltd. had abnormally high values of all the parameters (SAR=135, EC=16710, RSC = 36.5). Excluding these parameter the average of effluent from Industrial Area-A comes to SAR = 7.33, EC = 2364 and RSC = 3.6.

Thirteen samples collected from Tajpur Road area had the average of discharge of 244 KLD, the values of SAR = 3.92, EC = 1683 $\mu\text{S/cm}$ and RSC = 5.8 meq/litre.

Rahon Road effluents (3 samples) had average discharge of 567 KLD, the values of SAR = 8.2, EC = 1992 $\mu\text{S/cm}$ and RSC = 9.2 meq/litre.

Ten samples from Focal Point, Ludhiana had average discharge of 460 KLD, the values of SAR = 3.68, EC = 1333 $\mu\text{S/cm}$ and RSC = 8.75 meq/litre.

➤ Overall average of Results

- 1) SAR = 4.74
- 2) EC = 1538 $\mu\text{S/cm}$
- 3) RSC = 7.2 meq/litre

➤ Weighted Average Value of SAR

Sr. no.	Name of Cluster	SAR Values of IL & FS Water Ltd.	SAR Values as per analysis of PPCB and PAU
1.	Industrial Area-A	61.27	8.23
2.	Tajpur Road	6.13	5.75
3.	Rahon Road	23.04	9.52
4.	Focal Point	10.36	3.83
	Weighted average	17.36	5.46

Annexure - A

➤ Weighted Average of other parameter as per analysis of PPCB and PAU

Sr. no.	Name of Cluster	EC ($\mu\text{S}/\text{cm}$)	RSC (meq/litre)
1	Industrial Area-A	7458	5.35
2	Tajpur Road	1456	5.84
3	Rahon Road	1883	13.38
4	Focal Point	1375	9.67
Weighted average		1593	8.11

➤ Availability of dilution

The wastewater of STP Bhattian, which is being presently discharged into River Sutlej, is required to be diverted back to Budha Nallah in order to have sufficient dilution.

➤ Availability of land

Total land available for disposal as reported by CE (Canal) = 80,000 acres

- 1) For paddy crops, about 40,000 acres is sufficient
- 2) For wheat crops = 80,000 acres + excess effluent to be released into 6R distributary
- 3) Requirement of land during paddy crops = 1500 acres/day

➤ ANALYSIS RESULTS OF TREATED WASTEWATER OF STP BHATTIAN AND BALLOKE, LUDHIANA

Sr. no.	Name of STP	Type of Effluent	Type of sample collected	Colour of the effluent	Parameters Tested			
					Effluent discharge (KLD)	SAR	EC ($\mu\text{S}/\text{cm}$)	RSC (me/L)
1.	STP Bhattian, Ludhiana	Domestic effluent	treated	Almost clear	111000	5.14	1867	5
2.	STP Balloke, Ludhiana	Domestic effluent	treated	Light greyish	152000	2.43	1415	3

The analysis results of the treated wastewater of STP Bhattian and Balloke reveal that there is higher value of SAR in the treated sewage of STP Bhattian as compared to STP Balloke, which may probably due to mixing of untreated industrial effluent into the domestic sewage. The parameters from STP Balloke reveal that the domestic effluent can sufficiently dilute the treated effluent from CETP in terms of SAR and EC.

On the basis of the above data, the estimates of the parameters after mixing untreated industrial effluent (without CETP) and treated domestic effluent (through STP) are:

- i) SAR = 4.0
- ii) EC = 1500 $\mu\text{S}/\text{cm}$
- iii) RSC = 5.0 meq/litre

Thus, the standards proposed by PPCB and PAU, Ludhiana are achievable after treatment of the industrial effluent through CETP.

The Member Secretary, PPCB further apprised that the said analysis results were discussed in the meeting taken by the Hon'ble Chief Minister, Punjab on 16/11/2010, wherein, members of SPV contended that the analysis results given by M/s IL & FS indicated the value of SAR as 18 and as such, it will not be possible for the SPV to achieve the standard of SAR = 3 even with the level of dilution available from the treated sewage of STPs. The representative of M/s IL & FS, further expressed that in order to bring SAR = 3, expensive equipments like RO system is required to be installed which will not be economically viable for SPV. He requested that the standard of SAR as proposed by PPCB as 7 at the outlet of CETP may be relaxed. The detailed deliberation in the matter was made and it was decided that a joint team consisting of officers of PPCB, PAU, M/s IL & FS and PDA shall collect the composite samples of the raw effluent of dyeing industries and these may be analyzed by PAU in the presence of representative of M/s IL & FS.

Accordingly, the team consisting of officers of the said departments jointly conducted the composite sampling of raw effluents on 18/11/2010 and 22/11/2010. The analysis results of these samples in terms of SAR, EC and RSC are given as under:

Sr. no	Name & Address of the Industry	Type of Product	Dis. (KLD)	Parameters		
				SAR	EC ($\mu\text{S}/\text{cm}$)	RSC (me/L)
1.	Jain Uday Ind. (P) Ltd. D-43, 44 & 57, 58 Focal Point, Phase-5	Polyester Cotton	300	25.11	4940	6
2.	Maharaj Processors, C-39, Focal Point, Phase-5	Polyester Cotton/ Polyester	550	5.96	3300	0
3.	Sailopal Dyeing Works, d-96, Focal Point, Phase-5	Woolen Yarn/ Fabric	50	10.47	4320	0
4.	Saachi Processors (P) Ltd, 3-A, Focal Point, Phase-5	Polyester Cotton/ Acrylic	700	42.63	7900	15.5
5.	Kudu Knit Process, C-	Polyester	530	5.31	1558	1.2

	219, Focal Point, Phase-8	Cotton				
6.	P.V.M Enterprises, #342 D, Focal Point, Phase-8	Polyester Cotton	400	7.22	2480	1
7.	Ruby Dyeing & Finishing Mills, D-277A, Focal Point, Phase-8	Acrylic Yarn/ Polyester	320	4.60	1598	0
8.	Dhawan Processors, # E-670, Focal Point, Phase -8	Acrylic Yarn/ Polyester	400	1.92	1015	0
9.	R.P. Processors, 848/11 Ind. Area-'A'	Polyester Cotton	410	20.09	4170	4
10.	Pritam Scientific Dyers, 6-A Ind. Area-'A'	Acrylic Yarn	250	2.30	1047	0
11.	Berry Scientific Dyers, Tajpur Road	Acrylic/ Polyester	85	2.05	1052	0
12.	Maharaja Dyeing and finishing Mills, Tajpur Road	Polyester	560	3.44	1590	0
13.	New Amba Dyeing Mahaveer Colony, Tajpur Road	Acrylic Yarn	577	2.22	1125	0
14.	Lovely Industries, Tajpur road	Acrylic/ Polyester	246	2.19	986	1
15.	Balak International, Jawal Complex, Tajpur Road	Polyester/ Cotton	300	7.04	2530	0
16.	Golden Processors, Vill Bhamian, Tajpur Road	Polyester/ Cotton	200	4.49	858	2.5
17.	Prem International, Shiv Mandir Gali, Tajpur Road	Polyester Cotton/ Cotton/ Acrylic yarn	300	17.90	3630	5
18.	Oriental Knitfab Pvt. Ltd, 278, Ind. Area-A	Polyester/ Cotton	557	11.70	5560	2
19.	Madan Dyeing Finishing works, J-1, Ind. Area-'A'	Polyester/ Wool Top/ Acrylic yarn	507	2.57	1069	1
20.	Gian Chand Dyeing Works Vill Bairn, Rahon Road	Polyester Cotton	371	2.66	2680	1
21.	Barkat Dyeing Works, seera Road, Vill. Meharban	Polyester Fibre/ Acrylic yarn	468	2.66	1340	0
22.	Pawan Dyeing & finishing Mills, Vill Bajra	Acrylic Yarn/ Polyester Cotton/ Cotton Fibre	414	14.72	5730	2

23.	M/s Rampal Scientific Dyers 216, Industrial Area-A, Ludhiana	Acrylic/ polyester yarn	300	4.06	1332	4
24.	M/s Punjabi Dyeing, Industrial Area-A, Ludhiana	Cotton/ Polyester Cotton	200	4.49	1592	0
25.	M/s Satyam Scientific Dyers, Industrial Area-A, Ludhiana	Acrylic	150	2.19	1342	0
26.	M/s OM Processors, K-3, Textile Colony, Industrial Area-A	Polyester Cotton	300	81.35	12700	0
27.	M/s Deluxe Fabrics, Focal Point, Phase-6, Ludhiana	Cotton / Polyester Cotton	600	6.47	2920	0
28.	M/s Raghav Woolen Mills, Focal Point, Phase-6, Ludhiana	Acrylic/ wool Top	550	9.43	2390	3.5
29.	M/s Golden Enterprises, Focal Point, Phase-6	PC/ Cotton	550	16.26	4070	0
30.	M/s V.H. Scientific Dyers, Focal Point, Phase-8, Ludhiana	Acrylic/ polyester	300	6.63	2550	0
31.	M/s Super Tex Processors, A-3, Focal Point-5,	Dyed Fabric, PC/Cotton	600	20.76	4850	7.5
32.	M/s Navyug Laminates, C-124, Focal Point, Phase-5	Dyed Polyester & Acrylic	100	1.63	789	0
33.	M/s Gulab Dyeing, D-83, Focal Point, Phase-5, Ludhiana.	Dyed Fabrics, PC, Cotton and Polyester	500	16.27	3890	0
34.	M/s Shaan Dyeing Company, Vill. Seera Rahon Road	Acrylic Yarn	335	1.69	924	0
35.	M/s Marbel Dyers & Processor (P) Ltd., Meharban (Rahon Road	Polyester Cotton	390	20.62	4130	0
36.	M/s G.P. Dyeing, Geeta Nagar, Tajpur Road, Ludhiana	Acrylic yarn/ Polyester Yarn	120	1.35	929	0
37.	M/s Anmol Dyeing, Geeta Nagar, Tajpur Road, Ludhiana	Polyester	300	1.82	834	1
38.	M/s Yogita Collection, Tajpur Road	Polyester/ Cotton	500	4.43	1605	4.5
39.	M/s N.V Processors, Tajpur Road,	Polyester/ Polyester	415	4.94	1369	2.5

	Ludhiana	Cotton				
40.	M/s Mahavir Dyeing and Finishing Mills, Tajpur Road, Ludhiana	Cotton/ Polyester	300	24.98	4950	10
41.	M/s Aman Processor, Shiv Mandir Gali, Tajpur Road,	Acrylic/ Polyester	100	1.77	847	1.5
42.	M/s Sangam Dyeing House, Textile Colony, Ind. Area-A	Acrylic/ Polyester	290	5.36	1706	3

Averaged over the above results, the weighted values of 3 parameters are given below:

- i) SAR = 11.0
- ii) EC = 3031 $\mu\text{S/cm}$
- iii) RSC = 2.7 meq/litre

After mixing of industrial effluent (117 MLD) without CETP and treated domestic effluent (239 MLD), the weighted average of the above 3 parameters shall be as under.

- i) SAR = 5.25
- ii) EC = 1946 $\mu\text{S/cm}$
- iii) RSC = 2.9 meq/litre

If the treated of STP Bhattian (111 MLD) is diverted to Budha Nallah, the value of the 3 parameters after mixing of industrial effluent (117 MLD) without CETP and treated domestic effluent (350 MLD), the weighted average of the above 3 parameters shall be as under:

- i) SAR = 4.58
- ii) EC = 1819 $\mu\text{S/cm}$
- iii) RSC = 2.92 meq/litre

It is further mentioned here that out of these 42 samples, there are 2 industries (Sr. no. 4 and 26), which are having exceptionally high value of these parameters. If these industries are excluded for computing, the values the weighted average of the parameters are as under:

- i) SAR = 8.3
- ii) EC = 2597 $\mu\text{S/cm}$
- iii) RSC = 2.1 meq/litre

After mixing of industrial effluent (117 MLD) without CETP and treated domestic effluent (239 MLD), the weighted average of the above 3 parameters shall be as under:

- i) SAR = 4.36
- ii) EC = 1803 $\mu\text{S}/\text{cm}$
- iii) RSC = 2.7 meq/litre

If the treated of STP Bhattian (111 MLD) is diverted to Bucha Nallah, the value of the 3 parameters after mixing of industrial effluent (117 MLD) without CETP and treated domestic effluent (350 MLD), the weighted average of the above 3 parameters shall be as under:

- iv) SAR = 3.90
- v) EC = 1711 $\mu\text{S}/\text{cm}$
- vi) RSC = 2.77 meq/litre

In view of the above, the following revised standards are proposed:

Sr. No.	Parameters	Concentration in mg/l except pH, SAR, RSC & Bio-assay
1.	pH	6.5-8.5
2.	TSS	20
3.	BOD (3 Days at 27°C)	10
4.	COD	50
5.	TDS	2100
6.	Oil & Grease	Nil
7.	Total Chromium	Nil
8.	Phenolic Compounds	Nil
9.	Sulfide	0.01
10.	Bio-assay	90% survival of fish after 96 hours of 100% effluent.
11.	SAR	7
12.	RSC (meq/litre)	3

However, the following parameters as mentioned below shall be maintained after mixing of treated wastewater from the CETP and treated domestic wastewater of STPs of Ludhiana and Municipal Corporation, Ludhiana shall ensure that enough dilution through treated domestic wastewater is made available so that the values of SAR, EC and RSC as mentioned below is achieved at all the times:

Sr. No.	Parameters	Concentration
1.	Sodium absorption ratio (SAR)	3.5

Annexure - A

2.	Electrical Conductivity (EC) μS/cm	2000
3.	Residual Sodium Carbonate (RSC) meq/litre	2.5

During the meeting, the Chairman, Central Pollution Control Board asked the representatives of M/s IL & FS Water Ltd., as to whether they have done the chemical analysis of all effluents and what simulation they have performed to have fingerprinting of analysis of all effluents with them. Sh. Harsh Banwal, Senior Vice President, M/s IL & FS, Water Ltd. informed that they have carried out the simulation modeling for the analysis of all the effluents and stated that they are convinced with the analysis results of effluent samples (collected jointly by the team consisting of PAU, Ludhiana; Punjab Pollution Control Board; M/s IL & FS Water Ltd. and PDA, Ludhiana) analyzed by PAU, Ludhiana. Sh. Banwala further shared that they have calculated the value of SAR after dilution of untreated wastewater without the CETP and treated domestic wastewater which comes out to be 4.0.

The Chairman, Central Pollution Control Board asked Dr. O.P. Choudhary as to whether he is satisfied with the fixation of revised standards as proposed above for i.e. for SAR = 7, RSC = 3 meq/litre and TDS = 2100 mg/l at the outlet of CETP. Dr. O.P. Choudhary explained that the above standards are very well achievable at the outlet of the CETP keeping in view of the analysis of 42 composite samples carried out by the team. He stressed that the RSC which is more important parameter to be kept in mind for using effluent for agricultural purposes and it should not be greater than 2.5 meq/litre at the confluence point of the treated wastewater from CETP and treated domestic wastewater. Dr. O.P. Choudhary further suggested that some dyeing industries processing cotton/ polyester cotton, which have exceptionally higher SAR values (>25) in the raw effluent, should make appropriate changes in their chemicals and/ or processes so that the value of SAR shall not be high. In fact, some of their counterparts are processing cotton/ polyester cotton but have relatively lower values of SAR and EC in their raw effluents.

The Principal Secretary to Govt. of Punjab, Deptt. of Industries & Commerce, Chandigarh submitted that the value of available land at Tajpur Road is already high and the Govt. cannot allow additional land for proposed CETP at Tajpur Road and therefore, the consultants shall give such a technology which may be sufficient enough to meet with the standards at the outlet of CETP.

Sh. Vivek Kumar Jindal, Secretary, Punjab Dyers Association, Ludhiana submitted that M/s IL & FS should recommend such a design for CETP, which should be

capable to achieve the proposed CETP standards within the proposed cost of setting up of CETP. Sh. Harsh Bhanwala, Senior Vice President, M/s IL & FS Water Ltd., submitted that they have no objection for fixation of value of TDS = 2100 mg/l, SAR = 7 and RSC = 3 meq/litre in addition to other parameters as prescribed at the outlet of CETP. The project management consultant (Sh. Harsh Bhanwala) further submitted that they are confident and will give proper design of CETP which shall meet with the outlet wastewater quality standards at the outlet of CETP as proposed above.

Sh. R.S. Walia, Executive Engineer, Sidhwan Canal Division, Ludhiana also submitted that they have adequate land measuring 80,000 acres which is sufficient to handle the volume of treated wastewater during paddy crop cultivation period. He further informed that excess effluent during no demand period particularly in wheat season would be released into 6R distributary and would be sufficiently diluted for irrigation purposes.

After detailed deliberations, it was decided in the meeting that the following standards are fixed for the treated effluents at the outlet of CETP:

Sr. No.	Parameters	Concentration in mg/l except pH, SAR, RSC & Bio-assay
1.	pH	6.5-8.5
2.	TSS	20
3.	BOD (3 Days at 27°C)	10
4.	COD	50
5.	TDS	2100
6.	Oil & Grease	Nil
7.	Total Chromium	Nil
8.	Phenolic Compounds	Nil
9.	Sulfide	0.01
10.	Bio-assay	90% survival of fish after 96 hours of 100% effluent.
11.	SAR	7
12.	RSC (meq/litre)	3

However, the following parameters as mentioned below shall be maintained after mixing of treated wastewater from the CETP and treated domestic wastewater of STPs of Ludhiana. The Municipal Corporation, Ludhiana shall ensure that enough dilution through treated domestic wastewater is always made available so that the values of SAR, EC and RSC as mentioned below is achieved at all the times. **The said corporation shall provide necessary laboratory facilities at the confluence point of treated domestic sewage and treated CETP effluent**

Annexure-A

to ensure the achievement of the parameters namely SAR, and RSC at all the times:

Sr. No.	Parameters	Concentration
1	Sodium absorption ratio (SAR)	3.5
2	Residual Sodium Carbonate (RSC) meq/litre	2.5

However, the Electrical Conductivity (EC) shall be maintained 2,000 $\mu\text{S}/\text{cm}$ as discussed earlier.

The meeting ended with vote of thanks to the Chair.

F.No.10-119/2011-IA.III

Government of India
Ministry of Environment, Forests & Climate Change
(IA-III Division)

Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi - 110 003

Dated: 8th December, 2014

To

The Chairman,

M/s Bahadur Ke Textile & Knitwear Association Ltd. (BTKAL),
C/o Jain Shawls, Bahadur Ke Road, Industrial Zone,
Ludhiana - 141 008, Punjab

Subject: Establishment of Common Effluent Treatment Plant (CETP) of 15 MLD at Bahadurke Road Dyeing Complex, Ludhiana, Punjab by M/s Bahadur Ke Textile & Knitwear Association Ltd. (BTKAL) - Environmental Clearance reg.

Sir,

This is with reference to your letter no Nil dated 18.07.2012 and subsequent letter dated 19.05.2014 for environmental clearance on the above-mentioned subject.

2. The Ministry of Environment, Forests & Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance for **Establishment of Common Effluent Treatment Plant (CETP) of 15 MLD at Bahadurke Road Dyeing Complex, Ludhiana, Punjab by M/s Bahadur Ke Textile & Knitwear Association Ltd. (BTKAL)**. The proposal was considered by the EAC in its meetings held on 16th -17th August, 2012 and 30th June, 2014 - 2nd July, 2014. The proponent has informed that:

- i. The project was accorded TOR vide letter no. F.No.10-119/2011-IA-III dated 12.03.2012.
- ii. The project involves establishment of Common Effluent Treatment Plant (CETP) of 15 MLD to collect, treat and dispose (to achieve zero discharge - through treat, recover and reuse options) process effluent from industrial units of Bahadurke Road Dyeing Complex engaged in textile dyeing, washing and printing processes at Bahadurke Road Industrial Area, Dyeing Complex, Ludhiana, Punjab.
- iii. It is proposed to establishment of CETP of 15 MLD alongwith biomass based captive co-generation power plant of 10 MW (2 * 5 MW) as well as 60 MT/hour steam generation capacity.
- iv. The project location is within Bahadurke Road Dyeing Complex, Ludhiana, Punjab.
- v. Approximately 25 units (existing and proposed) have been identified as member units of the CETP.
- vi. The collected raw effluent will be treated through a sequence of unit operations including pre-treatment (screening, degritting, equalization), primary treatment (precipitation/coagulation, flocculation, and resulting

- sludge separation and dewatering - a hazardous waste), secondary treatment (anaerobic stabilization of organic matter present in the effluent, and separation and handling of secondary sludge), followed by tertiary treatment (through pressure depth multi-grade filters and activated carbon adsorption).
- vii. In order to achieve zero discharge, the effluent will be conditioned (through chlorination and dechlorination, followed by micron-filtration) and subjected to multi-stage membrane treatment (followed by three-stage reverse osmosis) wherein reject from each stage will be sequentially subjected to next stage of treatment.
 - viii. The permeate (purified accept) from each stage will be collected for reuse (to be supplied back to the participating industries through piped network). The concentrated reject from final RO stage will be subjected to destruction (through forced thermal evaporation) in Multiple Effect Evaporator (MEE).
 - ix. The fresh water requirement will be 5 KLD and will be met from ground source.
 - x. The affluent treatment sludge will be around 15.9 MT per day to be dried on site and disposed as hazardous waste through State's common TSDF facility.
 - xi. Boiler ash 15 MT per day to be disposed as soil conditioner (for agricultural activities) and landfill.
 - xii. The total land area is 15000 sq. mt.
 - xiii. The power requirement is 2500 KW and it is proposed to generate power about 10 MW using biomass.
 - xiv. The boiler capacity is 150 tones per hour. Maximum fuel requirement will be @ 15 MT/hour. The fuel handling system will be designed for a capacity of 20 TPH.
 - xv. ESP will be installed as air pollution control measure to the boiler.
 - xvi. Solid waste generated from the plant will be in form of boiler furnace ash (@ 60 MT/Day) which will be sold out to brick manufacturers, Biological treatment sludge (@ 9 MT/day) will be disposed through its use as soil conditioner for agricultural area in the vicinity.
 - xvii. Hazardous wastes will be generated in form of Primary treatment sludge (@ 15MT/Day), Solids from MEE concentrate drying and used oil will be handled and disposed as per HWM Rules, 2008.
 - xviii. The total **project cost** is Rs. 162 crores.
 - xix. **Wildlife issues:** There is no environmental sensitive location like wildlife sanctuary/national park within the 10 km radius of the airport.
 - xx. There is no **court cases/violation** pending with the project proponent.
 - xxi. **Public Hearing:** The Committee exempted the conduct of Public hearing since the site is located within the Industrial Estate.
 - xxii. The project is Category 'B' and since it is located in Ludhiana, a critically polluted area, it is treated as Category 'A' as per General Conditions of EIA, Notification, 2006.

3. The project was considered in the 115th EAC meeting held on 16th -17th August, 2012 and the Committee recommended the proposal for grant of Environmental Clearance, however advised the proponent to submit the MoU between CETP and member units indicating the maximum quantity of effluent to be sent to the CETP along with the quality and also the out let norms to be

complied by CETP. The Project Proponent submitted the MoU document on 02.06.2014 i.e. after approximately 2 years therefore the proposal was again referred to EAC for appraisal.

4. The proposal was reconsidered by the Expert Appraisal Committee (EAC) and recommended in its 135th EAC meeting held on 30th June, 2014 - 2nd July, 2014 for granting Environmental Clearance. The Ministry of Environment, Forests & Climate Change hereby accords Environmental Clearance for the above-mentioned **Establishment of Common Effluent Treatment Plant (CETP) of 15 MLD at Bahadurke Road Dyeing Complex, Ludhiana, Punjab by M/s Bahadur Ke Textile & Knitwear Association Ltd. (BTKAL)** under the provisions of the Environment Impact Assessment Notification, 2006 and amendments thereto and Circulars issued thereon and subject to the compliance of the following specific conditions, in addition to the general conditions mentioned below:

A. SPECIFIC CONDITIONS:

- (i) "Consent for Establishment" shall be obtained from State Pollution Control Board under Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The Punjab Pollution Control Board shall conduct regular as surprise inspection of the CETP.
- (iii) Online monitoring of the influent and effluent shall be conducted.
- (iv) The proponent shall maintain Zero discharge.
- (v) The permeate (purified accept) from each stage shall be collected for reuse (to be supplied back to the participating industries through piped network). The concentrated reject from final RO stage shall be subjected to destruction (through forced thermal evaporation) in multiple effect evaporator (MEE).
- (vi) The MoU between CETP and member units shall indicate the maximum quantity of effluent to be sent to the CETP along with the quality.
- (vii) The MoU between CETP and FETP shall indicate the maximum quantity of treated effluent and also the out let norms to be complied by CETP.
- (viii) The effluent from member units shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.
- (ix) Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended
- (x) Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/reused and discharged.

- (xi) ESP shall be installed as air pollution control measure with the boiler as proposed.
- (xii) Hazardous wastes will be generated in the form of Primary treatment sludge (@ 15MT/Day), Solids from MEE concentrate drying and used oil will be handled and disposed as per HWM Rules, 2008.
- (xiii) All the recommendation of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to Regional Office (RO), MoEF along with half yearly compliance report.
- (xiv) Transportation of Hazardous wastes shall be as per the section 129 to 137 of Central Motor Vehicle Rules, 1989.
- (xv) The proponent shall ensure that the project fulfills all the provisions of Solid Wastes (Management and Handling) Rules, 2000 including collection and transportation design etc.
- (xvi) The units and the CETP will maintain daily log book of the quantity and quality of discharge from the units, quantity of inflow into the CETP, details of the treatment at each stage of the CETP including the raw materials used, quantity of the treated water sent back to the units, quantity of the salts extracted from the treatment process and details of selling of such salts. All the above information shall be provided on-line of the web site exclusively prepared for the purpose by the CETP owner. The website should be accessible by the people. The financial and energy details of the CETP will also be provided along with details of the workers of the CETP.
- (xvii) The ground water at the site will also be monitored and information made available on the above web site.
- (xviii) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.

B. General Conditions:

- (i) Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.
- (ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
- (iii) The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.

- (iv) Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.
- (v) Borrow pits and other scars created during the road construction shall be properly levelled and treated.
- (vi) Adequate financial provision must be made in the project to implement the aforesaid safeguards.
- (vii) The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (viii) Full support shall be extended to the officers of this Ministry/ Regional Office at Chandigarh by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
- (ix) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Chandigarh regarding the implementation of the stipulated conditions.
- (x) Ministry of Environment, Forests & Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (xi) The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- (xii) In the event of a change in project profile or change in the implementation agency, a fresh clearance shall be obtained from the Ministry of Environment, Forests & Climate Change.
- (xiii) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (xiv) A copy of the clearance letter will be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal.
- (xv) Safety provision such as bus bays, service roads intersection improvement etc., will be carried out by the project proponent.

The project proponent shall provide adequate facilities as per IRC norms/guidelines.

- (xvi) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
- (xvii) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.

5. These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Municipal Solid Wastes (Management and Handling) Rules, 2000 including the amendments and rules made thereafter.

6. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

7. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Punjab Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forests & Climate Change at <http://www.envfor.nic.in>. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Chandigarh.

8. This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.

9. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

10. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

11. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any,

were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.


12. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the PPCB.

13. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the PPCB.

14. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.


(Dr. Manoranjan Hota)
Director

Copy to: -

1. The Secretary, Department of Environment, Government of Punjab, Chandigarh.
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110 032
3. The Member Secretary, Punjab Pollution Control Board, Vatavaran Bhavan, Nabha road, Patiala-147001, Punjab.
4. The CCF, Regional Office, Ministry of Environment, Forests & Climate Change (NZ), Bays No. 24-25, Sector-31-A, Dakshin Marg, Chandigarh-160030. 
5. IA - Division, Monitoring Cell, MoEF, New Delhi - 110003.
6. Guard file


(Dr. Manoranjan Hota)
Director

F. No. Q-15017/22/2014-CPW
 Government of India
 Ministry of Environment, Forest and Climate Change
 (CP Division)



2nd Floor, Prithvi Wing
 Indira Paryavaran Bhawan
 Aliganj, Jor Bagh Road
 New Delhi-110 003
 E-mail: h.kharkwal@nic.in
 Telefax: 01124695384

Dated: 18th March, 2016

To,
 The Member Secretary
 Punjab State Pollution Control Board
 Vatavaran Bhawan, Nabha Road,
 Patiala – 147001
 Punjab

Subject: Follow-up of the Minutes of the Appraisal Committee meeting on CETPs held on 03/03/2016- regarding.

Sir,

I am directed to enclose the Minutes of the Appraisal Committee Meeting on CETPs held on 03/03/2016 under the Chairmanship of Dr. Manoranjan Hota, Adviser (CP), MoEF&CC.

2. A copy of the minutes is enclosed. The Committee approved the following proposals:
 - i. 40 MLD CETP of M/s Punjab Dyers Association (PDA)–Focal Point Module Ludhiana, Punjab.
 - ii. 15 MLD CETP by M/s Bahadur Ke Textile & Knitwear Association (BKTKA) at Bahadur Ke Road, Ludhiana, Punjab.
3. The State Pollution Control Board may indicate the status of release of State subsidy to above said CETPs, so as to enable us to take further necessary action for processing the release of Central share as per the CETP Guidelines.

This may be treated as most urgent.

Encl. as above.

Yours faithfully,

Sd/-

(Dr. H. Kharkwal)
 Joint Director (S)

Copy to:

The Chairman/Managing Director
 M/s Bahadur Ke Textile &
 Knitwear Association (BKTKA)
 C/o Jain Shawls, Bahdur Ke Road,
 Industrial Zone, Ludhiana- 141008, Punjab.

Minutes of the Appraisal Committee meeting on Common Effluent Treatment Plants (CETPs) held in the Ministry of Environment, Forest & Climate Change on 03/03/2016.

A meeting of the Appraisal Committee on Common Effluent Treatment Plants was held in the Ministry of Environment, Forest and Climate Change at New Delhi on 03/03/2016 under the Chairmanship of Dr. Manoranjan Hota, Adviser (CP). The list of participants is annexed. At the outset the Chairman of the Committee welcomed the Members of the Committee attended the meeting and gave a brief background of the revised guidelines for central assistance to CETPs, procedures etc. invited the proponents to make presentation of their CETP proposals.

2. Joint Director (HK), MoEF&CC informed that the Appraisal Committee meeting was convened to discuss two new proposals of CETPs submitted as per revised guidelines on CETPs which has been duly recommended and forwarded by the Punjab State Pollution Control Board.

3. The following new proposals of CETP were presented and discussed in the meeting:

3.1 40 MLD CETP of M/s Punjab Dyers Association (PDA)-Focal Point Module Ludhiana, Punjab

- i. The proposal was duly recommended and forwarded by Punjab State Pollution Control Board (PPCB) for financial assistance for 40 MLD CETP of the SPV, M/s Punjab Dyers Association (PDA) - Focal Point Module, Ludhiana, Punjab. The CETP is based on Physico-Chemical followed by Advanced Biological treatment systems which is further followed by disinfection systems. The treated effluent will be discharged at the outfall of Ludhiana Sewage Treatment Plant (STP) and will be utilized for irrigation of agricultural land. m
- ii. The presentation on the project was made by Shri John Thomas, Consultant/ Environmental Advisor to PDA- Focal Point Module.
- iii. There are currently 55 industries who are members of the 40 MLD PDA Focal Point CETP.
- iv. Ludhiana has been identified as one of the Critical Polluted Areas and has also been recently been selected for the first 20 Smart Cities to be developed in the country. The Member Secretary, Punjab Pollution Control Board (PPCB) also clarified that the environmental standards were set for the said CETP after detailed deliberations with experts from CPCB, Punjab Agricultural University, PPCB. Apart from the Real Time Effluent Monitoring Systems; PPCB will be also regularly monitor the CETP performance.

- v. The Project DPR has been technically appraised by Guru Nanak Engineering College, Ludhiana and IIT Madras, Chennai; as well as been assessed for Techno Economic Viability by Punjab National Bank.
- vi. The proponent has mentioned that the treated effluent shall be discharged and utilized for irrigation purpose. Member Secretary, PPCB also confirmed that Government of Punjab has approved the project for providing conveyance system for carrying treated effluents from the STPs and CETPs in Ludhiana for irrigation and also stated that they have stipulated a condition in the Consent To Establish as the farmers shall be made aware that the water supplied to them is treated effluent.
- vii. The Member Secretary, PPCB has informed that a Special Purpose Vehicle (SPV) will be constituted for the CETP with the Director of Industries, Government of Punjab who will be by default be part of the Managing Board of the SPV apart from other State Government nominees.
- viii. The Member Secretary, PPCB has stated that the basic construction activities of the CETP of the Punjab Dyers Association, Ludhiana has been taken up by the project proponent to demonstrate PDA-Focal Point Module's commitment to the project and does not have much bearing on assistance component on the overall scale and cost of the project.
- ix. The Overall cost of the 40 MLD CETP and laboratory is ₹55.40 crores as per the following details:

CETP & Laboratory	
Civil works	₹24.93 crores
Electro Mechanical Components	₹27.70 crores
Design & Drawing	₹2.77 crores
Sub Total	₹55.40 crores



- x. The Source of Funding for the project as indicated by the Project Proponent are as per the following details:

CETP & Laboratory	
Central Assistance	₹15.00 crores
State Govt. Assistance	₹7.50 crores
PDA's own funds	₹7.50 crores
Additional funding to be sourced by PDA from Financial institutions	₹25.40 crores
Sub Total	₹55.40 crores

- xi. The Proponent indicated that Punjab National Bank (PNB) has appraised the financial viability of the project and has indicated its in-principle

willingness to finance upto an amount of ₹49.55 crores to cover the project and associated costs.

- xii. The proponent informed that the current 22 km long conveyance system is based on gravity with the CETP at a lower level. The logistics, infrastructure costs – CAPEX and OPEX do not support economic viability of recycle / reuse of treated effluent within industries under current circumstances. The same would cause further environmental burden linked to high energy consumption towards pumping, evaporation etc.
- xiii. The project has an Environment and Sludge Management Plan and has confirmed that it is Member of the Common Hazardous Waste TSDF at Nimbua, Derabassi and has an agreement already signed up for disposal of sludge into this facility.
- xiv. The proponent has confirmed that a legal agreement has been made between the SPV and its 55 Members regarding their roles, responsibilities and the sharing of the capital and O&M costs; as specified under the CSS guidelines.
- xv. The project would be completed in 18 months.
- xvi. As per the revised Central Sector Schemes guidelines for CETPs involving primary, secondary and tertiary treatment; financial assistance would be provided by Govt to the tune of 50% of maximum project cost or ₹1.5 crore/MLD capacity, subject to a ceiling of ₹15 crores per CETP. Considering the project is eligible for Central subsidy, the Committee approved Central subsidy of ₹15 crores for the project.

3.2 After a detailed deliberations, the Committee recommend/approved the 40 MLD /CETP of M/s Punjab Dyers Association, Ludhiana, Punjab.

4. 15 MLD CETP by M/s Bahadur Ke Textile & Knitwear Association (BKTKA) at Bahadur Ke Road, Ludhiana, Punjab.

- i) The proponent has informed that there are currently 23 industries, which are Members of the CETP Association.
- ii) A presentation of the proposal was made by Sh. Pardeep Kumar of M/s JBR Technologies Pvt. Ltd., Ludhiana and the consultant of the BKTKA.
- iii) Earlier, the proposal of CETP was based on Zero Liquid Discharge (ZLD) Technology was duly recommended and forwarded by Punjab Pollution Control Board (PPCB) for financial assistance for 15 MLD CETP. But due to reluctance of Bankers for the disbursement of finance for ZLD, the proposal was reformulated/ recommended for financial assistance which is based on

- aerobic biological system for tertiary treatment in the Phase-I. The ZLD will be considered in Phase-II.
- iv) The project proponent has indicated their intention to initiate the CETP based on conventional treatment system in Phase-I. They may adopt ZLD in the Phase-II for which they will apply to the MoEF&CC at a later stage as an up-gradation case.
 - v) The Association informed that a dedicated piped conveyance system will be laid to carry the effluent from 23 units to the CETP and this conveyance system has been approved by the Municipal Corporation, Ludhiana.
 - vi) The Association also informed that the sludge generated from the CETP be transported to the Common Hazardous Waste Treatment and Disposal Facility, Nimbua, Dera Bassi, Punjab, which is a scientifically designed disposal site duly approved by the Govt. of Punjab. The Association has obtained the Membership of the facility.
 - vii) The financial appraisal for the CETP which is based on aerobic biological system has been done by the Bank of Baroda, MID Corporate Branch, Ludhiana.
 - viii) Member Secretary, Punjab State Pollution Control Board has confirmed that the Consent to Establish (CTE) has been issued by PPCB based on the ZLD.
 - ix) The proponent in response to the query regarding adoption of an Ion Exchange in tertiary phase of non-ZLD based CETP, stated that Ion Exchange would help in increasing the life of RO membranes when ZLD will be adopted in Phase-II.
 - x) The proponent informed the Committee that they have already got commitment from the State Government for assistance to the tune of ₹10 crores and requested GOI to provide financial assistance and permission to initiate a non-ZLD based CETP in Phase-I and then upgrade to ZLD based CETP subject to support from the financial institutions. However, the Committee recommended that the Association should submit a fresh proposal for Zero Liquid Discharge at a later stage so that the CETP is installed in a phased manner. The CETP shall treat the effluents to meet the norms prescribed for CETP.
 - xi) The total project cost of the 15 MLD CETP is ₹51.11 crores as per the following:

Sr. No.	Item	Total Cost (₹ in Crores)
1	Land	Leased
2	Land development cost (already incurred)	₹1.25
3	Building & Civil works	₹28.76

4	Water pipeline cost	₹2.25
5	Road Repair (Lumpsum)	₹0.15
6	Mechanical & Electrical	₹12.69
7	Interest during construction period	₹1.98
8	Misc. fixed assets (Lumpsum)	₹0.25
9	Electricity security (1400 KW @ ₹2000 /KW)	₹0.28
10	Preliminary & Pre-operative expenditure	₹1.00
11	Working capital margin	₹1.25
12	Contingency	₹1.22
TOTAL		₹51.11

- xii) The source of funding for the project as indicated by the proponent are as follows:

1	MOEF&CC subsidy (50%)	₹15.00 crores
2	State Govt. Subsidy (25%)	₹ 7.50 crores
3	Members contribution (25%)	₹ 7.50 crores
4	Members contribution by way of loan from bank	₹21.11 crores
TOTAL		₹51.11 crores

The Association has already taken the approval from the Bank of Baroda, a Nationalized Bank, for a loan of ₹37.35 crores out of which an amount of ₹21.11 crores will be available by the proponent.

- xiii) With regard to the high cost of the CETP project, the proponent clarified that the CETP is to be constructed in vertical horizon with lot of civil work depending upon the soil bearing capacity of the area. The Techno Economic Viability (TEV) study has included all the aspects before giving financial approval to the project. The total cost of Plant & Machinery of CETP is ₹41.75 crores and the cost of sewerage line & disposal line & other misc. is ₹9.36 crores. The proponent however clarified that the Committee may approve the funds as per the CETP guidelines. The SPCB also supported their proposition and also stated the State Board has committed for the State share of ₹10 crores as per the CETP guidelines.
- xiv) As per the revised Central Sector Schemes guidelines for CETPs involving primary/ secondary/ tertiary treatment; financial assistance would be provided by GoI to the tune of 50% of maximum cost of the project or ₹1.5 crore/MLD capacity, or subject to a ceiling of ₹15 crores per CETP maximum. Considering the project is of 15 MLD capacity, the Committee approved for Central subsidy of ₹11.25 crores for the project.
- xv) The Govt. of Punjab has already given a commitment letter vide letter Memo No.10/87/2015 (STE-5) in October, 2015 for ₹10.00 crores as State share of the project.

xvi) The project would be completed in 18 months.

4.1 After a detailed deliberation, the Committee has recommended/approved the CETP proposal of M/s Bahadur Ke Textile & Knitwear Association at Bahadur Ke Road, Ludhiana, Punjab.

The meeting ended with a Vote of Thanks to the Chair.



List of the Participants who attended the meeting of the Appraisal Committee Meeting of Common Effluent Treatment Plants (CETPs) held on 03/03/2016 in Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.

S. No.	Name & Address	Designation
1.	Dr. Manoranjan Hota, Adviser, Ministry of Environment, Forest & Climate Change, New Delhi	Chairman
2.	Dr. Neelam, Scientist 'E' of Ministry of Science & Technology, New Delhi	Member
3.	Sheri Ankush Tewari (EE) of Central Pollution Control Board, Delhi.	Member
4.	Ms. Pratima Gupta, Director, Niti Ayog, New Delhi	Member
5.	Dr. Babu Ram, Member Secretary, Punjab Pollution Control Board (SPCB), Punjab	Member
6.	Sheri Abhijit Roy, Under Secretary, IFD, MoEF&CC, New Delhi	Member
7.	Dr. H. Kharkwal, Joint Director/Scientist 'D', C.P. Division, MoEF&CC, New Delhi	Member Secretary
8.	Sheri Prithpal Bhalla, Punjab Dyers Association Ludhiana, Punjab.	Proponent
9.	Shri Vijay Mehtani, Vice President.....Dyers Association Focal Point Module Ludhiana, Punjab.	Proponent
10.	Shri Ajit Maruthe, Technical Adviser, Punjab Dyers Association, Ludhiana, Punjab.	Proponent
11.	Shri John Thomas, Consultant, Punjab Dyers Association Ludhiana, Punjab.	Proponent
12.	Prof. Vivek Dhawan, Punjab Dyers Association, Ludhiana, Punjab.	Proponent
13.	Sheri Er. Harbir Singh, SEE, Punjab, Pollution Control Board, Zonal Officer, Ludhiana, Punjab.	Proponent
14.	Shri Vishal Jain, Director, Amar Ind. Ltd. Ludhiana, Punjab.	Proponent
15.	Sheri Pradeep Singh, Technical Director, JBR Technologies Pvt. Ltd. Ludhiana, Punjab.	Proponent
16.	Shri Lalit Jain, MD, Bahadur Ke Knit wears & Textiles Association, Ludhiana, Punjab.	Proponent
17.	Sheri Rajveer Gupta, Director, Bahadur Ke Knit wears & Textiles Association, Ludhiana, Punjab.	Proponent
18.	Sheri Arun Jain, Director, Jain Shawals, Ludhiana, Punjab.	Proponent



PUNJAB POLLUTION CONTROL BOARD

Zonal Office-II, E-648-B, Backside CICU Office, Phase-5, Focal Point, Ludhiana

Website:- www.ppcb.gov.in

Ameswari - D

Office Dispatch No :

Registered/Speed Post

Date:

Industry Registration ID: R14LDH3737982

Application No : 11846013

To,

Rajneesh Gupta
Bahadur Ke Road
Ludhiana, Punjab-141008

Subject: Grant Varied 'Consent to Operate' an outlet u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974 for discharge of effluent.

With reference to your application for obtaining Varied $\frac{1}{2}$ Consent to Operate $\frac{1}{2}$ an outlet for discharge of the effluent u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974, you are, hereby, authorized to operate an industrial unit for discharge of the effluent(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate

1. Particulars of Consent to Operate under Water Act, 1974 granted to the industry

Consent to Operate Certificate No.	CTOW/Varied/LDH3/2020/11846013
Date of issue :	10/09/2020
Date of expiry :	31/03/2021
Certificate Type :	Varied
Previous CTO No. & Validity :	ZO-II/LDH/RO-III/NOC/2011-12/114 (further extended from time to time) From: 28/11/2011 To: 31/03/2019

2. Particulars of the Industry

Name & Designation of the Applicant	Rajneesh Gupta, (Director)
Address of Industrial premises	Bahadur Ke Textile & Knitwear Association, Bahadurke Road, Ludhiana East, Ludhiana Iii-141008
Capital Investment of the Industry	34.17 lakhs
Category of Industry	Red
Type of Industry	Common effluent treatment plant.
Scale of the Industry	Large
Office District	Ludhiana Iii
Consent Fee Details	Rs. 63600/- under Water Act, 1974 and Rs. 500/- under Form fee.
Raw Materials (Name with quantity per day)	N.A. as it is a Common Effluent Treatment Plant for 15 MLD effluent treatment capacity
Products (Name with quantity per day)	N.A. as it is a Common Effluent Treatment Plant for 15 MLD effluent treatment capacity
By-Products, if any, (Name with quantity per day)	-

"This is computer generated document from OCMMS by PPCB"

Bahadur Ke Textile & Knitwear Association, Bahadurke Road, Ludhiana East, Ludhiana Iii, 141008

Page 1

Details of the machinery and processes	<i>N.A as it is a Common Effluent Treatment Plant for 15 MLD effluent treatment capacity</i>
Details of the Effluent Treatment Plant	<i>Trade Effluent @ 15 MLD (Effluent collected from different dyeing industries of Bahadurke Road, Ludhiana) Domestic Effluent @ 3.5 KLD (Effluent collected from different dyeing industries of Bahadurke Road, Ludhiana)</i>
Mode of Disposal	<i>Trade Effluent @ 15 MLD (In 1st phase: After Treatment of the effluent will be discharged into Buddha Nallah) Domestic Effluent @ 3.5 KLD at the inlet of CETP</i>
Standards to be achieved under Water(Prevention & Control of Pollution) Act, 1974	<i>As prescribed by PPCB/CPCB/MoEF (as applicable)</i>



10/09/2020

(Sandeep Bahl)
Sr Environmental Engineer

*For & on behalf**of***(Punjab Pollution Control Board)**

Endst. No.:

Dated:



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

Environmental Engineer, Punjab Pollution Control Board, Regional Office-3, Ludhiana with the request to report w.r.t special conditions of consent granted to the SPV.



10/09/2020

(Sandeep Bahl)
Sr Environmental Engineer

*For & on behalf**of***(Punjab Pollution Control Board)**

TERMS AND CONDITIONS

A. GENERAL CONDITIONS

1. This consent is not valid for getting power load from the Punjab State Power Corporation Limited or for getting loan from the financial institutions.
2. The industry shall apply for renewal/further extension in validity of consent atleast two months before expiry of the consent.
3. The industry shall ensure that the effluent discharging through the authorized outlet shall confirm to the prescribed standards as applicable from time to time.
4. The industry shall plant minimum of three suitable varieties of trees at the density of not less than 1000 trees per hectare all along the boundary of the industrial premises.
5. The achievement of the adequacy and efficiency of the effluent treatment plant/pollution control devices/re-circulation system installed shall be the entire responsibility of the industry.
6. The industry shall ensure that the Hazardous Wastes generated from the premises are handled as per the provisions of the Hazardous Wastes(Management, Handling and Trans boundary Movement) Rules, 2008 as amended time to time , without any adverse effect on the environment, in any manner
7. The responsibility to monitor the effluent discharged from the authorized outlet and to maintain a record of the same rests with the industry. The Board shall only test check the accuracy of these reports for which the industry shall deposit the samples collection and testing fee with the Board as and when required.
8. The industry shall submit balance sheet of every financial year to the concerned Regional Office by 30th June of every year.
9. The industry shall submit a yearly certificate to the effect that no addition/up-gradation/ modification/modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.
10. During the period beginning from the date of issuance and the date of expiration of this consent. the applicant shall not discharge floating solids or visible foam.
11. Any amendments/revisions made by the Board in the tolerance limits for discharges shall be applicable to the industry from the date of such amendments/revisions.
12. The industry shall not change or alter the manufacturing process(es) so as to change the quality and/or quantity of the effluents generated without the written permission of the Board.
13. Any upset conditions in the plant/plants of the factory, which is likely to result in increased effluent and/or result in violation of the standards lay down by the Board shall be reported to the Environmental Engineer, Punjab Pollution Control Board of concerned Regional Office immediately failing which any stoppage and upset conditions that come to the notice of the Board/its officers, will be deemed to be intentional violation of the conditions of consent.
14. The industry shall provide terminal manhole(s) at the end of each collection system and a manhole upstream of final outlet (s) out of the premises of the industry for measurement of flow and for taking samples.
15. The industry shall for the purpose of measuring and recording the quantity of water consumed and effluent discharged, affix meters of such standards and at such places as approved by the Environmental Engineer, Punjab Pollution Control Board of the concerned Regional Office.
16. The industry shall maintain record regarding the operation of effluent treatment plant i.e. record of quantity of chemicals and energy utilized for treatment and sludge generated from treatment so as to satisfy the Board regarding regular and proper operation of pollution control equipment.
17. The industry shall provide online monitoring equipment 1/2s for the parameters as decided by concerned Regional Office with the effluent treatment plant/air pollution control devices installed, if applicable.
18. The pollution control devices shall be interlocked with the manufacturing process of the industry.
19. The authorized outlet and mode of disposal shall not be changed without the prior written permission of the Board.
20. The industry shall comply with the conditions imposed by the SEIAA / MOEF in the environmental clearance granted to it as required under EIA notification dated 14/9/06, if applicable.
21. The industry shall obtain and submit Insurance cover as required under the Public Liability Insurance Act, 1991.
22. The industry shall not use any unauthorized out-let(s) for discharging effluents from its premises. All unauthorized outlets, if any, shall be connected to the authorized outlet within one month from the date of issue of this consent.

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23. The industry shall make necessary arrangements for the monitoring of effluent being discharged by the industry and shall monitor its effluents:-
 - (i) Once in Year for Small Scale Industries.
 - (ii) Four in a Year for Large/Medium Scale Industries.
 - (iii) The industry will submit monthly reading/ data of the separate energy meter installed for running of effluent treatment plant/re-circulation system to the concerned Regional Office of the Board by the 5th of the following month.
24. The industry shall provide electromagnetic flow meters at the source of water supply, at inlet/outlet of effluent treatment plant within one month and shall maintain the record of the daily reading and submit the same to the concerned Regional Office by the 5th of the following month.
25. The Board reserves the right to revoke this consent at any time in case the industry is found violating any of the conditions of this consent and/or the provisions of Water (Prevention & Control of Pollution) Act, 1974 as amended from time to time.
26. The issuance of this consent does not convey any property right in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local Laws or Regulations.
27. The consent does not authorize or approve the construction of any physical structures or facilities for undertaking of any work in any natural watercourse.
28. Nothing in this consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected under this or any other Act.
29. The industry shall make necessary and adequate arrangements to hold back the effluent in case of failure of septic tank.
30. The diversion or bye pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this consent is prohibited except.
 - (i) Where unavoidable to prevent loss of life or some property damage or
 - (ii) Where excessive storm drainage or run off would damage facilities necessary for compliance with terms and conditions of this consent. The applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
31. The industry shall ensure that no water pollution problem is created in the area due to discharge of effluents from its industrial premises.
32. The industry shall comply with the code of practice as notified by the Government/ Board for the type of industries where the siting guidelines/ code of practice have been notified.
33. Solids, sludge, filter backwash or other pollutant removed from or resulting from treatment or control of waste waters shall be disposed off in such a manner to prevent any pollutants from such materials from entering into natural water.
34. The industry shall re-circulate the entire cooling water and shall also re-circulate/reuse to the maximum extent the treated effluent in processes
35. The industry shall make necessary and adequate arrangements to hold back the effluent in case of failure of re-circulation system/ effluent treatment plant.
36. The industry shall make proper disposal of the effluent so as to ensure that no stagnation occurs inside and outside the industrial premises during rainy season and no demand period.
37. Where excessive storm water drainage or run off, would damage facilities necessary for compliance with terms and conditions of this consent, the applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
38. The industry shall submit a detailed plan showing therein the distribution system for conveying waste-water for application on land for irrigation along with the crop pattern for the year.
39. The industry shall ensure that the effluent discharged by it is toxicity free.
40. The industry shall not irrigate the vegetable crops with the treated effluents which are used/ consumed as raw.
41. Drains causing oil & grease contamination shall will be segregated. Oil & grease trap shall be provided to recover oil & grease from the effluent.

42. The industry shall establish sufficient number of piezometer wells in consultation with the concerned Regional Office, of the Board to monitor the impact on the Ground Water Quantity due to the industrial operations, and the monitoring shall be submitted to the Environmental Engineer of the concerned Regional Office by the 5th of every month.
43. The industry shall ensure that its production capacity & quantity of trade effluent do not exceed the quantity mentioned in the consent and shall not carry out any expansion without the prior permission/NOC of the Board.



B. SPECIAL CONDITIONS

1. The SPV shall comply with all the terms and conditions of the meeting of the Appraisal Committee of MoEF&CC held on 18-03-2016.
2. The SPV shall comply with the conditions/stipulations imposed by the Ministry of Environment, Forest & Climate Change (MoEF&CC) while granting the Environmental clearance vide no. 10-119/2011-IA-III dated 08.12.2014 for the project.
3. The SPV shall comply with the stipulations/conditions imposed by MoEF&CC/Central government/State Government/PIDB while granting the financial assistance for the project.
4. The SPV shall comply with the office order no. 39 dated 16-01-2020 issued by the Board for utilization of funds for construction of CETP.
5. The SPV shall comply with all the discharge parameters prescribed by the Board from time to time i.e. pH @ 6.5-8.5, BOD @ < 10 mg/l, COD @ < 50 mg/l, TSS @ < 10 mg/l, Chromium @ Nil, Sulphide @ 0.01 mg/l, TDS @ 2100 ppm, Oil & grease @ nil, Phenolic Compound @ Nil, SAR @ 7, RSC @ 3 mg/l and Bio-Assay @ 90 % survival of fish after 96 hours of 100% effluent.
6. The SPV shall ensure that the member industries comply with the inlet standards as and when prescribed by the Board/CPCB/MoEF.
7. The SPV shall ensure that the SCADA system of its flow meter is fully operational and give output of all data at all the time. The SPV shall ensure that the SCADA systems of CETP as well as its all member units always stay connected and linked end to end i.e. from the industries to the inlet of the CETP and further leading to outlet of the CETP.
8. The SPV shall submit detailed report on weekly basis regarding quantity of effluent received from each member units, total quantity of effluent at the inlet of the CETP and total quantity of effluent discharged through email to concerned Zonal Office and Regional Office.
9. The SPV shall immediately inform any breakdown / technical fault in the EMFs/SCADA system telephonically as well as through email to the Board.
10. The SPV shall ensure that CCTV cameras/ Online Continuous Effluent Monitoring System (OCEMS) installed at the CETP are operational and connected with the server at all the times and will provide desired link to the concerned Zonal Office and Regional Office.
11. The SPV shall ensure that all the member units comply with directions u/s 33-A of the Water (Prevention & Control of Pollution) Act, 1974 issued to them for legal binding frame work between the SPV and member units.
12. The SPV shall ensure strict compliance to the decisions taken during the meeting held under the Chairmanship of worthy Chairman of the Board on 01-09-2020 w.r.t use of treated effluent.
13. The SPV shall ensure that the SPV as well as the member units comply with all the guidelines for operation and maintenance of CETPs.
14. The SPV shall ensure compliance to all the statutory guidelines issued by the Board from time to time.
15. The SPV shall ensure that the member units are not allowed to discharge the effluent exceeding the consented discharge allowed to them by the Board.
16. The SPV shall ensure that only single outlet is provided by the member units for discharging both the treated trade effluent as well as domestic sewage into CETP.
17. The SPV shall ensure that no new unit is allowed to connect to the CETP or existing unit is allowed to increase the discharge quantity leading to CETP without obtaining prior permission of the Board.
18. The SPV to obtain all regulatory permissions from the various departments required for operation of the project at their own level. Punjab Pollution Control Board will not be responsible, in case such permissions would not be obtained and the entire responsibility will lies with the project proponents/SPV constituted for this purpose.
19. The SPV shall get the performance study of the CETP conducted from the Board/NABL approved Lab on monthly basis.
20. The SPV shall ensure proper maintenance of the dedicated sewer line from industries to the inlet of the CETP and further from outlet of the CETP to the final disposal.
21. The SPV shall comply with all the terms and guidelines of the Centrally Sponsored Scheme of the

Ministry of Environment, Forest & Climate Change for the CETP.

22. The SPV shall ensure compliance to all general and special conditions of the consent to operate and other regulatory clearances. Any non-compliance by any member units shall be informed to the Board by the SPV immediately.



10/09/2020

(Sandeep Bahl)
Sr Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)



57



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
परिवेश, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

Speed Post

CPCB/IPC-VII/CETP-Ludhiana/3471

Dated 12.08.2024

To

The Member Secretary
Punjab Pollution Control Board
Vatavaran Bhawan, Nabha Road
Patiala Punjab

Subject: Directions under section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974 regarding non-compliance status of four CETPs namely A. 40 MLD CETP- near Central Jail, Tajpur Road (Focal Point Module), Ludhiana, Punjab, B. 50 MLD CETP Tajpur-Rahon Road Cluster, Ludhiana, near Central Jail, Tajpur Road, Ludhiana, Punjab, C. 15 MLD CETP- Bahadurke Road, Ludhiana, Punjab and D. 500 KLD CETP, Plot No. D-260-261, Phase-VIII, Focal Point, Ludhiana, Punjab.

WHEREAS, amongst others, under Section 17 of the Water (Prevention & Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Board (SPCB), (or Pollution Control Committee for Union Territories) constituted under the Water (Prevention & Control of Pollution) Act, 1974 is to plan a comprehensive programme for prevention, control or abatement of pollution of streams and wells located in the State and to secure the execution thereof; and

WHEREAS, amongst others, under Section 16 of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, one of the functions of the Central Pollution Control Board (CPCB), constituted under the Water (Prevention & Control of Pollution) Act, 1974 is to coordinate activities of the State Pollution Control Boards and Pollution Control Committees and to provide technical assistance and guidance to SPCBs/PCCs; and

WHEREAS, amongst others, under Section 16 of the Water (Prevention & Control of Pollution) Act, 1974, one of the functions of the Central Pollution Control Board (CPCB), is to promote cleanliness of streams and wells in different areas of the State; and

WHEREAS, the Central Government has notified the standards for discharge of environmental pollutants from various categories of industries, Common Effluent Treatment Plants (CETPs) and Sewage Treatment Plants (STPs) under the Environment (Protection) Act, 1986 and the rules framed there under; and

केन्द्रीय प्रदूषण नियंत्रण बोर्ड

दिनांक 12/08/24

दिनांक 12/08/24

"परिवेश भवन" पूर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, New Delhi - 110032

दूरभाष/Tel: 43102030, 22305792, वेबसाइट/Website: www.cpcb.nic.in

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WHEREAS, there is a need to inculcate the habit of self-monitoring within the CETPs for complying with the prescribed standards and this can be achieved by installing Online Continuous Effluent Monitoring System (OCEMS); and

WHEREAS, four CETPs namely (i) CETP - 40 MLD near Central Jail, Tajpur Road (Focal Point Module), Ludhiana, Punjab, (ii) CETP - 50 MLD Tajpur-Rahon Road Cluster, Ludhiana, near Central Jail, Tajpur Road, Ludhiana, Punjab, (iii) CETP - 15 MLD Bahadurke Road, Ludhiana, Punjab and (iv) CETP - 500 KLD CETP, Plot No. D-260-261, Phase-VIII, Focal Point, Ludhiana, Punjab were inspected by CPCB officials along with officials of Punjab PCB during 22.04.2024 and 23.04.2024 based on the communication of the Central Monitoring Committee (CMC) with CPCB. Following major observations were made:

- A. CETP - 40 MLD, near Central Jail, Tajpur Road (Focal Point Module), Ludhiana, Punjab (herein after referred as CETP):
- I. During the visit on 22.04.2024, the CETP was found operational with the flow rate of 29 MLD. The CETP receives effluent through dedicated underground pipeline and the treatment is based on Sequential Batch Reactor (SBR) technology. It was informed that the CETP is discharging the treated effluent into Budha Nallah (which meets River Sutlej) through underground pipeline from CETP. However, as per the Environmental Clearance (EC) issued by MoEF&CC to the CETP dated 03.05.2013, "the treated wastewater will be used for irrigation" and it is also mentioned in the special terms & conditions that, "There shall be no discharge into Budha Nallah".
 - II. The consent under the Air Act, 1981 is valid upto 29.12.2024 and the Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 is valid upto 19.12.2024 for the operation of 40 MLD CETP. However, the consent under the Water Act, 1974 was valid till 15.05.2023. The CETP has applied for renewal of consent to PPCB on 07.09.2023.
 - III. It was reported that 72 Dyeing and Printing units have obtained membership from CETP. It was also informed by the CETP operator that inlet norms for CETP is not prescribed in the consent.
 - IV. Grab samples were collected from the CETP during monitoring. The analysis result of samples collected from CETP outlet reveals that BOD:54 mg/l (Standard: 30 mg/l), COD:262 mg/l (Standard:250 mg/l), Chloride:2284 mg/l (Standard: 1000 mg/l) and Sulphide:2.4 mg/L (Standard: 2 mg/l) exceeds the notified effluent discharge standards for CETP. Remaining monitored parameters are within the prescribed standards.


- V. Grab sample were also collected from the Sequential Batch Reactor (SBR) tank for MLSS & MLVSS. The analysis result reveals that the concentration of MLSS: 4661 mg/l (Designed range: 5000-7000 mg/l) and concentration of MLVSS: 3000 mg/l (Designed range: 3500-4200 mg/l) are less than the designed range, which indicates the poor operation of the SBR.
- VI. The CETP has installed Online Continuous Effluent Monitoring System (OCEMS) at the final outlet of treated effluent for the parameters- pH, TSS, COD, BOD with connectivity to PPCB & CPCB servers. During the visit, the OCEMS was found operational and variation in OCEMS reading compared with the monitored results was also reported which indicates the improper working / validation / calibration of OCEMS system.
- VII. The CETP has provided sludge storage facility and obtained membership from M/s Re-sustainability Limited (M/s Ramky Enviro Engineers Limited). The CETP had disposed 3517.235 MT sludge (as per the log book records) during the year 2023-24.
- B. CETP - 50 MLD, Tajpur-Rahon Road Cluster, Ludhiana, near Central Jail, Tajpur Road, Ludhiana, Punjab.**
- I. During the visit on 22.04.2024, the CETP was found operational with the flow rate of 46 MLD. The CETP receives effluent through dedicated underground pipeline and the treatment is based on Sequential Batch Reactor (SBR) technology. It was informed that as per the consent, the CETP is permitted to discharge the treated effluent into Budha Nallah (which meets River Sutlej) through underground pipeline from CETP. However, as per the EC issued by MoEF&CC to the CETP dated 03.05.2013, "the treated wastewater will be used for irrigation" and it is also mentioned in the special terms & conditions that, "*There shall be no discharge into Budha Nallah*".
 - II. The consent under the Air Act, 1981 is valid upto 31.03.2026 for the operation of 50 MLD CETP. However, the Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 was valid till 04.12.2023 and the consent under the Water Act, 1974 was valid till 22.08.2023. The CETP has applied for renewal of consent and authorization to PPCB on 31.08.2023. m
 - III. It was reported that 110 Dyeing and Printing units have obtained membership from CETP. It was also informed by the CETP operator that inlet norms for CETP is not prescribed in the consent.
 - IV. Grab samples were collected from the CETP during monitoring. The analysis result of samples collected from CETP outlet reveals that BOD: 128 mg/l (Standard: 30

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mg/l), COD: 382 mg/l (Standard: 250 mg/l) and Chloride: 1713 mg/l (Standard: 1000 mg/l) exceeds the notified effluent discharge standards for CETP. Remaining monitored parameters are within the prescribed standards.

- V. Grab sample were also collected from the Sequential Batch Reactor (SBR) tank for MLSS & MLVSS. The analysis result reveals that the concentration of MLSS: 300 mg/l (Designed value: 5000 mg/l) and concentration of MLVSS: 215 mg/l (Designed value: 4000 mg/l) are less than the designed values, which indicates the poor operation of the SBR.
- VI. The CETP has installed Online Continuous Effluent Monitoring System (OCEMS) at the final outlet of treated wastewater for the parameters- pH, TSS, COD, BOD with connectivity to PPCB & CPCB servers. During the visit, the OCEMS was found operational and variation in OCEMS reading compared with the monitored results was also reported which indicates the improper working / validation / calibration of OCEMS system.
- VII. During the visit, it was observed that the CETP has provided sludge storage facility and obtained membership from M/s Re-sustainability Limited (M/s Ramky Enviro Engineers Limited) for disposal of sludge. The CETP had disposed 1597.20 MT sludge during the year 2023-24 through TSDF and further, as per log book records, about 173 MT was stored in the premises.

C. CETP - 15 MLD CETP- Bahadurke Road, Ludhiana, Punjab.

- I. During the visit on 22.04.2024, the CETP was found operational with the flow rate of 11.26 MLD. The CETP receives effluent through dedicated underground pipeline and the treatment is based on Sequential Batch Reactor (SBR) technology. It was informed that the CETP is discharging the treated effluent into Budha Nallah (which meets River Sutlej) through underground pipeline from the CETP. However, as per EC issued by MoEF&CC on 08.12.2014, the CETP is required to establish a Zero Liquid Discharge system. 
- II. The consent under the Air Act, 1981 is valid upto 31.03.2025 for the operation of 15 MLD CETP. However, the consent under the Water Act, 1974 was valid till 04.01.2023 and the Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 was valid till 04.10.2022 for which the CETP has applied for renewal to PPCB.
- III. It was reported that 36 Dyeing/Printing/washing units have obtained membership from CETP and connected to the CETP at the time of visit. It was also informed by the CETP operator that inlet norms for CETP is not prescribed in the consent.

- IV. Grab samples were collected from the CETP during monitoring. The analysis results of sample collected from CETP outlet reveals that BOD: 243 mg/l (Standard: 30 mg/l), COD: 587 mg/l (Standard: 250 mg/l), Chloride: 1904 mg/l (Standard: 1000 mg/l) and Sulphide: 16 mg/l (Standard: 2 mg/l) exceeds the notified effluent discharge standards for CETP. Remaining monitored parameters are within the prescribed standards.
- V. Grab samples were collected from the Sequential Batch Reactor (SBR) tank for MLSS & MLVSS. The sample analysis results reveals that the concentration of MLSS: 2639 mg/l (Designed value: 4840 mg/l) and concentration MLVSS: 1179 mg/l (Designed value: 3872 mg/l) are less than the designed values, which indicates the poor operation of the SBR.
- VI. The CETP has installed Online Continuous Effluent Monitoring System (OCEMS) at the final outlet of treated effluent for the parameters- pH, TSS, COD, BOD with connectivity to PPCB & CPCB servers. During the visit, the OCEMS was found operational and variation in OCEMS reading compared with the monitored results was also reported which indicates the improper working / validation / calibration of OCEMS system.
- VII. During the visit, it was observed that the CETP has provided sludge storage facility and obtained membership from M/s Re-sustainability Limited (M/s Ramky Enviro Engineers Limited) for disposal of sludge. The CETP had disposed 602.685 MT sludge during the period of 02.04.2023 to 31.03.2024, through TSDF.
- D. CETP - 500 KLD CETP, Plot No. D-260-261, Phase-VIII, Focal Point, Ludhiana, Punjab.**
- I. During the visit on 23.04.2024, the CETP was found operational with the flow rate of 450 KLD. It is informed that the CETP receives effluent through dedicated tankers from member units through vehicles (56 in number) equipped with GPS system for carrying effluent. The CETP comprised of physico-chemical process followed by filtration, two stage Reverse Osmosis (RO) followed by evaporator to achieve ZLD as per the consent and EC condition.
- II. The Air consent is valid upto 30.06.2028 and the Water consent is valid upto 30.06.2027 for the operation of 500 KLD CETP. However, the Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 was valid till 16.06.2021. It was informed that the CETP has applied for renewal of authorization to PPCB on 01.10.2021.
- III. It was reported that 1613 Electroplating industries / Metal Surface Treatment units have obtained membership from CETP and connected to the CETP at the time of

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- visit. It was also informed by the CETP operator that inlet norms for CETP is not prescribed in the consent.
- IV. On the day of visit, it was observed that the flow meters are installed at RO Feed, RO Reject, Evaporators Vessels feed and Evaporator concentrate. It was reported that the CETP have not installed differential pressure gauge system at Cation-Anion and Carbon filter systems which can be used to indicate the choking/scaling of filtration system.
 - V. During the visit, grab samples were collected from the RO outlet of CETP. The analysis result reveals that treated effluent is complying with the notified discharge standards. Discharge of effluent from the CETP premises was not observed during visit. It is reported that treated effluent (RO Permeate and Condensate) is used for cooling tower makeup water, plantation, gardening, watering to MC parks, DC office, NH-95, construction work. The CETP has also made agreement with M/s Yardhman Special Steels Limited C-58, Focal point Phase-3, Ludhiana, to take 100 KLD treated effluent through tankers for using in different purpose as per requirement. Furthermore, the CETP operator has maintained the records of the treated effluent taken by the users for gardening, construction activities & industrial use and others. The CETP has established an Environmental laboratory.
 - VI. The CETP has installed OCEMS (Electromagnetic flow meter, PTZ camera) at the final outlet / RO permeate which is connected to CPCB/PPCB portal in compliance of CPCB directions.
 - VII. The CETP has installed 05 KLD STP with Moving Bed Biofilm Reactor (MBBR) for treatment of domestic wastewater.

AND, NOW, THEREFORE, in exercise of powers conferred under section 18(1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention and control of pollution) Act, 1981, Punjab Pollution Control Board (PPCB) is hereby directed to take appropriate action including imposing environmental compensation and to ensure that CETPs are operated ensuring.

- a. Operation/augmentation of the treatment system, appropriately, so as to meet the prescribed discharge standards and to comply with the disposal condition mentioned in the Environmental clearance by MoEF & CC dated 03.05.2013 and 08.12.2014 in the aforesaid 40 MLD, 50 MLD and 15 MLD CETPs. Further, to stop discharging of treated effluent into Buddha Nallah from the 50 MLD CETP, 40 MLD CETP and 15 MLD CETPs.

- b. With valid consent under the Water Act-1974 / Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 from PPCB and comply with all the conditions mentioned thereof.
- c. Undertaking regular calibration, maintenance and validation of the OCEMS analysers as per standard operating procedures/recommendations of the suppliers, so as to ensure generation of continuous & reliable data.

Further, PPCB is also hereby directed:

- a. To prescribe disposal condition to respective CETPs in accordance with the Environmental clearance by MoEF&CC dated 03.05.2013 and 08.12.2014.
- b. To prescribe the inlet standard for CETP in accordance to the CETP notification dated 01.01.2016.
- c. To regularly undertake verification of member industries of the CETP for ensuring proper operation of PETP/ETP by individual member industry.

The action taken by PPCB be intimated to CPCB within 15 days of receipt of these directions.


(Bharat Kumar Sharma)
Member Secretary

Copy to:

1. **The Chairman** : for information, please.
Punjab Pollution Control Board
Vatavaran Bhawan, Nabha Road
Patiala Punjab
2. **The Additional Secretary (CP Division)** : for information, please.
Ministry of Environment, Forests & Climate
Change,
Prithvi Wing, 2nd Floor, Indira Paryavaran
Bhawan, Jor Bagh Road,
New Delhi-110 003.



- 3. **The Regional Director (Chandigarh)**
Central Pollution Control Board
BSNL, Telephone Exchange, 2nd Floor
Sector - 49C, Chandigarh - 160047 : for follow-up, please.
- 4. **Divisional Head, WQM-I,**
CPCB, Delhi : for information, please.
- 5. **Divisional Head, IPC-VI,**
CPCB, Delhi : for information, please.
- 6. **Divisional Head, IT**
CPCB, Delhi : for uploading on CPCB
website, please.

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(Bharat Kumar Sharma)

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o/c



ਪੰਜਾਬ ਪ੍ਰਦੂਸ਼ਣ ਰੋਕਥਾਮ ਬੋਰਡ
PUNJAB POLLUTION CONTROL BOARD



Zonal Office-II, E-648-B, Back Side CICU Office, Phase-5, Focal Point, Ludhiana
E-mail: seezo2ldhppcb@yahoo.com

Ph No. 0161-2670141

No. PPCB/SEE/ZO-2/LDH/2024/.....

Regd.

Dated

To

- 1) The Chairman,
Bahadur Ke Textile & Knitwear Association (SPV),
C/o M/s Adinath Dyeing & Finishing Mills, Bahadurke Road,
Dyeing Complex, Ludhiana.
- 2) The Director,
Bahadur Ke Textile & Knitwear Association (SPV),
C/o M/s Shri Balaji Finishing Mills, Bahadurke Road,
Dyeing Complex, Ludhiana.

ਮਹਾਂਸ਼ਰ ਸਹਾ/ਸਸ ਕਨਰਕ/ਡੀ.ਓ.ਬਿ.ਸਹ. ਵਾਤਾ ਇੰਜੀ
ਨਵੀ ਡਾਕ ਜ਼. ਵਾਤਾ ਇੰਜੀ
ਮਿਤੀ
ਵਾਤਾ ਇੰਜੀ
ਤਾਇਰੀ ਨੰ. 33.6 ਮਿਤੀ 06/09/24

Sub: Directions u/s 33-A of the Water (Prevention & Control of Pollution) Act, 1974 as amended in 1988.

Whereas, Bahadur Ke Textile Knitwear Association (SPV for CETP) has installed and is operating the Common Effluent Treatment Plant (CETP) of capacity 15 MLD for treatment of waste water from the cluster of textiles dyeing industries located at Bahadur Ke Road in Ludhiana.

And whereas, earlier the SPV was granted consents to operate under Water (Prevention and Control of Pollution) Act, 1974 vide no. CTOW/Renewal/LDH3/2022/18251904 dated 05.07.2022 and Air (Prevention & Control of Pollution) Act, 1981 vide no. CTDA/Varied/LDH3/2023/ 20380901 dated 25.04.2023, to operate the CETP of capacity 15 MLD for the treatment of effluent generated from dyeing industries located at Bahadurke Road, Ludhiana, both the consents had expired on 04.01.2023 and 31.03.2024 respectively.

And whereas, since the inception and commissioning, the SPV of 15 MLD capacity is being pursued by the Board from time to time for the compliance of the provisions of environmental laws especially the Water (Prevention and Control of Pollution) Act, 1974 by way of issuing notices, requests, reminders and affording of opportunities of hearing before the Competent Authority. The officers of the Board are also carrying out the monthly monitoring of the Common Effluent Treatment Plant since the commissioning of the CETP.

And whereas, the SPV, BKTKA was given personal hearing before the Chairman of the Board on 16.06.2023 u/s 33-A of Water (Prevention & Control of Pollution) Act, 1974 as amended in 1988 for non-achievement of effluent discharge standards at final outlet of CETP 15 MLD. After hearing the representations of the SPV and the officers of the Board and considering the relevant facts of the case, the Chairman of the Board has decided as under:

1. SPV shall submit a time bound proposal for up-gradation and augmentation of the CETP along with PERT Chart so as to achieve the prescribed standards as well as the standards as mentioned in the DPR appraised at the time of approval of financial aid received from, the Government for this CETP, within 30 days.
2. SPV shall submit a time bound proposal for 2nd Phase of up-gradation of CETP to ZLD along with PLRI Chart as per the condition of Environmental Clearance granted by MoEF&CC, within 30 days.
3. SPV shall take all necessary measures to reduce the concentration of various pollutants at source including pretreatment in the member units wherever required so as to meet with inlet standards of DR at CETP and issue necessary directions to this effect to the member units.
4. Till the up-gradation of CETP, SPV shall operate the existing CETP with best of its ability, adequately and efficiently so as to achieve the prescribed standards.

5. SPV shall ensure that in the removal of colour at the final outlet of the CETP to achieve the desired standards as well as to the visual satisfaction.
6. SPV shall submit the performance bank guarantee of remaining amount after deduction of the EC i.e. $(2,40,00,000 - 77,62,500 = 1,62,37,500)$ of Rs. 1,62,37,500/-, within 15 days.
7. SPV shall get installed SCADA enabled flow meters with all the member units at intake supply (submersible pumps / MC supply / other sources) having connectivity with the Online Monitoring System of CETP and access to Punjab Pollution Control Board, within one month to ensure that no bye pass of effluents is being operated by them. Till the installation of online meters, the industry shall must have EMF or mechanical meter at intake supply for which record is to be maintained on day to day basis.
8. SPV shall provide flow meter, CCTV cameras and Online Monitoring Mechanism at its final outlet leading to Buddha Nallah, within one month.
9. Environmental Compensation for the period of 20.04.2022 to 11.05.2023 (date of last sampling) shall be imposed on the SP for not operating the CET properly and efficiently resulting in non-achievement of results. Regional Office-3, Ludhiana to calculate the amount of Environmental Compensation and obtain necessary approvals.
10. Legal action against the SPV (CETP 15 MLD, Bahadur Ke Road, Ludhiana) and its Directors (M/s Bahadur Ke Textile & Knitwear Association (SPV) as well as CETP operator be initiated in the Competent Court of Jurisdiction.

And whereas, the SPV has not complied with the decisions of the hearing mentioned above from serial no.1 to serial no. 06 as the SPV has neither submitted any proposal to adopt ZLD nor submitted bank guarantee of remaining amount after deduction of the EC.

And whereas, the CETP of capacity 15 MLD installed at Bahadurke Road, Ludhiana for the treatment of effluent generated from the dyeing industries of Bahadurke cluster is fully operational since July 2020 and CETP is being regularly monitored by the Board on monthly basis. The CETP has failed to achieve the stringent discharge standards prescribed by the Board for the CETP since its commissioning.

And whereas, the SPV had applied for renewal of consent to operate under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 and accordingly, CETP 15 MLD was visited by officer of the Board on 11.04.2024 and it was observed as under:

1. CETP was in operation for the treatment of effluent generated from the member dyeing industries. DAF was also in line and operational.
2. CETP had recently added 03 new sludge de-watering machines alongwith 02 existing sludge centrifuge pumps and these newly installed 03 machines were in operation and existing 02 were in standby mode.
3. The recently added 01 wood fired boiler of capacity 01TPH with cyclone separator as an APCD alongwith steam paddler drier was also in operation.
4. During visit effluent was collected and sent to the Board's lab for analysis, as per the analysis report CETP is achieving the discharge standards prescribed by the MoEF&CC except one parameter i.e. TDS but it has failed to achieve stringent discharge standards prescribed by the Board.
5. CETP is complying with the provisions of the Air (Prevention & Control of Pollution) Act, 1981

And whereas, the SPV has failed to comply with the decisions taken during the personal hearing dated 16.06.2023 and to achieve stringent effluent discharge standards. Thus, the SPV was found violating the provisions of the Water (Prevention & Control of Pollution) Act, 1974.

And whereas, the SPV was granted Environmental Clearance vide MoEF&CC letter dated 08.12.2014 for the establishment of CETP based on Zero Liquid Discharge (ZLD). Thereafter a follow up meeting of Appraisal Committee on CETP was held in the MoEF&CC on 03.03.2016

and during the meeting it was decided that the SPV shall install CETP based on conventional treatment method in 1st phase and may adopt ZLD in 2nd phase. Minutes of the said meeting were issued vide MoEF&CC letter dated 18.03.2016, but the SPV has not submitted any proposal till date to adopt 2nd phase i.e. ZLD.

And whereas, the SPV has filed appeals before the Appellate Authority-cum-Secretary to Government of Punjab, Department of Science Technology and Environment against following decisions of the Board:

1. Imposition of EC amounting to Rs. 01 crore to the SPV vide minutes of meeting dated 08.10.2021.
2. Imposition of EC amounting to Rs. 77.625 Lacs to the SPV vide Board's no. 335 dated 4.10.2022
3. Against the decision of the Board to obtain Performance Bank Guarantee of Rs. 2.4 Crores from the SPV.

And whereas, however, above appeals filed by the SPV were decided and dismissed by the Appellate Authority-cum-Secretary to Government of Punjab, Department of Science, Technology and Environment vide orders dated 20.05.2024.

Environmental Compensation (EC) amounting to Rs.1 crore has already been deposited by the SPV and EC amounting to Rs.77.625 lacs has been recovered from the amount of performance bank guarantee of Rs. 2.4 crore earlier submitted by the SPV. However, the SPV has not submitted performance bank guarantee of remaining amount after deduction of the EC amounting to Rs. 77.625 Lac by the Board i.e. (2,40,00000 - 77,62,500 = 1,62,37,500) till date. The appeal filed by the SPV against this BG has already been dismissed by the Appellate Authority.

And whereas, the SPV is not complying with the decisions of the Competent Authority.

And whereas, show cause notice for refusal of consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 was issued to the SPV with an opportunity of personal hearing before the Chairman of the Board on 09.07.2024 postponed to 12.07.2024, postponed to 16.07.2024 and postponed to 23.07.2024. No one on behalf of SPV attended the hearing. Considering the request of the SPV, the hearing was further postponed to 09.08.2024. However, no one on behalf of SPV again attended the hearing on 09.08.2024.

And whereas, keeping in view the act and conduct of the SPV, it was observed that the SPV is not serious about resolving the issues / violations reported on part of the CETP and SPV is not attending the hearing being afforded by the Board to avoid the implementation of the provisions of Environmental Laws. After considering all the aspects of the case, the Chairman of the Board decided to proceed ex-parte and has taken the following decisions:

1. The consent to operate applied by the SPV under the Water (Prevention & Control of Pollution) Act, 1974 be refused as ex-parte decision.
2. Notice to issue directions u/s 33-A of the Water Act, 1974 to take measures to control the pollution generated by the CETP, which may include taking legal action against the responsible persons of the SPV, to stop the transaction of the bank account of SPV with immediate effect, to impose the appropriate Environmental Compensation based on polluter pays principle and to upgrade the existing CETP to the ZLD, be issued to the SPV along with an opportunity of personal hearing before the Chairman of the Board.

And whereas, the proceedings were conveyed to the SPV vide Board's letter no 5336/37 dated 29.08.2024.

And whereas, in compliance to the decisions of hearing the consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 was refused vide no. CTOW/Renewal/LDH3/2024/ 25302719 dated 30.08.2024.

And whereas, in compliance of directions of the Central Monitoring Committee (CMC), CPCB has carried out inspection and monitoring of the Buddha Nallah and River Sutlej on 02.04.2024. The CPCB has also carried out inspection of 04 CETPS located at Ludhiana on

22.04.2024 and issued directions u/s 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974 regarding non-compliance of four CETPs of Ludhiana. The CETP of capacity 15 MLD was visited by the team of CPCB and following observations were made:

1. During the visit on 22.04.2024, the CETP was found operational with the flow rate of 11.26 MLD. The CETP receives effluent through dedicated underground pipeline and the treatment is based on Sequential Batch Reactor (SBR) technology. It was informed that the CETP is discharging the treated effluent into Buddha Nallah (which meets River Sutlej) through underground pipeline from the CETP. However, as per EC issued by MoEF&CC on 08.12.2014, the CETP is required to establish a Zero Liquid Discharge system.
2. The consent under the Air Act, 1981 is valid upto 31.03.2025 for the operation of 15 MLD CETP. However, the consent under the Water Act, 1974 was valid till 04.01.2023 and the Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 was valid till 04.10.2022 for which the CETP has applied for renewal to PPCB.
3. During visit, it was informed to the team that 36 Dyeing/Printing/washing units had obtained membership from CETP and connected to the CETP.
4. Grab samples were collected from the CETP during monitoring. The analysis results of sample collected from CETP outlet reveals thats B OD: 243 mg/l (Standard: 30 mg/l), COD: 587 mg/l (Standard: 250 mg/l), Chloride: 1904 mg/l (Standard: 1000 mg/l) and Sulphide: 16 mg/l (Standard: 2 mg/l) exceeds the notified effluent discharge standards for CETP. Remaining monitored parameters were found within the prescribed standards.
5. Further, the grab samples were collected from the Sequential Batch Reactor (SBR) tank for MLSS & MLVSS. The sample analysis results reveals that the concentration of MLSS: 2639 mg/l (Designed value: 4840 mg/l) and concentration MLVSS: 1179 mg/l (Designed value: 3872 mg/l) are less than the designed values, which indicates the poor operation of the SBR.
6. The CETP has installed Online Continuous Effluent Monitoring System (OCEMS) at the final outlet of treated effluent for the parameters pH, TSS, COD, BOD with connectivity to PPCB & CPCB servers. During the visit, the OCEMS was found operational and variation in OCEMS reading compared with the monitored results was also reported which indicates the improper working / validation / calibration of OCEMS system.
7. During the visit, it was observed that the CETP has provided sludge storage facility and obtained membership from M/s Re-sustainability Limited (M/s Ramky Enviro Engineers Limited) for disposal of sludge. The CETP had disposed 602.685 MT Sludge during the period of 02.04.2023 to 31.03.2024, through TSDF.

And whereas, the SPV is violating the provisions of the Water (Prevention & Control of Pollution) Act, 1974.

And whereas, Environmental Engineer, Zonal Office-2, Ludhiana brought out that in light of deficiencies as observed by CPCB in operation of the CETPs of Ludhiana installed for dyeing units on its visit on 22.04.2024, the Central Pollution Control Board has issued directions u/s 18(1)(b) of the Water (Prevention & Control of Pollution) Act, 1974 vide letter dated 12.08.2024 to take appropriate action including imposing Environmental Compensation and to ensure that the CETP is operated ensuring:

- a) Operation/ augmentation of the treatment system, appropriately, so as to meet the prescribed discharge standards and to comply with the disposal condition mentioned in the Environmental Clearance by MoEF&CC dated 03.05.2013 and 08.12.2014 in the aforesaid 40 MLD, 50 MLD & 15 MLD CETPs. Further, to stop discharging of treated effluent into Buddha Nallah from 50 MLD, 40 MLD & 15 MLD CETPs.

- b) With valid consent under the Water Act, 1974/ Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 from PPCB and comply with all the conditions mentioned thereof.
- c) Undertaking regular calibration, maintenance and validation of the OCMS analysers as per standard operating procedures/recommendations of the suppliers, so as to ensure generation of continuous & reliable data.

And whereas, Punjab Pollution Control Board was further directed by Central Pollution Control Board as under:

- a) To prescribe disposal condition to respective CETPs in accordance with the Environmental Clearance by MoEF&CC dated 03.05.2013 & 08.12.2014.
- b) To prescribe inlet standards for CETP in accordance to the CETP notification dated 01.01.2016.
- c) To regularly undertake verification of member industries of the CETP for ensuring proper operation of PETP/ETP by individual member industry.

And whereas, notice to issue directions u/s 33-A of the Water (Prevention & Control of Pollution) Act, 1974 as amended in 1988 was issued to the SPV with an opportunity of personal hearing before Chairman of the Board on 13.09.2024 postponed to 18.09.2024.

And whereas, Sh. Lalit Jain, Director of the SPV (CETP of 15 MLD) alongwith Sh. I.K. Kapila, Advocate, Hon'ble Supreme Court of India attended the hearing and submitted a written reply which was taken on record. The representatives stated that although the EC was obtained by the SPV for ZLD based treatment but later on the project was conceived on the SBR based secondary level treatment. The representatives further contended that other two CETPs of 40 MLD & 50 MLD capacity were duly sanctioned without any condition / requirement for ZLD level treatment. Regarding the submission of Bank Guarantee as per decision of personal hearing afforded to the SPV by Chairman of the Board on 16.06.2023, the representatives informed that the SPV has challenged the said decision by way of filing appeal before the Appellate Authority and the decision is pending. The representatives disagreed with the technical observations as reported by the CPCB and did not find the same acceptable to the SPV and insisted not to penalize the SPV on the basis of the said report. The representatives further informed that the SPV has applied for obtaining the consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 with the Board.

And whereas, during hearing, it was observed by the Competent Authority that the SPV has been constantly pursued by the Board to submit proposal for upgradation of the CETP to ZLD technology in consonance with the EC conditions and thus not to discharge its effluent into the Buddha Nallah. However, the SPV has not taken any step in this direction. The Ludhiana city has been declared as critically polluted area due to various reasons and one of the reasons is the activities of the industrial units in violation of the environmental norms. Though the Board has imposed EC and performance Bank Guarantee but the SPV is still violating the provisions of the Water (Prevention and Control of Pollution) Act, 1974.

And whereas, the representatives of the SPV could not give any satisfactory reply to the observations raised during the hearing.

And whereas, after detailed deliberations and hearing the representatives of SPV, officers of the Board and taking into consideration various factors including the seriousness of the issue, the Chairman of the Board observed that the objective to restrain the discharge of effluent into Budha Nallah cannot be achieved except with the issuance of directions. It is a fit case to invoke the provisions of section 33-A of the Water (Prevention and Control of Pollution) Act, 1974 for issuance of suitable directions to the SPV operating the CETP of 15 MLD capacity at Bahadurke Road, Ludhiana. Hence, the Chairman of the Board in exercise of the powers conferred u/s 33-A of the Water (Prevention and Control of Pollution) Act, 1974 decided to issue the following directions to the SPV of CETP of 15 MLD capacity:

3. The SPV shall ensure that the operation / augmentation of treatment system of CETP is appropriately made, so as to meet with the prescribed discharge standards and to comply with the disposal conditions mentioned in the Environmental Clearance granted by the Ministry of Environment, Forest and Climate Change dated 08.12.2014.
4. The SPV shall immediately stop the discharge of effluent from the CETP of 15 MLD capacity into Buddha Nallah or any other surface water body.

And whereas, the proceedings of the hearing were conveyed to the industry vide order dated 25.09.2024.

Now, therefore, the Competent Authority of the Punjab Pollution Control Board, exercise of the powers conferred upon it u/s 33-A of the Water (Prevention & Control of Pollution) Act 1974 as amended in 1988, issues the following directions:

1. That, the SPV shall ensure that the operation / augmentation of treatment system of CETP is appropriately made, so as to meet with the prescribed discharge standards and to comply with the disposal conditions mentioned in the Environmental Clearance granted by the Ministry of Environment, Forest and Climate Change dated 08.12.2014.
2. That, the SPV shall immediately stop the discharge of effluent from the CETP of 15 MLD capacity into Buddha Nallah or any other surface water body.

In case of failure to comply with the above said directions, you are liable for action u/s 41 of the Water (Prevention and Control of Pollution) Act 1974 as amended in 1988.

Indst. No. 5804

For and on behalf of
Punjab Pollution Control Board
Dated 25/09/24

A copy of the above is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office-3, Ludhiana for information and necessary action. He is also directed to submit report regarding effective compliance of above said directions, within 3 days positively.

For and on behalf of
Punjab Pollution Control Board