BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PB AT NEW DELHI

O.A. NO. 225 OF 2022

IN THE MATTER OF:

Nitin Dhiman ...APPLICANT

VERSUS

State Of Punjab ...RESPONDENTS

INDEX

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New Delhi

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
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IN THE MATTER OF:

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ADDITIONAL SUBMISSIONS AND RESPONSE OF THE RESPONDENT NO 7, PUNJAB DYERS ASSOCIATION (MANAGING 50 MLD CAPACITY CETP AT LUDHIANA) TO REPORT OF CPCB DATED 19.3.2025

MOST RESPECTFULLY SHOWETH:

1. That matter related pollution in Buddha Nala that meets River Satluj is pending before this Hon'ble Tribunal in the matter of OAS 225/2022 based on a letter petition alleging that about 400 dyeing industries including three CETPs for dyeing industries at Ludhiana are polluting Buddha Nala. The Hon'ble Tribunal was pleased to observe following in the order dated 10.10.2022 before seeking report from various authorities on the subject matter

> "1. The grievances in the present letter petition sent by Mr. Nitin Dhiman resident of 1203, Princeton Tower, Omaxe, Pakhowal Road, Ludhiana are that around 400 dyeing units are operating in Ludhiana district. The above said units are consuming about 3 crore liters ground water for washing and dyeing daily and discharging approximately 300 MLD chemical

mixed untreated water directly in Buddha Nullah through local Municipal Sewerage which finally goes to River Satluj thereby causing dangerous diseases like cancer and skin problems. Ludhiana dyeing industry allegedly installed 3 CETP plants with the capacity of 105 MLD in different locations. MOEF & CC had issued the environment clearance for setting up of one CETP on the basis of Zero Liquid Discharge (ZLD) technology but said CETP has been installed without ZLD Technology. Other two CETPs are under construction for more than one decade. Around 125 dyeing units are situated in scattered area which do not have CETP."

2. That through several reports filed by official respondents before Hon'ble Tribunal and other Respondents in the instant matter, the following main sources of pollution of River Satluj through discharge of polluted waters through Buddha Nala have been brough out:

a) Three CETPs with total capacity of 105 mld for dyeing industries discharging treated effluent directly in to Buddha Nala

b) 225 mld STP at Jamalpur discharging treated municipal sewage and effluents from scattered/ large dyeing units (and other unspecified industries/establishments at Ludhiana as evident from test report for STP inlet dt 12.11.2024 at **Annexure R7/1** showing BOD 229 mg/l, COD 660 mg/l, TDS 936 mg/l and Iron 53 mg/l beside other metals etc. despite directions u/s 5 of EP Act dated 10.10.2019 as mentioned by Secretary , ST & Env at **page 1607**),

directly in to Buddha Nala. Copy of Consent to establish to 225 mld STP to discharge effluent in to Buddha Nala is placed at **page 265.**

c) Dairy waste from large number of dairies located around Buddha Nala and discharging their waste including animal dung in to Buddha Nala directly

d) Large number of untapped drains carrying waste water (from industries, establishments and households) directly falling in to Buddha Nala.

3. That the Respondent No 12, CPCB has submitted its monitoring report by PPCB dated 19.1.2024 for Buddha Nala and monitoring report by CPCB for River Satluj and Buddha Nala dated 2.4.2024 vide report dated 26.11.2024 placed at page 2023-2077 that informs **(page 2064)** that Real time Water Quality Monitoring Station (S No 9) at Buddha Nala on 19.1.2024 show very high concentration of **BOD (190 mg/l)**, **TC (92 lakh/ 100 ml)**, **Iron (13 mg/l**) etc. it is submitted that presence of High concentration of **Iron** and **Coliform** which are not known to be contributed by dyeing industries clearly shows that **human/ animal waste and some non dyeing industrial waste** is contributing significantly to pollution of river Satluj through Buddha Nala. The CPCB has reported (**Page 2026-2027**) that water quality of Buddha Nala on 2.1.2024 was found non complying wr to BOD (161 mg/l), COD (456 mg/l) and TSS (328 mg/l) for in land water and wr to BOD and TSS for land irrigation when compared to

General Standards for discharge of environmental pollution prescribed under Schedule VI of EP Rules for inland surface water and land irrigation. It thus becomes clear that TDS is not a major concern for disposal of collective Buddha Nala waters in to inland surface water or for land irrigation purpose due to mixing & dilution of low TDS waters with relatively high TDS treated effluents. Buddha nala is also receiving dilution through release of 200 cusec (480 mld) fresh water as per Action Plan for clean River Satluj, from Sirhind canal since Aug 2021 **(Page 274 of Appeal no 40/2024)**.

4. That few photographs and newspaper reports are enclosed herewith as **Annexure R7/2 colly** to show indiscriminate discharge of dairy waste in to Buddha Nala including animal dung. The reports also show that about 100 mld of waste water flowing in to Buddha Nala near Gaughat is only now tapped and diverted in to 225 mld STP through efforts of Sant Seenchewal, MP through kar sewa and MP funds. The STP is thus reportedly operating now at about 200 mld capacity instead of earlier about 109 mld capacity. It is also reported in newspapers that steps are also taken to prevent throwing of animal dung in to Buddha Nala and the same is being collected in series of tanks to dewater and then utilised. There are still a lot of untapped drains carrying city waste in to Buddha Nala. As per a news report of March 2025, there are about **156 points where waste water is still being directly discharge in to Buddha Nala.** It is submitted that in humble view of answering respondent official system requires

to take proactive steps on all action points to control pollution falling into Buddha Nala.

5. That the report of Secretary Science & Technology and Environment, Govt of Punjab submitted on 25.11.2024 (1596-1715) regarding compliance of direction of Hon'ble Supreme Court in WPC 375/ 2012 in Re Paryavaran Suraksha Samiti & other Vs UOI and others, in compliance of order of Hon'ble Tribunal dated 14.8.2024 informs that Secretary Ministry of Jal Shakti , Govt of India is also seized of the matter regarding pollution of Buddha Nala and a presentation was made before him on 7.10.2024 in this regard which was also attended by representatives of MC Ludhiana, PPCB and Drainage dept etc (**Para 10 Page 1602**). The report informs that pollution of Buddha Nala has increased despite construction of additional STP capacity and CETPs.

6. That the said report of Secretary Science, Technology & Environment, Govt of Punjab has further informed Hon'ble Tribunal that as per decision taken in the meeting of Secretary Ministry of Jal Shakti dated 7.10.24 a Group has been constituted vide order dated 13.11.24 comprising representatives of the Central Government (CPCB, National River Conservation, Directorate, National Mission for Clean Ganga, National Institute of Hydrology), all line departments of the State Govt of Punjab with Punjab Pollution Control Board to be the nodal agency/secretariat. **The Group is required to diagnose the issues concerning persisting pollution in Buddha Nallah, evaluation of existing pollution abatement infrastructure to ensure optimization and suggest corrective actions in order of priority (Para**

13, Page1605). The said Group is to complete the task and submit its report with in a time period of one month. Although the representative of drainage deptt, Govt of Punjab was present in the meeting of Secretary Ministry of Jal Shakti, nothing has been put on record of minutes of said meeting regarding implementation of scheme of Govt of Punjab prepared in year 2012 to lay channel network for carrying effluent from STPs and CETPs at Ludhiana to prevent its discharge in to Buddha Nala and to use the same for irrigation purpose.

7. That vide **para 15** of the said report of Secretary, Science, Technology and Environment, Govt of Punjab, it is informed that pursuant to decision taken in the meeting of Chief Secretary, Govt of Punjab with large scale dyeing industries and others, IIT **Roorkee has been contacted for source apportionment study for Buddha Nala.** It is submitted that **t**he large dyeing industries at Ludhiana are still discharging their effluent in to STP except those who are discharging effluent for plantation considered to qualify as ZLD unit as per PPCB practice. Directions under sec 5 of EP Act 1986 were issued on 10.10.2019 to stop discharge of treated/ untreated industrial effluent in to municipal sewer.

8. That the report of Group constituted as per decision taken in the meeting chaired by Secretary, Ministry of Jal Shakti in Oct 2024 or the source apportionment report from IIT Roorkee as per decision taken in the meeting in Oct 2024 chaired by

Chief Secretary, Govt of Punjab have not been submitted before Hon'ble Tribunal so far.

9. That it may not be out of place to respectfully submit that condition for no discharge in to Buddha Nala implies no discharge in to River Satluj through Buddha Nala as the water in Buddha Nala is not being put to any use in Ludhiana city. It discharges itself directly in to river Satluj near Walipur whereafter it is being used for irrigation purpose after heavy dilution by water discharged in to river Satluj through Dams from time to time (**Point B, Page 2025 of report of CPCB dated 25.11.2024)**. As per the project report of Govt of Punjab for laying channel net work for use of treated water from STPs and CETPs in Ludhiana, the flow of all treated/ untreated waters entering Buddha Nala was to be stopped entering river Satluj and used on to lands for irrigating 80,000 Ha land (Copy of map at **page 1768**). In fact, waters of Buddha Nala, originally an off shoot from river Satluj near … was meeting river Satluj again after passing through Ludhiana city through lower Buddha Nala near Walipur and used for irrigation etc in villages around lower Buddha Nala. Only due to high flood around year 1980, the waters of Buddha Nala were diverted directly in to river Satluj near Walipur to prevent inundation of villages around lower Buddha Nala. Said arrangement continues till date. The waters of Buddha Nala continue to flow in to river Satluj only because Govt of Punjab has not implemented said project of year 2012 so far while STPs and CETPs are already constructed but all untapped drains falling in to Buddha Nala have not been stopped/ tapped in to STPs, and thus treated effluent from STP/ CETPs continue to discharge treated effluent in to Buddha Nala with

consent of PPCB alongwith untreated waste water through untapped drains.

10. That it appears that CPCB was aware of the proceedings of instant OA as part of the committee constituted by Hon'ble Tribunal vide order dated 4.1.2024 which filed its report before Hon'ble Tribunal on 22.4.2024 (Page 2043- 2028), the finding of which are relied by CPCB in its response dated 26.11.2024 before Hon'ble Tribunal after it was impleaded as Respondent 12 vide order dated 14.8.2024. The CPCB subsequently conducted inspection of 4 CETPs at Ludhiana on 22-23 April 2024 in reference to letter of Regional office CPCB letter dated 15.4.2024. based on said inspection of the 4 CETPs, CPCB for first time took cognigence of EC for all three CETPs for dyeing units at Ludhiana whose violation was alleged in the letter petition converted in to OA 225/2022. However, **the CPCB did not seek any explanation or clarification from PPCB for allowing discharge of treated effluent in to Buddha Nala but decided to issue directions to PPCB under sec 18(1)(b) of Water Act 1974 on 12 August 2024, just two days before hearing of instant OA before Hon'ble Tribunal on 14.8.2024**, to take necessary action to comply with EC conditions for discharge from three CETPs for dyeing units at Ludhiana. The inspection report and test reports for samples collected from 4 CETPs during inspection on 22-23 April 2024 are not submitted by CPCB before Hon'ble NGT nor its copy has been provided to answering respondent. The CPCB also did not take in to consideration the CTE granted to answering respondent in 2021 for discharge of treated effluent in to Buddha Nala (**Page 2091)** or the fact that MoEFCC sanctioned 50 mld

CETP project only in Nov 2019 after the MoEFCC had already dispensed with requirement of EC for CETP vide notification dated 18.12.2018 (Page 2114) the CPCB preferred to gloss over all these facts while issuing directions under Sec 18(1)(b) of Water Act. The CPCB directions under Sec 18(1)(b) placed at **page 4420** directs PPCB **" To prescribe inlet standards for CETP in accordance with the CETP notification dated 01.01.2016"** but the CPCB report has not offered any comment/ observation on this non compliance by PPCB although it has direct bearing on performance of CETP. in humble view of answering Respondent the responsibility of treated effluent discharge in to Buddha Nala primarily lies with State Govt and PPCB on whose commitment and assurance to implement project for carrying treated effluents from STPs and CETPs for irrigation purpose, the answering respondent had proposed as such before MoEFCC for grant of EC in year 2013 and for sanction of CETP project in year 2019 when requirement of EC was not in place as per amendment to EIA notification in Dec 2018. The State Govt and PPCB may not be allowed to go back from their commitment on the basis of which answering respondent took steps to construct CETP at huge cost.

11. That the answering Respondent has filed Appeal No 40/2024 against directions under Sec 33A of Water Act 1974 issued by PPCB on 26.9.2024 after taking in to consideration of directions of CPCB dated 12.8.2024 under section 18(1)(b) of Water Act 1974. The said appeal is pending before Hon'ble Tribunal.

12. That the PPCB has stated in its reply to Appeal No 40/2024 as under at **para 2, page 354** regarding State Govt Project for conveyance system for treated CETP effluents for irrigation purpose :

> "Initially the treated effluent of CETP was proposed to be discharge on to land for irrigation with the assistance of the Govt. ..".

It is respectfully submitted that it is already on record of appeal no 40/2024 that even in the action plan for Ludhiana in April 2019, the said intent in retained. A copy of extract of Action Plan is enclosed as Annexure .. for ready reference.

13. That the said project of Govt of Punjab for laying channel system to carry treated effluents from CETP for irrigation is clearly borne by following in minutes of 112th meeting of EAC dated 11.5.2012 considering grant of EC to 117 mld CETP (**page 227-228**)

> "During the discussion, the following points emerged
>
> (i) The proponent stated that irrigation deptt is working on a proposal to use treated water for about 33454 acres of land of about 35 villages. Submit the supporting documents on this proposal.

(ii) ..

(iii) There shall be no discharge in to Buddha Nala

(iv) …

The committee recommends the proposal for environment clearance after submission of information at (i) , above with the above condition in the clearance for strict compliance by project proponent."

14. That for submitting the project report for use of treated water for irrigation purpose, to MoEFCC in compliance of decision of EAC dated 11.5.2012, the copy of said project report was provided to answering respondent by PPCB on 3.9.2012 (**page 371**).

15. That the said project was relied for sanction of 40 mld CETP by MoEFCC in 2016 is clearly reflected from following recorded in the minutes of meeting of MoEFCC dated 3 .3.2016 (**page 809-810**) :

(i) " The Proposal was duly ….. the treated effluent will be discharged at the outfall of Ludhiana STP and will be utilised for irrigation of agricultural land."

(vi) "The proponent has mentioned that treated effluent shall be discharged and utilised for irrigation purpose. Member Secretary PPCB

> also confirmed that Govt of Punjab has approved the project for providing conveyance system for carrying treated effluent 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."

16. That the above condition is made applicable to 50 mld CETP also as per order of Hon'ble Tribunal dated 20.1.2020 in IA no 13/2020 in OA no 410/2017.

17. That the PPCB in its reply to Appeal No 40 (**para 18, Page number 362 of Appeal**) has also stated as under regarding its reason for allowing discharge of treated effluent from 50 mld CETP in to Buddha Nala :

> " that it is relevant to mention here that though the Punjab Pollution Control Board having been bound by direction of Central Pollution Control Board given under section 18 (1)(b) of Water (Prevention & Control of Pollution) Act 1974 had further issued directions to the Appellant CETP of 50 mld not to discharge any treated effluent in to Buddha Nala , but the issuance of such direction is not a permanent solution 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 Central Pollution Control Board to suggest the alternate method of discharge of treated trade effluent of Common Effluent Treatment Plant other than the discharge of treated effluent in to Buddha Nala."

18. That the PPCB in its reply to appeal no 48/2024 at **para 10 , page 252** of Appeal states as under regarding State Govt project for conveyance of treated effluents for irrigation purpose :

"Para 10: That it is germane to mention that the Govt of Punjab has earlier approved the project for providing conveyance system for carrying the treated effluent from CETPs and STPs in Ludhiana for irrigation. A condition to this effect was in the consent to establish was also stipulated in case of 40 mld and 50 mld CETP that the farmers shall be made aware that that the water supplied to them is treated effluent. …"

19. That the PPCB has also clearly stated as under in its reply to Appeal No 48/ 2024 at **para 12 page no 253** regarding requirement of EC by CETPs.

> "Para 12 : It is further pertinent to mention here that the Ministry of Environment, Forest & Climate Change vide notification no SO 6250 (E) dated 19.12.2018 has amended the EIA notification dated 14.09.2006 where in schedule for item no 7(h) in the column of conditions a note has been appended which is reproduced below for kind perusal ;
>
> Note : Environmental Clearance for CETPs set up for or with in projects or activities which do not require Environmental Clearance are exempted and if any of the existing or proposed member unit of said CETP produce or proposes to produce requiring environmental clearance then CETP shall need Environmental Clearance."

It is submitted that no member unit of 50 mld CETP requires EC and CETP was sanctioned by MoEFCC for subside in year 2019. The consent to establish for it was obtained afresh in year 2019 that permits discharge in to Buddha Nala (Temporary permission).

20. That this Hon'ble tribunal granted limited relief to answering respondent vide order dated 4.12.2024 after

hearing of Appeal No 40/2024 along with Appeal No 41/2024. The relevant gist of the order is reproduced below

> " Para 12 Pending prayer for interim relief, learned counsel for applicant submitted that impugned orders will result in shutting down all the industries connected with CETP in question. Considering the circumstances of the case we direct that till next date of hearing no coercive step in pursuant to impugned order will be taken subject to compliance of environmental norms and clearance conditions".

21. The it has already been submitted in reply of answering respondent to show cause notice for PPCB direction dated 26.9.2024 based on CPCB directions under sec 18(1)(b) that CPCB sampling report is not reliable and its sampling has not been carried out as per sec 21 of Water Act 1974. A request for re sampling was thus made. In this light, the sampling by CPCB at 50 mld CETP on 24.12.2024 assumes additional significance.

22. That the CPCB has filed its report dated instant report (Page no 4389- 4435) in compliance of order of Hon'ble Tribunal dated 27.11.2024.

RESPONSE TO REPORT OF CPCB DATED 19.3.2025

23. That the CPCB report dated 19.3.2025 is filed in compliance of following direction dated 27.11.2024 by Hon'ble Tribunal :

> Pata 7 : " Respondent No 12 CPCB is also directed to file the compliance report disclosing performance of CETPs and required action to be taken by issuing necessary direction under the Water (Prevention & Control of Pollution) Act 1974 and Air (Prevention & Control of Pollution) Act 1981 or under section 5 of Environment Protection Act 1986." ..

24. That CPCB report dated 19.3.2025 informs Hon'ble Tribunal that CPCB has again inspected 50 mld CETP on 24.12.2024 and collected samples. It is submitted that a sealed one part bearing signature of CPCB inspecting official also was sent by answering Respondent for testing at Laboratory located at Thapar Institute, Patiala. The results of testing at Thapar Institute Laboratory are found complying with MoEFCC notified standards. A copy of said results is already enclosed as Annexure R7/6 to response of the answering respondent dated 18.3.2025 at **page 2116-2119.**

25. That a comparative chart of results of samples at CETP out let as per CPCB report based on 24.12.2024 sampling

and results from lab at premises of Thapar university where one part of sealed sample also bearing signature of CPCB inspecting official was sent by the answering respondent for testing is tabulated below

S no	Parameter	CPCB Result at outlet (mg/l except pH) Page 4399	Result from Lab at Thapar University (mg/l except pH)	Remark
1	pH	8	8.1	
2	TSS	47	32	TSS is 32 at SBR out let in CPCB report and 26 in other report
3	TDS	2852	1488	TDS is 2744 at SBR out let in CPCB report and 2952 in other report
4	COD	125	88	COD is 98 at SBR out let in CPCB report and 104 in other lab report
5	BOD	54	16	BOD is 32 at SBR outlet in CPCB report and 22 in other lab report.
6	Phenolic compounds	3.62	<0.1	
7	Sulphide	2.4	<1.0	
8	Chloride	1283	489	Chloride at SBR out let as per CPCB report is 1473

				and as per other lab it is 1193 at SBR oulet

Detailed reply to PPCB on 8.5.2025 along with copy to CPCB for improbability of CPCB results as submitted to PPCB is enclosed as **Annexure R7/3** for kind perusal pl. It has been explained in the enclosed reply that results of CPCB are not reliable for some reason as the same do not seem technically possible. More so as O/G trap has additionally been installed at 50 mld CETP which helps in reduction of phenolic compounds also. Said fact is not mentioned in report of CPCB at **page 4397** where details of details of CETP treatment units are mentioned by CPCB. It is pertinent to point out here that CPCB has relied on MoEFCC notified standards as clearly reflected in table of results in CPCB report (**Page 4399 for 50 mld CETP**). All heavy metals are found with in limit at 50 mld CETP as per CPCB report. The CPCB report further observes (**para 12, page 4400**) that **overall performance of CETP with regard to removal efficiency of COD, BOD and SS parameters was found to be 85%, 87% and 71% respectively which was found adequate to achieve the prescribed norms.** Said observation of CPCB itself shows that CETP is working satisfactorily and it would perform still better as and when PPCB prescribed CETP inlet standards in compliance of directions of CPCB under Sec 18(1)(b) dated 12.8.2024 as it has direct bearing on performance of CETP. **it is pertinent to point out here**

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that BOD reduced from 62 mg/l at SBR out let to 27 mg/l at final out let for 40 mld CETP (table 3 page 4395) ie reduction of 62 % which seems odd. BOD for both 15 mld and 50 mld CETP is shown increasing after SBR to final out let. Further it is very unlikely that removal efficiency for phenolic compound was found 0% in the face of fact that O/G removal system has been installed and functional at CETP. This further points towards creeping in some or other human error in testing or reporting of CPCB results. Some additional comments on CPCB test results are tabulated below for consideration of CPCB and this Hon'ble Tribunal :

Comments on CPCB report Table 7 Page 4399 CETP Ludhiana 50mld				
S.No.	**Parameter**	**O/L of SBR mg/ltr**	**O/L of CCT mg/ltr**	**Remarks**
1	pH	7.3	8.0	pH cannot increase after CCT, as in CCT only Gas Chlorination process is being conducted due to which pH will remains the same / slightly lower.
2	COD	98.0	125.0	As during retention at CCT, only Gas Chlorination are being done so there no chance on increase in COD value, rather it will remains the same or decrease. As Chlorine will oxidized Bio degradable COD to give lesser value.
3	BOD	24.0	54.0	As during retention at CCT, only Gas Chlorination are being done so there no chance on increase in BOD value, rather it will remains the same or decrease. As Chlorine will oxidized Bio degradable COD to give lesser value.
4	PO4-P	0.12	0.43	Again, this increase in value is not acceptable. No addition of any sort of Chemical between SBR & CCT except Chlorine Gas. So PO4-P value cannot increase.
5	SO4	224.0 at SBR inlet	410.0	During SBR Process & CCT process no Chemicals addition is being done. SO Water parameter as SO4 cannot increase to double.

6	Phenolic Compound	1.60 at Inlet of CETP	3.6	at CCT outlet the value of this compound cannot increase in comparison to Inlet. During process we are using Lime, Ferrous, Poly & HCl, no addition of any other type of Chemicals. So increase in Phenolic compound is not possible. Rather by virtue of Biological activities at SBR there are chances of reduction of Phenolic compound but in no way it will increase, more so as O/G removal system has also been installed. .

26. That to reassure self about reliability of CPCB results, CPCB results for effluent treatment at 500 kld CETP for electroplating and metal finishing industries are also studied. According to CPCB report, the plant is working at 80% volumetric loading (**para 2.1.3.2 page 4405**) and it disposed 738.5 MT sludge during FY 2023-24 through TSDF against authorised capacity of 540.24 MT/ annum (**2.1.3.8 page 4406**) ie about 140 % of authorised capacity. Further, sample analysis results tabulated at Table 15 (**page 4407**) show that BOD has reduced from 1570 mg/l at equalisation tank to 137 mg/l at outlet of tube settler ie a reduction of about **89 percent during physico chemical treatment** which primafacie seems too high. Overall BOD removal from 1570 mg/l at outlet of EQ to 28 mg/l at Final outlet shows removal efficiency of about **98 percent** where as CPCB report says at para 2.1.3. 15 (**page 4408**) that removal efficiency for BOD was found to be 79.5%. Like wise results at table 15 show COD has reduced from 2162 mg/l at EQ outlet to 65 mg/l at final outlet ie about **97%** removal efficiency but CPCB report at para 2.1.3.15 says that overall removal efficiency for COD removal is **83.6 %.** NH3-N is reportedly reduced from 150 mg/l at outlet of EQ tank to < 1 at final outlet ie removal efficiency of > 99 %. CPCB report says at "overall performance of CETP with regard to removal efficiency of NO_3 -N and sulphide parameters was found to be **9.3%** and **71.6%** respectively (para 2.1.3.15) requires improvement to achieve the prescribed limits whereas table 15 at page 4407 shows NO3-N has reduced from 14.4 mg/l at tube settler outlet to 12.69 mg/l at final

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outlet ie **12%** and sulphide has reduced from 6.8 mg/l at EQ outlet to 4.0 mg/l at final out let ie 41%. Thus it appears that here also some human error has crept in the compilation or reporting of results or some other reason that CPCB may look in to. No direction under Sec 18(1)(b) of Water Act 1974 to PPCB or Sec 5 of EP Act 1986 has been reported for 500 kld CETP.

27. That in view of aforesaid submissions it is humbly requested that Hon'ble Tribunal may kindly direct :

(i) Secretary Science, Technology and Environment , Govt of Punjab to submit report of the Group constituted as per decision taken in meeting chaired by Secretary, Ministry of Jal Shakti , Govt of India in Oct 2024.

(ii) Any institute of repute to conduct thorough performance evaluation and monitoring of all STPs and CETPs at Ludhiana and suggest improvements, if any to enhance their treatment efficiency in time bound manner.

(iii) Ludiana Municipal corporation and PPCB to ensure time bound stoppage of any untreated /partially treated discharge of waste through drain or directly in to Buddha Nala and employ bio remediation of all such drains during interim period.

(iv) CPCB and PPCB to revisit effluent discharge standards for STPs and CETPs, keeping in view water quality of Buddha Nala so as to make it fit for irrigation purpose or best designated use of river Satluj that should be implemented by STPs/ CETPs with in reasonable time thereafter.

(v) PPCB to notify CETP inlet standards in compliance of MoEFCC notification dated 1.1.2016 and CPCB directions dated 12.8.2024 under Sec 18(1)(b) of Water Act 1974.

(vi) And pass any further orders as considered proper in view of the facts and circumstances of the case.

Respondent No 7
For Punjab Dyers Association Tajpur Road, Ludhiana

DATED: 13.5.2025

Filed through

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PB AT NEW DELHI

OA NO. 225 OF 2022

IN THE MATTER OF:

NITIN DHIMAN ...APPLICANT

VERSUS

STATE OF PUNJAB & OTHRS ...RESPONDENT

AFFIDAVIT

I, Vivek Kumar Jindal, a Director of Punjab Dyers Association, Tajpur Road, Ludhiana at present at New Delhi, do hereby solemnly affirm and declare as under: -

1. That I am presently a director of Punjab Dyers Association, a Company registered under company Act and duly authorized by the Company to file this affidavit.

2. That I am fully conversant with case as derived from office record and competent to swear to this affidavit.

3. That I have read the accompanying Response/ Reply of Respondent and have understood the contents thereof. The facts stated there in are true and correct to the best of my knowledge and nothing has been concealed there from.

4. That the Annexure are true copy of its original.

NOTARY PUBLIC 3765 Rajinder K. Ahuja Ludhiana (Pb.) Regd. No. 4525 GOVT. OF INDIA

Certified that the affidavit has been read over & explained to the deponent who has fully understand at same at the time making there of.

DEPONENT

VERIFICATION:

Verified at Ludhiana on this 12th day of May 2025, I the above named deponent, do hereby verify that the contents of the above affidavit are true and correct. No part of it is false and nothing material has been concealed there from.

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ATTESTED AS IDENTIFIED
NOTARY PUBLIC Ludhiana (Pb.)

DEPONENT

Punjab Biotechnology Incubator

Department of Science, Technology & Environment,
Govt. of Punjab
Notified State Analytical Agency

FSSAI Empanelled | EIC Approved | APEDA Approved | Notified State Water Lab - GoP | Notified Under EPA - GoI

No.PBTI/ENV/121124/000876

Dated : 10/12/24

TEST REPORT

Sample Registration No. : PBTI/ENV/121124/000876
Sample code given by customer : Code- 225 MLD Inlet

Issued to:
Sub Divisional Engineer,
Punjab Water Supply & Sewerage, Sub Division-1, PWSSB Complex,
Near Post Office, Backside Cold Court, Club Road, Civil Lines,
Ludhiana-141001
Punjab

SAMPLE PARTICULARS

Your Ref. No.	:	Letter No. 600, dt. 12/11/2024
Date of Receipt	:	12/11/2024
Name/Nature of sample	:	Untreated Effluent
Sample code given by customer	:	Code- 225 MLD Inlet
Condition of the sample	:	Intact coded sample under unrefrigerated condition
Brand name	:	NA
Qty/Pkg.	:	4L (2L X2) approx in plastic cans
Batch No.:	:	NA
Date of Manufacture :	:	NA/NM
Sampling Method	:	Sample not drawn by PBTI
Test Start Date	:	12/11/2024
Test Completion Date	:	10/12/2024

Report Not Valid for
Consent Purpose of PPCB
PBTI, Mohali

10/12/2024

Authorized Signatory
Punjab Biotechnology Incubator Lab
Employee Code : Employee Code: 16

Note:
1. The above results pertain only to the sample tested.
2. There is no addition, deviation or exclusion from the method mentioned.
3. The report shall not be used for advertising or any legal purpose without written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
4. This report cannot be re-produced, except when in full, without the written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
5. Perishable samples will be destroyed after testing, others after one month from the date of issue of the report, unless otherwise agreed with the customer or as required by the applicable regulations.

Format No : PBTI/F/7.8/02
Issue No. & Date : 02 & 03.10.23

National Referral Lab for LMO/GMO Detection under Seeds Act | Approved NRL by FSSAI | Referral Lab under FSSA 2006

Knowledge City, Sector-81, SAS Nagar (Mohali) Punjab - 140 306, India
Phone : +91-172-2998601, 2998602, 2998603 Website : www.pbtilabs.com /pbti_dst

4496

Dated :

Sample Registration No. : PBTI/ENV/121124/000876

Sample code given by customer : Code- 225 MLD Inlet

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
1	pH	7.58	-	IS 3025 (Part 11) 2022
2	Total Suspended Solids (TSS)	514	mg/l	IS 3025 (Part 17) 2022
3	Total Dissolved Solids (TDS)	936	mg/l	IS 3025 (Part 16) :2023
4	Biochemical Oxygen Demand (BOD5 at 20oC)	229	mg/l	IS 3025 (Part 44) : 2023
5	Chemical Oxygen Demand (COD) Total	660	mg/l	IS 3025 (Part 58) 2023
6	Faecal coliform	2.4 x 10^5	MPN/100ml	IS 1622: 1981
7	Residual free chlorine	BDL(MDL:0.1)	mg/l	IS3025 (Part-26): 2021
8	Ammonical Nitrogen	27	mg/l	IS 3025 (Part 34): 2023
9	Chromium - Hexavalent (as Cr+6)	BDL(MDL:0.05)	mg/l	IS 3025 (Part 52)
10	Nickel (as Ni)	0.38	mg/l	APHA 3125 B By ICP-MS
11	Zinc (as Zn)	2.27	mg/l	APHA 3125 B By ICP-MS
12	Copper (as Cu)	0.16	mg/l	APHA 3125 B By ICP-MS
13	Lead (as Pb)	0.05	mg/l	APHA 3125 B By ICP-MS
14	Chromium (as Cr)	1.11	mg/l	APHA 3125 B By ICP-MS
15	Iron (as Fe)	53.1	mg/l	APHA 3125 B By ICP-MS
16	Cyanide (as CN)	BDL(MDL:0.05)	mg/l	IS 3025 (Part 27)
17	Color	230	CU	IS 3025 (Part 4) : 2021
18	Total Kjeldahl Nitrogen (TKN)	31	mg/l	IS 3025 (Part 34): 2023 (5a)
19	Arsenic (As)	BDL(MDL 0.01)	mg/l	APHA- 3125 B By ICP-MS
20	Mercury (as Hg)	BDL(MDL 0.001)	mg/l	APHA- 3125 B By ICP-MS
21	Cadmium (as Cd)	BDL(MDL 0.01)	mg/l	APHA- 3125 B By ICP-MS
22	Vanadium	BDL(MDL 0.01)	mg/l	APHA- 3125 B By ICP-MS
23	Selenium (as Se)	BDL(MDL 0.01)	mg/l	APHA- 3125 B By ICP-MS
24	Total Phosphate	12.7	mg/l	APHA 4500-P
25	Sulphide	BDL(MDL:1)	mg/l	IS 3025 (Part 29) : 2022
26	Phenolic compounds (as C6H5OH)	BDL(MDL:0.5)	mg/l	IS 3025 (Part 43) Sec I : 2022
27	Manganese (as Mn)	0.36	mg/l	APHA- 3125 B By ICP-MS
28	Chloride (as Cl)	145	mg/l	IS 3025 (Part 32) 1988
29	Sulphate (as SO4)	33.2	mg/l	IS 3025 (Part 24) Sec I : 2022
30	Nitrate (as NO3)	78.2	mg/l	IS 3025 (Part 34): 2023
31	Total Fixed Dissolved Solids	722	mg/l	IS 3025 (Part 18)

BDL:Below Detection Limit MDL:Method Detection Limit

10/12/2024

Authorized Signatory
Punjab Biotechnology Incubator Lab
Employee Code : Employee Code: 16

Report Not Valid for Consent Purpose of PPCB
PBTI, Mohali

Ludhiana Kesari
Apr 18, 2025

पंजाब केसरी

दौरान मौसम साफ रहेगा।

LUDHIANA KESARI

बुड्ढे नाले में अवैध डिस्चार्ज बंद होने के बाद फेल होने लगा जमालपुर एस.टी.पी.

■ ओवरफ्लो होकर साथ लगते इलाकों में जमा हुआ पानी, नगर निगम व सीवरेज बोर्ड ने पावरकॉम पर फोड़ा ठीकरा

लुधियाना, 17 अप्रैल (हितेश): बुड्ढे नाले में अवैध डिस्चार्ज बंद होने के बाद जमालपुर एस.टी.पी. फेल होने लगा है जिसका सबूत वीरवार को सीवरेज का पानी ओवरफ्लो होकर ट्रीटमेंट प्लांट के साथ लगते इलाकों में जमा होने के रूप में देखने को मिला।

नामियां रोड पर ओवरफ्लो की समस्या का समाधान करने के लिए नगर निगम अधिकारियों ने बुड्ढे नाले में ही छोड़ दिया कैमिकल युक्त पानी

संत सीचेवाल ने पी.पी.सी.बी. पर निकाली भड़ास

जहां तक बुड्ढे नाले में अवैध डिस्चार्ज बंद करने का सवाल है, उनमें सबसे मेन प्वाइंट गौशाला श्मशान घाट के नजदीक का है।

इसके अलावा संत सीचेवाल द्वारा जमालपुर, ताजपुर रोड से हैबोवाल तक स्ट्रॉम सीवरेज या डिस्पोजल के नाम पर बुड्ढे नाले में छोड़े जा रहे पानी को बंद करवाया गया है।

यह पानी अब जमालपुर एस.टी.पी. पर पहुंच रहा है जिसके चलते ट्रीटमैंट प्लांट का डिस्चार्ज 200 एम.एल.डी. तक पहुंच गया है और उसकी कैपेसिटी 225 एम.एल.डी. की है जिसका नतीजा यह हुआ कि एस.टी.पी. का सिस्टम फेल हो गया है और वीरवार को सीवरेज का पानी ओवरफ्लो होकर ट्रीटमैंट प्लांट के साथ लगते इलाकों में जमा होने लगा जिस पर पर्दा डालने के लिए नगर निगम व सीवरेज बोर्ड द्वारा यह कहकर पावरकॉम पर ठीकरा फोड़ने की कोशिश की गई कि सब-स्टेशन में खराबी की वजह से दिक्कत आई थी जिसकी रिपेयर होने के बाद एस.टी.पी. पर पानी का लेवल डाऊन हो गया है।

4498

156 outlets still polluting Buddha Nullah, finds govt survey

DWR conducts mapping, identification of points flowing effluents, waste into Sutlej tributary, submits report to Centre's panel

NITIN JAIN | TRIBUNE NEWS SERVICE
Ludhiana, Updated At : 09:58 AM Apr 01, 2025 IST

Effluents flow without check into the Buddha Nullah in Ludhiana on Monday. Ashwani Dhiman

In what appears to be an official admission, a latest government survey has found at least 156 outlets, which were still polluting the Buddha Nullah, one of the most polluted tributaries of the Sutlej, passing through Ludhiana before it confluences with the Sutlej and enters Rajasthan.

The survey was conducted by the Department of Water Resources (DWR) and its report was submitted before the high-level joint group of experts and senior officials from both Centre and Punjab, formed by the Union Government, for carrying out a time-bound action plan to clean and preserve the Sutlej tributary.

The development assumes significance as the state government had in December 2020 launched an ambitious project to rejuvenate the Buddha Nullah at the cost of Rs 840 crore but even after spending almost the entire corpus and lapse of over four years, the Sutlej tributary still remains polluted.

"The DWR has identified 156 total outlets, including drains, which comprise all small and large outlets within and beyond the MC limits, during the mapping and identification of polluting points across the nullah," DWR Superintending Engineer (SE) Amrinder Singh Pandher apprised the panel.

He submitted that these include outlets for domestic effluents, village ponds, dairies, households, storm water, CETPs and STPs.

Giving bifurcation of these outlets, he said 96 outlets were found on the upstream, three on the downstream and 57 within the city reach.

However, contrary to it, Municipal Corporation (MC) Chief Engineer (CE) Ravinder Garg informed the group that the civic body had identified 42 outlets within the MC limits while submitting that a majority of these outlets were from dairy complexes.

He said with the closure of the gau ghat outlet, the majority of the domestic effluents was diverted to STPs. However, three major outlets and some minor discharge points, with estimated 20-25 MLD flow, were yet to be plugged and to be connected with the STPs.

The civic body CE assured the panel that all points would be plugged by June 30.

He said one of the outlets was storm water under the GLADA jurisdiction and it has to be plugged and diverted to the STP in Jamalpur by the GLADA.

To a specific query from committee members, officers from the DWR said discharge from the majority of the outlets was not only meagre but also intermittent and thus, difficult to measure.

On this, members from the National Institute of Hydrology (NIH), Roorke, and National Mission for Clean Ganga (NMCG) suggested that the discharge from such outlets could be measured through crude methods such as bucket estimations. For bigger discharges emanating from village outlets, drains and STP outlets, experts advised to adopt a V-notch method, besides making population-based estimations according to the per capita basis to estimate the discharges.

Observing that the outlets reported by the DWR and MC were still not in consonance, the committee chairperson, Manish Kumar, Director, Environment and Climate Change, emphasised that these should not vary and directed that the data presented by both agencies should be reconciled.

"A number of outlets of the Buddha Nullah upstream, downstream and within the MC limits shall be freezed and the DWR would convey the same to the committee," he instructed.

The panel also asked the departments concerned such as the MC, PWSSB, DWR and DRDP to jointly carry out flow measurements of the wastewater being discharged through various outlets into the nullah.

The DWR was asked to coordinate and submit the action-taken report to the committee within 15 days.

4500

Group to diagnose, evaluate, suggest action

In November last, the Union Government had come out with an action plan to clean and preserve the nullah.

The time-bound joint action plan, which had been launched in collaboration with the state government, entails diagnosis of issues concerning persisting pollution in the Buddha Nullah, evaluation of the existing pollution abatement infrastructure to ensure optimisation and corrective actions in order of priority.

The Department of Water Resources, River Development and Ganga Rejuvenation under the Union Ministry of Jal Shakti had constituted a high-level joint group of experts and senior officials from the Centre and Punjab to carry out the action plan.

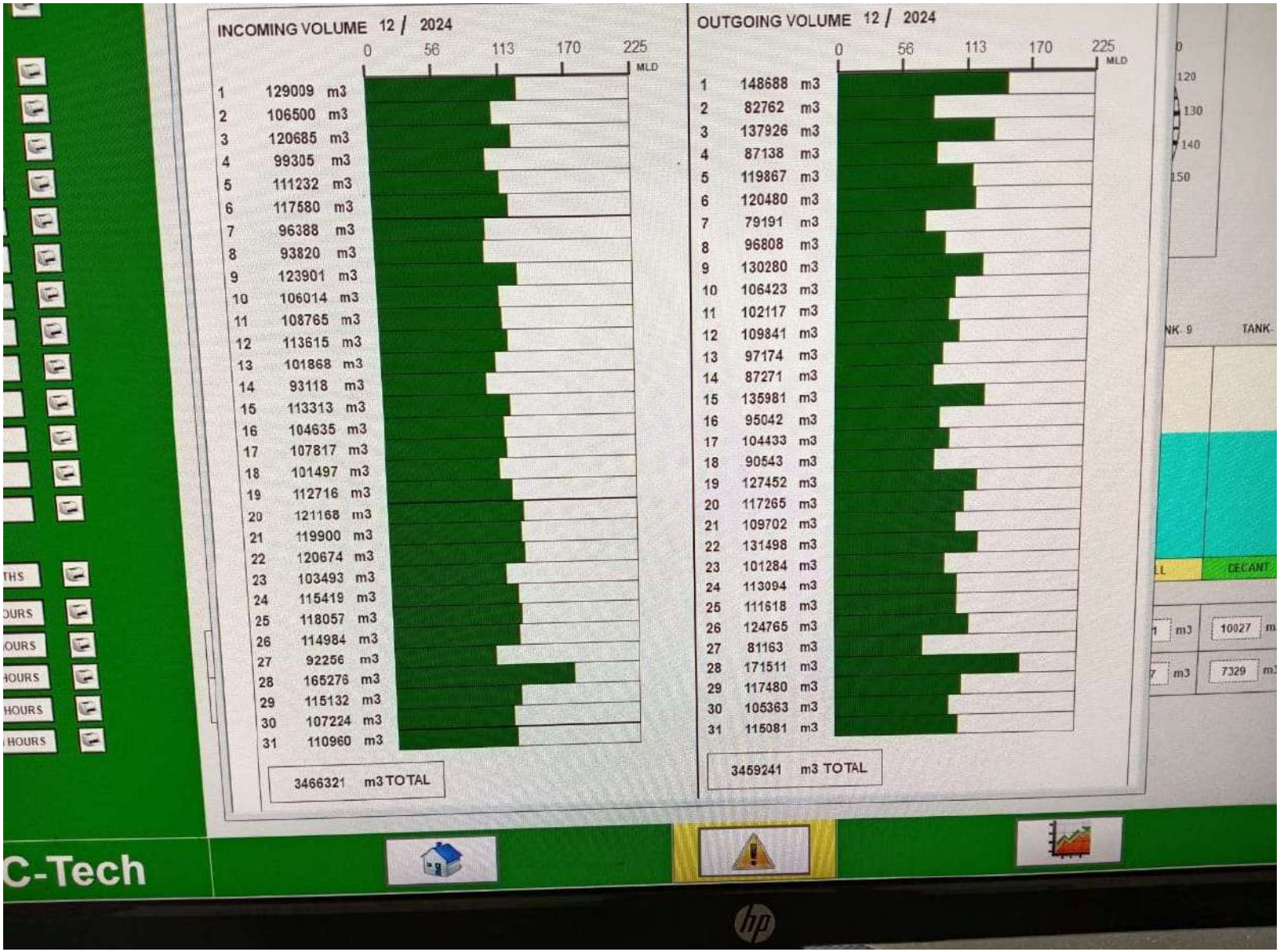
The Centre had nominated the Executive Director (Technical) of the National Mission for Clean Ganga (NMCG), Member Secretary of the Central Pollution Control Board (CPCB), Scientist F (Senior Technical Director) of the National River Conservation Directorate (NRCD) and Scientist F or Director of the National Institute of Hydrology (NIH), Roorkee, as its nominees/ representatives for the joint panel.

The Punjab Government had named Director Environment and Climate Change Manish Kumar as Chairman and nominated PPCB member secretary GS Majithia as member secretary, Punjab Water Supply and Sewerage Board (PWSSB) Chief Engineer Mukesh Garg, Ludhiana Municipal Corporation Additional Commissioner Paramjit Khaira, Ludhiana District Industries Centre General Manager, Chief Engineers of Water Resources, Soil and Water Conservation, Water Supply and Sanitation departments, PEDA Director, and Ludhiana ADC (Development), as members of the group. Besides, representatives of the Industries Association and experts also would be nominated in the due course of time.

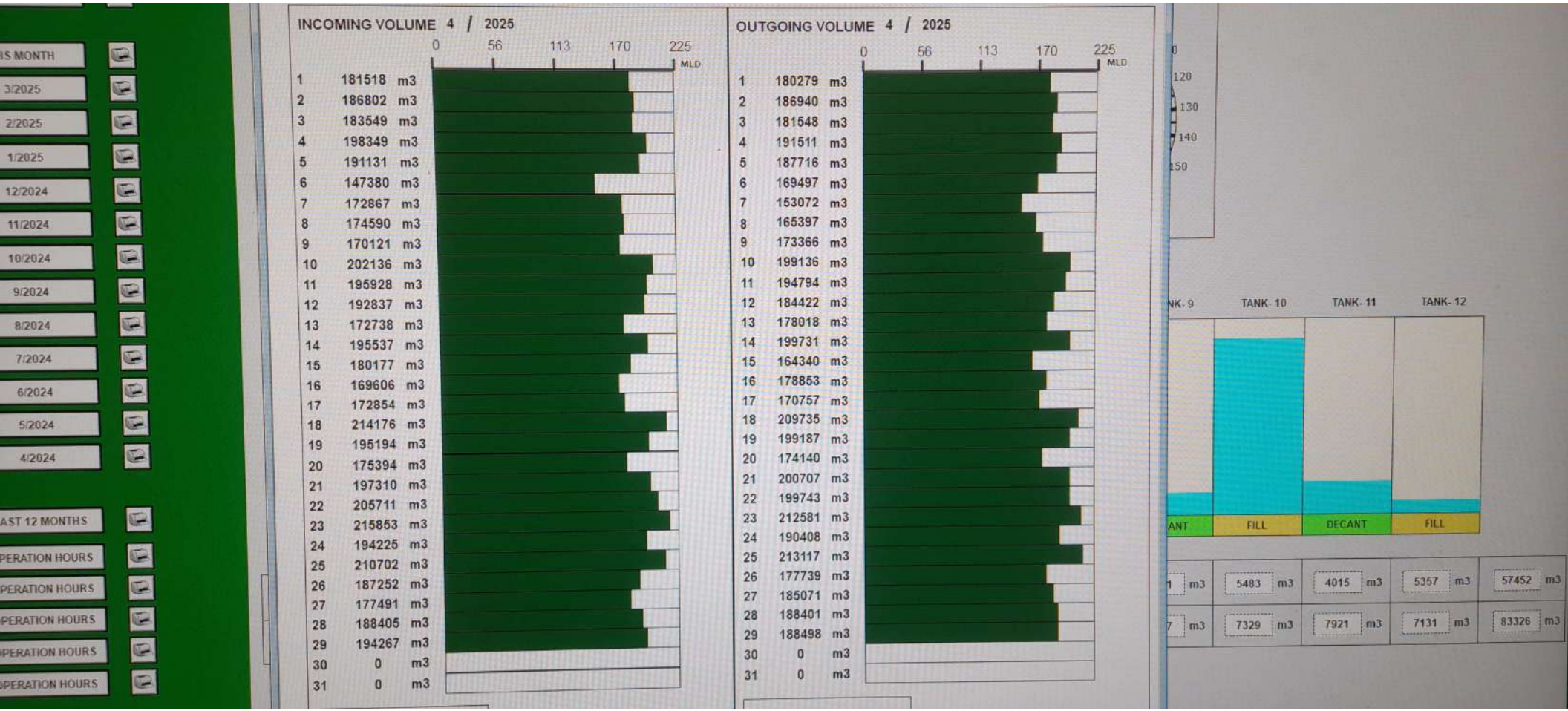
Acting swiftly, the state government had notified the 13-member group and had given a go-ahead to undertake the action as outlined in the Centre's plan.

The group had been given liberty to co-opt any other member, if it deems fit during the course of its deliberations.

4501


INCOMING VOLUME 12 / 2024
0 56 113 170 225 MLD
1 129009 m3
2 106500 m3
3 120685 m3
4 99305 m3
5 111232 m3
6 117580 m3
7 96388 m3
8 93820 m3
9 123901 m3
10 106014 m3
11 108765 m3
12 113615 m3
13 101868 m3
14 93118 m3
15 113313 m3
16 104635 m3
17 107817 m3
18 101497 m3
19 112716 m3
20 121168 m3
21 119900 m3
22 120674 m3
23 103493 m3
24 115419 m3
25 118057 m3
26 114984 m3
27 92256 m3
28 165276 m3
29 115132 m3
30 107224 m3
31 110960 m3
3466321 m3 TOTAL
OUTGOING VOLUME 12 / 2024
0 56 113 170 225 MLD
1 148688 m3
2 82762 m3
3 137926 m3
4 87138 m3
5 119867 m3
6 120480 m3
7 79191 m3
8 96808 m3
9 130280 m3
10 106423 m3
11 102117 m3
12 109841 m3
13 97174 m3
14 87271 m3
15 135981 m3
16 95042 m3
17 104433 m3
18 90543 m3
19 127452 m3
20 117265 m3
21 109702 m3
22 131498 m3
23 101284 m3
24 113094 m3
25 111618 m3
26 124765 m3
27 81163 m3
28 171511 m3
29 117480 m3
30 105363 m3
31 115081 m3
3459241 m3 TOTAL
0
120
130
140
150
TANK-
DECANT
10027
7329
C-Tech

4502


IS MONTH
3/2025
2/2025
1/2025
12/2024
11/2024
10/2024
9/2024
8/2024
7/2024
6/2024
5/2024
4/2024
AST 12 MONTHS
PERATION HOURS
PERATION HOURS
PERATION HOURS
PERATION HOURS
PERATION HOURS
INCOMING VOLUME 4 / 2025
0 56 113 170 225 MLD
1 181518 m3
2 186802 m3
3 183549 m3
4 198349 m3
5 191131 m3
6 147380 m3
7 172867 m3
8 174590 m3
9 170121 m3
10 202136 m3
11 195928 m3
12 192837 m3
13 172738 m3
14 195537 m3
15 180177 m3
16 169606 m3
17 172854 m3
18 214176 m3
19 195194 m3
20 175394 m3
21 197310 m3
22 205711 m3
23 215853 m3
24 194225 m3
25 210702 m3
26 187252 m3
27 177491 m3
28 188405 m3
29 194267 m3
30 0 m3
31 0 m3
OUTGOING VOLUME 4 / 2025
0 56 113 170 225 MLD
1 180279 m3
2 186940 m3
3 181548 m3
4 191511 m3
5 187716 m3
6 169497 m3
7 153072 m3
8 165397 m3
9 173366 m3
10 199136 m3
11 194794 m3
12 184422 m3
13 178018 m3
14 199731 m3
15 164340 m3
16 178853 m3
17 170757 m3
18 209735 m3
19 199187 m3
20 174140 m3
21 200707 m3
22 199743 m3
23 212581 m3
24 190408 m3
25 213117 m3
26 177739 m3
27 185071 m3
28 188401 m3
29 188498 m3
30 0 m3
31 0 m3
0
120
130
140
150
NK- 9
TANK- 10
TANK- 11
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ANT
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m3
5483 m3
4015 m3
5357 m3
57452 m3
m3
7329 m3
7921 m3
7131 m3
83326 m3

Cow Dung Put into Budha Dariya at Bhukhri Kalan & Near Amrit Kanda Pulli Tajpur Road

4504

संत बलबीर सिंह सीचेवाल ने अस्थाई पंपिंग स्टेशन की पहली मोटर चालू की

225 एमएलडी प्लांट में जाएगा गंदा पानी : सीचेवाल

भास्कर न्यूज | लुधियाना

राज्यसभा मेंबर संत बलबीर सिंह सीचेवाल ने अस्थाई पंपिंग स्टेशन का बटन दबाकर पहली मोटर चालू की। उन्होंने कहा कि पवित्र बुड्ढा दरिया में गंदे पानी की रोकथाम की शुरूआत कर दी गई है। 225 एमएलडी प्लांट में शहर का गंदा पानी भेजा जाएगा।

सीचेवाल ने लुधियाना शहर से बुड्ढा दरिया में 225 एमएलडी प्लांट के जरिए सीवरेज के ट्रीटेड पानी की सीधी डिलीवरी शुरू की है। ये अस्थाई पंप स्टेशन गुरुद्वारा गऊघाट के पास बनाया गया है, जिसमें तीन मोटरों में से एक वीरवार को स्टार्ट की गई। अब इस गंदे पानी को ट्रीटमेंट प्लांट तक पहुंचाया जा रहा है। यहां तीन मोटरें चलने से करीब 60 एमएलडी पानी 225 एमएलडी ट्रीटमेंट प्लांट में जाने लगेगा, जिससे गंदे पानी का एक बड़ा हिस्सा बुड्ढा दरिया में गिरना बंद हो गया है। इस काम को एक बड़ी उपलब्धि के तौर पर देखा जा रहा है। पंप स्टेशन शुरू करने से पहले ऐतिहासिक गुरुद्वारा गऊघाट में श्री गुरु ग्रंथ साहिब की पूजा-अर्चना की गई। संत बलबीर सिंह सीचेवाल ने प्रार्थना की और कहा कि पवित्र बुड्ढा दरिया जिसे श्री गुरु नानक देव जी के चरणों का स्पर्श मिला है। इस नदी को स्वच्छ रखना हम सभी का साझा कर्तव्य है। उन्होंने कहा कि शेष दो मोटरें भी जल्द चालू कर दी जाएंगी। वहीं, राज्यसभा मेंबर सीचेवाल ने ताजपुर समेत अन्य क्षेत्रों में स्थित डेयरियों का गोबर बुड्ढा दरिया में गिरने पर नाराजगी जताई है और इसे लेकर अफसरों को निर्देश जारी किए हैं।

दूसरे चरण की कार सेवा 22 दिसंबर से शुरू की गई थी: बुड्ढा दरिया कार सेवा के दूसरे चरण की कार सेवा 22 दिसंबर से शुरू की गई थी। यहां पंप स्टेशन का निर्माण गत 31 दिसंबर को शुरू किया गया था। इस पंप स्टेशन को रिकॉर्ड दिनों में बनाने के लिए सेवकों ने दिन-रात काम किया। इस पंप स्टेशन की एक मोटर महज 16 दिन में चालू कर दी गयी। लोकल बॉडीज मिनिस्टर डॉ. रवजोत सिंह संत, पंजाब स्पीकर कुलतार सिंह संधवां समेत अन्य ने इसे लेकर बलबीर सिंह सीचेवाल से मुलाकात की थी।

New Pumping Station to carrying waste water from gain near Gaughat to STP 225 MLD

4505

Open Drains into Budha Dariya

4506

Collect tankers from Bhamian village dairies cow dung for treatment & disposal

Clean water of Budha Dariya at Bhukhri kalan village

Annexure R7/3

4508

PUNJAB DYERS ASSOCIATION

(A Company incorporated under Section 25 of the Companies Act, 1956)
CIN : U93000PB2010NPL033734 | GST No: 03AAFCP4960L1Z8
A SPV FOR 50 MLD COMMON EFFLUENT TREATMENT PLANT (CETP)
REGD. OFFICE : 50 MLD CETP PLANT, ADJOINING CENTRAL JAIL, TAJPUR ROAD, LUDHIANA - 141007 (PUNJAB)
E-mail : punjabdyers@gmail.com | Mobile : 93578-50500, 98150-03584

REF: - PDA/2025-2026/04

Dated: May 8, 2025

To

The Chairman

Punjab Pollution Control Board

Patiala

Sub ; Hearing of Matters pertaining to payment of EC, Compliance of CPCB directions and Refusal of Consent.

Ref ; 1. . Show cause notice no PPCB/SEE/ZO-2/LDH/2025/2815 Dated 22-04-2025

2. Show cause notice no PPCB/SEE/ZO-2/LDH/2025/2817 Dated 22-04-2025

3. Show cause notice no PPCB/SEE/ZO-2/LDH/2025/2819 Dated 22-04-2025

Sir

Further to our mail / letter dated 06-05-2025 on above cited subject, we hereby reiterate that that results of sample analysis by CPCB for sample collected by them during inspection on 24.12.2024 are glaringly unreliable. The sample result for part sample of same sample duly sent to third party lab at Thapar University campus are found complying with prescribed standards for CETP effluent as prescribed by MOEFCC under EP Act. A comparative chart of results for testing by CPCB and above said independent laboratory is enclosed for ready reference as annexure 1. Also enclosed at annexure 2 is observation of scientific reasons for which results conveyed by CPCB are unlikely in real situation. The

PUNJAB DYERS ASSOCIATION

(A Company incorporated under Section 25 of the Companies Act, 1956)

CIN : U93000PB2010NPL033734 | GST No: 03AAFCP4960L1Z8

A SPV FOR 50 MLD COMMON EFFLUENT TREATMENT PLANT (CETP)

REGD. OFFICE : 50 MLD CETP PLANT, ADJOINING CENTRAL JAIL, TAJPUR ROAD, LUDHIANA - 141007 (PUNJAB)

E-mail : punjabdyers@gmail.com | Mobile : 93578-50500, 98150-03584

results of CPCB and independent laboratory are also enclosed as Annexure 3 for ready reference. The Annexures are self-explanatory to cast serious doubt on reliability of CPCB results. The reason/ explanation for CPCB has yet not been communicated to us by CPCB.

It will also not be out of place to mention here that TDS concentration at CETP inlet and out let does increase occasionally depending upon inlet water quality. As submitted earlier also, the high TDS is contributed mostly by cotton textile dyeing industries. There are around 25/ 30 such industries discharging their effluent in to 50 MLD CETP. As submitted earlier, it is for PPCB to prescribe CETP inlet parameters as per MOEFCC notification dated 1.1.2016 and so directed by CPCB also vide directions dated. under sec 18 of Water Act 1974 to PPCB, apart from regulatory power of PPCB to prescribed industry effluent standards under sec 25/26 of Water Act, 1974. We are confident that once PPCB takes effective steps on these, the CETP performance will improve substantially to comply notified CETP outlet standards, more so as we have already installed O/G trap.

It is further pertinent to add here that some of our member industry are experimenting to use special technique invented by BARC to reduce TDS at industry level. As per preliminary results the said technique is found more effective on cotton textile dying effluent than on polyester dyeing effluents. We request PPCB to kindly take note of it and conduct necessary research to issue suitable directions/ consent conditions to cotton textile member units on the basis of proposed/ suggested research.

Further, we seek your permission to revamp our existing terminal manhole on CETP effluent carrier pipe line to facilitate collection of samples from it. Due locking system would also be provided to make it tamper proof to the extent feasible. We also propose to discharge effluent after said terminal manhole in to Buddha Nala at close a location as possible to the discharge point of 225 MLD STP as expected through EC.

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PUNJAB DYERS ASSOCIATION

(A Company incorporated under Section 25 of the Companies Act, 1956)
CIN : U93000PB2010NPL033734 | GST No: 03AAFCP4960L1Z8
A SPV FOR 50 MLD COMMON EFFLUENT TREATMENT PLANT (CETP)
REGD. OFFICE : 50 MLD CETP PLANT, ADJOINING CENTRAL JAIL, TAJPUR ROAD, LUDHIANA - 141007 (PUNJAB)
E-mail : punjabdyers@gmail.com | Mobile : 93578-50500, 98150-03584

We therefore request you to kindly help us forwarding our objection to CPCB results to CPCB for kind necessary action / clarification / review. We also urge you to kindly take further necessary action to prescribe CETP inlet standards and to also prescribe suitable condition to individual cotton textile dyeing units as requested above.

It is thus submitted that we have taken every possible step to efficiently run CETP to meet requirements of law and continue to comply the same apart from our readiness to take all necessary steps that PPCB may like to advise/ direct after comprehensive review of ground situation as already brought to kind knowledge.

Thanking you

Yours sincerely

For PUNJAB DYERS ASSOCIATION

DIRECTORS

Encl : As above Annexure 1

Annexure 2. Annexure 3.

Copy to

Member secretary CPCB , Parivesh Bhawan

East Arjun Nagar,

Delhi - 110032.

Sophisticated Analytical Instruments Laboratories Society

(Registered as Society with Registrar of Firms & Societies, Punjab, Chandigarh)

Thapar Technology Campus, Bhadson Road, Patiala-147 004 (India)

TC-14776

TEST REPORT

ULR No.	NA	Date:	03.01.2025	Serial No.	201
Service No.	E(S)/24-25/181(01)	Customer's Ref.	Sample submitted by customer on dtd. 24.12.2024 after 5 pm		
Customer's name and address:					
Punjab Dyers Association **50 MLD CETP, Ludhiana (Pb)**					
Sample Description			Effluent		
Condition of the sample received			Sealed Sample received a bearing slip with two signatures on the seal.		
Customer's sample identification No. (if any)			**01-** Inlet, **02-** Equalization, **03-** S.B.R.1, **04-** S.B.R. Outlet, **05-** C.F.L. Outlet, **06-** C.C.T. Outlet		
Quantity/number of samples			3.5 Liter / 1		
Sampling Procedure (if any)			--		
Mode of Sampling/ Environmental Condition During Transport			Not Applicable		
Test parameters			01- pH,TDS,TSS,COD,BOD,SO_4,P,AN,O&G,Cl,F,Cd,Cr,Cu,Mn,Ni, Zn, TKN 02- pH, TSS, TDS, COD, BOD, Cl, F 04- pH, TSS, TDS, COD, BOD, Cl, F 05- pH, TSS, TDS, COD, BOD, O&G, Total Nitrogen, P 06- pH,TDS,TSS,COD,BOD,SO_4,P,AN,O&G,Cl,F,Cd,Cr,Cu,Mn,Ni, Zn, TKN		
Standard/Specification/ Method followed			As mentioned below		
Deviations (if any)			--		
Documents constituting this report (if any)			--		

Date of Receipt of Job	Date of Completion of Job	Total Number of Pages
26.12.2024	03.01.2025	1

TEST RESULTS

S. No.	Parameters	Test Method	Unit	Results	
				01	02
1	pH at 25°C	IS 3025 (Part 11):2022 - Electrometric Method	--	7.6	7.6
2	Total Suspended Solid at 105°C	IS 3025 (Part 17):2022 - Gravimetric Method	mg/l	112	192
3	Total Dissolved Solid at 180°C	IS 3025 (Part 16):2023 - Gravimetric Method	mg/l	2680	2992
4	Chemical Oxygen Demand (COD)	IS 3025 (Part 58):2023- Open Reflux	mg/l	840	928
5	Biochemical Oxygen Demand for 3 days at 27°C	IS 3025 (Part 44):2023 - Wrinkler Method	mg/l	253	278
6	Oil & Grease @ 80°C	IS 3025 (Part 39):2021- Liquid Partition Gravimetric Method	mg/l	48.7	--
7	Chromium as Cr	IS 3025 (Part 52)2003 - AAS Method	mg/l	<0.30	--
8	Ammonical Nitrogen as N	IS 3025 (Part 34):2023 Sec 1 - Titrimetric Method	mg/l	0.68	--
9	Sulphate as SO_4	IS 3025 (Part 24) :2022 Sec 1 -Turbidity Method	mg/l	168	--
10	Phosphorous as P	IS 3025 (Part 31):2022- Sec 1- Vanadomolybdo Phosphoric Acid	mg/l	2.58	10.7
11	Manganese as Mn	APHA 24th Edition 3111B- 2023	mg/l	0.10	--
12	Chloride as Cl	IS 3025 (Part 32) - 1988 Argentometric Method	mg/l	927	1093
13	Fluoride as F	IS 3025 (Part 60) – 2008 Ion Selective Electrode Method	mg/l	0.33	0.33
14	Copper as Cu	IS 3025 (Part 42) -2023 AAS Method	mg/l	<0.05	--
15	Nickel as Ni	IS 3025 (Part 54) 2003- AAS Method	mg/l	<0.20	--
16	Cadmium as Cd	APHA 24th Edn.3111 B 2023	mg/l	<0.10	--
17	Zinc as Zn	IS 3025 (Part 49) - AAS Method 1994	mg/l	0.30	--
18	TKN (Total Kjeldahl Nitrogen)	IS 3025 (Part 34):2023 -Sec 1 - Titrimetric Method	mg/l	1.02	--

Mr. Rushil Kapur
Technical Manager
(Authorized Signatory)

Note:
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Thapar Technology Campus, Bhadson Road, Patiala-147 004 (India)

TC-14776

S. No.	Parameters	Test Method	Unit	Results	
				04	05
1	pH at 25°C	IS 3025 (Part 11):2022 - Electrometric Method	--	7.9	8.0
2	Total Suspended Solid at 105°C	IS 3025 (Part 17):2022 - Gravimetric Method	mg/l	26	90
3	Total Dissolved Solid at 180°C	IS 3025 (Part 16):2023 - Gravimetric Method	mg/l	2952	2900
4	Chemical Oxygen Demand (COD)	IS 3025 (Part 58):2023- Open Reflux	mg/l	104	432
5	Biochemical Oxygen Demand for 3 days at 27°C	IS 3025 (Part 44):2023 - Wrinkler Method	mg/l	22	84
6	Oil & Grease @ 80°C	IS 3025 (Part 39):2021- Liquid Partition Gravimetric Method	mg/l	--	<5.0
7	Phosphorous as P	IS 3025 (Part 31):2022- Sec 1- Vanadomolybdo Phosphoric Acid	mg/l	8.50	0.62
8	Chloride as Cl	IS 3025 (Part 32) - 1988 Argentometric Method	mg/l	1193	--
9	Fluoride as F	IS 3025 (Part 60) – 2008 Ion Selective Electrode Method	mg/l	0.40	--
10	TKN (Total Kjeldahl Nitrogen)	IS 3025 (Part 34):2023 -Sec 1 - Titrimetric Method	mg/l	--	2.03

S. No.	Parameters	Test Method	Unit	Results
				06
1	pH at 25°C	IS 3025 (Part 11):2022 - Electrometric Method	--	8.1
2	Total Suspended Solid at 105°C	IS 3025 (Part 17):2022 - Gravimetric Method	mg/l	32
3	Total Dissolved Solid at 180°C	IS 3025 (Part 16):2023 - Gravimetric Method	mg/l	1488
4	Chemical Oxygen Demand (COD)	IS 3025 (Part 58):2023- Open Reflux	mg/l	68
5	Biochemical Oxygen Demand for 3 days at 27°C	IS 3025 (Part 44):2023 - Wrinkler Method	mg/l	16
6	Oil & Grease @ 80°C	IS 3025 (Part 39):2021- Liquid Partition Gravimetric Method	mg/l	<5.0
7	Chromium as Cr	IS 3025 (Part 52)2003 - AAS Method	mg/l	<0.30
8	Ammonical Nitrogen as N	IS 3025 (Part 34):2023 Sec 1 - Titrimetric Method	mg/l	<0.05
9	Sulphate as SO4	IS 3025 (Part 24) :2022 Sec 1 -Turbidity Method	mg/l	133
10	Phosphorous as P	IS 3025 (Part 31):2022- Sec 1- Vanadomolybdo Phosphoric Acid	mg/l	<0.20
11	Manganese as Mn	APHA 24th. Edn.3111B	mg/l	<0.10
12	Chloride as Cl	IS 3025 (Part 32) - 1988 Argentometric Method	mg/l	489
13	Fluoride as F	IS 3025 (Part 60) – 2008 Ion Selective Electrode Method	mg/l	0.38
14	Copper as Cu	IS 3025 (Part 42) -2023 AAS Method	mg/l	<0.05
15	Nickel as Ni	IS 3025 (Part 54) 2003- AAS Method	mg/l	<0.20
16	Cadmium as Cd	APHA 24th. Edn.3111 B	mg/l	<0.10
17	Zinc as Zn	IS 3025 (Part 49) - AAS Method 1994	mg/l	0.34
18	TKN (Total Kjeldahl Nitrogen)	IS 3025 (Part 34):2023 -Sec 1 - Titrimetric Method	mg/l	0.75

..... End of the report.....

Mr. Rushil Kapur
Technical Manager
(Authorized Signatory)

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Thapar Technology Campus, Bhadson Road, Patiala-147 004 (India)

TEST REPORT

ULR No.	NA	Date:	04.01.2025
Service No.	NN(D)/24-25/694 (01-06)	Customer's Ref.	Sample submitted by customer on dtd. 24.12.2024 after 5pm

Customer's name and address:

Punjab Dyers Association
50 MLD CETP, Ludhiana (Pb).
Kind Attn: Mr. Boby Jindal

Sample Description	Effluent
Condition of the sample received	Sealed sample received a bearing slip with two signatures on the seal
Customer's sample identification No. (if any)	**01-** Inlet **02-** Equalization **03-** S.B.R.1 **04-** S.B.R. Outlet **05-** C.F.L. Outlet **06-** C.C.T. Outlet
Quantity/number of samples	13 Liter / 6
Sampling Procedure (if any)/ Standard/Specification	--
Mode of Sampling / Environmental Conditions During Transportation	NA
Test parameters	**01-** Sulphide, Nitrate, Phenol, Pb **02-** Colour, FDS, NO_2, NO_3 **03-** MLSS, MLVSS **04-** Colour, FDS, NO_2, NO_3 **05-** Colour **06-** Sulphide, Nitrate, Phenol, Pb
Method followed	As mentioned below
Deviations (if any)	--

Date of Receipt of Job	Date of Completion of Job	Total Number of Pages
26.12.2024	04.01.2025	2

Mr. Rushil Kapur
Technical Manager
(Authorized Signatory)

Note:
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Thapar Technology Campus, Bhadson Road, Patiala-147 004 (India)

TEST RESULTS

S. No.	Parameters	Test Method	Unit	Results	
				01	02
1	Colour	IS: 3025 (Part 4)-2021 Spectrophotometric Single Wavelength method	Pt.Co. Unit	--	910
2	Phenolic compound as C_6H_5OH	APHA 24th. Edn.5530 D	mg/l	<0.10	--
3	Sulphide as S^2	APHA 24th. Edn.4500 S^{-2} F	mg/l	1.3	--
4	Total Fixed Dissolved Solid @ 550°C	IS:3025(Part-16)-1984	mg/l	--	2784
5	Nitrate as NO_3	APHA 24th. Edn.4500 NO_3 B	mg/l	5.61	35.6
6	Nitrite as NO_2	APHA 24th. Edn.4500 NO_2 B	mg/l	--	0.20
7	Lead as Pb	APHA 24th. Edn.3120 B	mg/l	<0.05	--

S. No.	Parameters	Test Method	Unit	Results
				03
1	MLSS @105°C	APHA 24th Edn.2540-D	mg/l	5068
2	MLVSS @550°C	APHA 24th Edn.2540-E	mg/l	2440

S. No.	Parameters	Test Method	Unit	Results		
				04	05	06
1	Colour	IS: 3025 (Part 4)-2021 Spectrophotometric Single Wavelength method	Pt.Co. Unit	184	474	--
2	Phenolic compound as C_6H_5OH	APHA 24th. Edn.5530 D	mg/l	--	--	<0.10
3	Sulphide as S^2	APHA 24th. Edn.4500 S^{-2} F	mg/l	--	--	<1.0
4	Total Fixed Dissolved Solid @ 550°C	IS:3025(Part-16)-1984	mg/l	2916	--	--
5	Nitrate as NO_3	APHA 24th. Edn.4500 NO_3 B	mg/l	2.77	--	16.7
6	Nitrite as NO_2	APHA 24th. Edn.4500 NO_2 B	mg/l	0.64	--	--
7	Lead as Pb	APHA 24th. Edn.3120 B	mg/l	--	--	<0.05

....End of the report....

Mr. Rushil Kapur
Technical Manager
(Authorized Signatory)

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		THAPAR						CPCB				
SR. No.	Parameters	UNIT	Inlet	Equalization Tank	SBR Outlet	CFL Outlet	CCT Outlet	Inlet of cetp	Outlet of equalization tank	Inlet of sbr	Outlet of sbr	Final treated effluent after chlorination
1	PH		7.6	7.6	7.9	8	8.1	7.5	7.3	7.7	7.3	8
2	TSS	mg/ltr	112	192	26	90	32	192	162	92	32	47
3	TDS	mg/ltr	2680	2992	2952	2900	1488	2680	2416	2600	2744	2852
4	COD	mg/ltr	840	928	104	432	88	570	848	448	98	125
5	BOD	mg/ltr	253	278	22	84	16	194	410	232	24	54
6	OIL & GREASE	mg/ltr	48.7			<5.0	<5.0	BDL				BDL
7	CHROMIUM AS Cr	mg/ltr	<0.30				<0.30					
	AMONICAL NITROGEN AS N	mg/ltr	0.68				<0.05					
9	SULPHATE AS SO4	mg/ltr	168				133	280	291	224	411	410
10	PHOSPHOROUS AS P	mg/ltr	2.58	10.7	8.5	0.62	<0.20	0.66	0.69	0.6	0.12	0.43
11	MANGANSE AS Mn	mg/ltr	0.1				<0.10					
12	CHLORIDE AS CL	mg/ltr	927	1093	1193		489	1093	1615	1568	1473	1283
13	FLUORIDE AS F	mg/ltr	0.33	0.35	0.4		0.38	BDL	0.6	0.9	0.9	0.8
14	COPPER AS Cu	mg/ltr	<0.05				<0.05					
15	NICKEL AS NI	mg/ltr	<0.20				<0.20					
16	CADMIUM AS CD	mg/ltr	<0.10				<0.10					
17	ZINC AS ZN	mg/ltr	0.3				0.34					
18	TKN	mg/ltr	1.02			2.03	0.75	4				BDL
19	colour	mg/ltr		910	184	474						
20	phenolic compound	mg/ltr	<0.10				<0.10	1.6				3.62
21	sulphide as s2	mg/ltr	1.3				<1.0	3.2				2.4
22	tfds	mg/ltr		2784	2918			2279	2056	2384	2596	2364
23	nitrate as no3	mg/ltr	5.61	35.6	2.77		16.7					
24	nitrite as no2	mg/ltr		0.2	0.64							
25	lead as pb	mg/ltr	<0.05				<0.05					
26	NO3-N	mg/ltr						12.2	8.4	8.4	5.06	4.8

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Comments of CPCB report - CETP Ludhiana 50mld				
S. No.	**Parameter of dispute**	**O/L of SBR mg/ltr**	**O/L of CCT mg/ltr**	**Remarks**
1	pH	7.3	8.0	pH cannot increase after CCT, as in CCT only Gas Chlorination process is being conducted due to which pH will remains the same / slightly lower.
2	COD	98.0	125.0	As during retention at CCT, only Gas Chlorination are being done so there no chance on increase in COD value, rather it will remains the same or decrease. As Chlorine will oxidized Bio degradable COD to give lesser value.
3	BOD	24.0	54.0	As during retention at CCT, only Gas Chlorination are being done so there no chance on increase in BOD value, rather it will remains the same or decrease.As Chlorine will oxidized Bio degradable COD to give lesser value.
4	PO4-P	0.1	0.4	Again this increase in value is not acceptable. No addtion of any sort of Chemical between SBR & CCT except Chlorine Gas. So PO4-P value cannot increase.
5	SO4	224.0 at SBR inlet	410.0	During SBR Process & CCT process no Chemicals additon is being done. SO Water parameter as SO4 cannot increase to double.
6	Phenolic Compound	1.60 at Inlet of CETP	3.6	at CCT outlet the value of this compound cannot increase in comparison to Inlet. During process we are using Lime, Ferrous, Poly & HCl, no addition of any other type of Chemicals. So increase in Phenolic compound is not possible. Rather by virtue of Biological activities at SBR there are chances of reduction of Phenolic compound but in no way it will increase.

2.1.1 50 MLD CETP, Tajpur Road:

1. The CETP is designed to treat 50 MLD effluent generated from textile dyeing & printing units located at Tajpur-Rahon Road, Ludhiana. The CETP is operating at average flow rate of 40 MLD, thus utilizing 80% of its capacity. It was observed that the CETP has installed flow Ultrasonic type flow meters at Parshall flume Channel (inlet channel) and at the final outlet of CETP (outlet of Chlorine Contact Tank). A record of the same was maintained by the operator.

2. The effluent is received at CETP through a dedicated conveyance system (Pipeline) , which is maintained by the Punjab Dyers Association (SPV for 50 MLD capacity). The PPCB has not prescribed inlet standards for CETP.

3. The 50 MLD CETP is operated based on Physico-chemical treatment followed by Biological Process (Sequential Batch Reactor). The CETP is comprised of following components namely; Main Pumping station (Inlet Chamber →Coarse Screen (Mechanical + Manual)→Sump Well→ Inlet chamber → Fine Screen(Mechanical + Manual) →Aerated Grit Chamber(Mechanical + Manual) → Oil & Grease Removal →Equalization Tank (in 02 Compartment) →Flash Mixer (Lime & $FeSO_4$ dosing, Poly Dosing) →Clari-flocculator (HCL dosing)→ Distribution Chamber for SBR →SBR Basins (12.5 MLD x 4 no's basin) >Chlorine Contact Tank → Treated Effluent Disposal. Sludge dewatering system comprising of Thickener (01)→Belt Filter Press(04no's each of 45 m^3/hr capacity) has been provided by the CETP. The CETP has installed four Sequential Batch Reactor (SBR basins) which operated in a cyclic batch mode controlled by a PLC, with the following time schedule: Filling and Aeration for 120 minutes, Settling for 60 minutes, and Decanting for 60 minutes.

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4. **The consent to operate granted to 50 MLD CETP under the Water Act, 1974 was valid upto 22.08.2023**, whereas the Consent to Operate under the Air Act, 1981 is valid upto 31/03/2026. *The Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016* ***was valid upto 04/12/2023. The CETP was found to be operating without valid consent to operate under Water Act, 1974 and Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 at the time of inspection.*** The CETP operator applied for renewal of consents under Water Act and Authorization to PPCB on August 31, 2023.

5. The bio-sludge generated from the SBR basin is passed through a thickener and the thickened sludge is collected in the thickened sludge sump. The thickened sludge is fed into a belt press for dewatering. Similarly, Chemical sludge generated from clari-flocculation of the effluent at the bottom of clari-flocculator is collected in the chemical sludge sump followed by feeding into the belt filter press for dewatering. The combined filtrate is sent to equalization tank for further treatment.

6. It was observed that the CETP has constructed a shed for the storage of CETP sludge. As per log book record maintained by the CETP, 1597.20 metric tons (MT) of sludge was sent to the TSDF operated by M/s Re-sustainability Limited (M/s Ramky Enviro Engineers Limited), Nimbua, Derabassi, Punjab for final disposal during FY 2023-24. The records also show that 1531.495 MT of sludge was sent to the TSDF from May to December 2024 against authorized capacity of 2500 MT/annum. 173 MT of sludge was recorded as stored in the premises.

7. The grab samples collected by CPCB team from 50 MLD CETP from the following points (**Table 6**) were analyzed in CPCB Head Office laboratory:

Table 6: 50 MLD CETP Sampling Locations.

S. No.	Description of sampling locations
1.	Inlet of CETP
2.	Outlet of Equalization Tank
3.	Inlet to SBR
4.	Outlet of SBR
5.	Final treated effluent
6.	SBR Tank

8. The analysis results of samples collected by CPCB presented in **Table 7**. The PPCB has not prescribed inlet norms for CETP.

Table 7: Analysis results of the samples collected from 50 MLD CETP.

Parameters (All values are in mg/l except pH)	Inlet of CETP	Outlet of Equalization Tank	Inlet of SBR	Outlet of SBR	Final treated effluent after Chlorination	MoEF&CC notified Std. vide notification . 4 (E), dated 1/1/2016 for discharge into inland surface water.
pH	7.5	7.3	7.7	7.3	8.0	6-9
Oil and Grease	BDL	--	--	--	BDL	10
COD	570	848	448	98	125	250
BOD	194	410	232	24	54	30
TSS	192	162	92	32	47	100
TDS	2680	2416	2600	2744	2852	2100
FDS	2279	2056	2384	2596	2364	2100
Cl⁻	1093	1615	1568	1473	1283	1000
TKN	04	--	--	--	BDL	50
NH_3-N	BDL	--	--	--	BDL	50
PO_4-P	0.66	0.69	0.6	0.12	0.43	5
NO_3-N	12.2	8.4	8.4	5.06	4.8	10
SO_4	280	291	224	411	410	1000
Fluoride	BDL	0.6	0.9	0.9	0.8	2.0
Sulphide	3.2	--	--	--	2.4	2.0
Phenolic compounds as C_6H_5OH	1.6	--	--	--	3.62	1.0

9. ***As per analysis results of the samples collected by CPCB team, 50 MLD CETP was found to be non-complying with regard to BOD (54 mg/l > Prescribed limit of 30 mg/l), FDS (2364 mg/l > prescribed limit of 2100 mg/l), Sulphide (2.4 mg/l > prescribed limit of 2 mg/l), Chloride (1283 mg/l > prescribed limit of 1000 mg/l) and Phenolic Compounds (3.62 mg/l > Prescribed Limit of 1.0 mg/l) parameters.***

10. The samples collected by CPCB team from inlet and outlet of CETP were also analyzed for the presence of heavy metals and the analysis results are presented in Table 8.

Table 8: Analysis results of heavy metal parameters.

Sampling Locations	Sample Codes	T-Cr	Cr^{+6}	Cd	Cu	Mn	Pb	Zn	Ni	As	Fe	Se	V
Inlet of CETP	CT-A1	0.007	BDL	BDL	0.029	0.112	BDL	0.223	0.006	BDL	0.598	BDL	0.024
Final outlet	CT-A5	0.005	BDL	BDL	BDL	0.039	BDL	0.045	0.007	BDL	1.509	BDL	BDL
Prescribed limits (All values are in mg/l) prescribed by MoEF&CC vide notification . 4 (E), dated 1/1/2016 for		02	0.1	03	0.05	02	0.1	05	03	0.2	03	0.05	0.2

discharge into inland surface water.												

11. The concentration of heavy metal parameters in the samples collected by CPCB from 50 MLD CETP were found within the prescribed limits.

12. ***The overall performance of CETP with regard to removal efficiency of COD, BOD and Suspended Solids parameters was found to be 85 %, 87 % and 71% respectively, which was found adequate to achieve the prescribed norms. However, the overall performance with regard to removal efficiency for BOD, Chloride, Sulphide and Phenolic compounds parameters based on the analyzed concentration of respective parameters was found to be 87%, 20.5%, 25% and 0% respectively, requires improvement to achieve to prescribed limits.***

13. The biomass concentrations in the SBR basin in terms of MLSS and MLVSS were found as 5456 mg/l and 2849 mg/l respectively. The MLVSS/MLSS ratio was found to be 0.52, which is lower than the recommended ratio of 06-0.8. The MLVSS /MLSS ratio between 0.6-0.8 indicates satisfactory operation of biological treatment system (SBR)

14. Online Continuous Effluent monitoring system (OCEMS) is installed at inlet and final outlet of CETP for measuring pH, TSS, COD and BOD. The Online Continuous Effluent Monitoring System (OCEMS) was last calibrated on May 12, 2024. The variation was observed in the lab analysis value and the OCEMS value on the day of inspection as presented in Table 9:

Table 9: Comparison of Laboratory Analysis Values with OCEMS Values.

Sampling location	Analysis results/grab	Date/time	Parameters			
			pH	TSS	COD	BOD
Final outlet of CETP	Lab data	24/12/24	8.0	47	125	54
	OCEMS data	24/12/24	7.23	14.4	89.4	16.2
% Variation w.r.t. Laboratory Data			(-) 9.6	(-) 69.36	(-) 28.48	(-) 70

A wide variation was observed in the lab analysis values and the OCEMS values on the day of inspection. The OCEMS values for TSS, COD and BOD were found to be 28% to 70% lower in comparison to laboratory analysis value, indicating improper calibration of OCEMS.

15. It was observed that the CETP is discharging treated effluent into Budha Nallah through an underground conveyance channel as per CTO, which ultimately meets River Sutlej. However, as per the Environmental Clearance (EC) issued by MoEF&CC to the CETP, "the treated wastewater will be used for irrigation," and it is also stated in the special terms and conditions that "there shall be no discharge into Budha Nallah."