

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

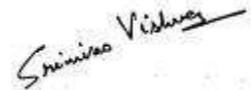
Original Application No. 243/2025

In the matter of:

News Item titled "Explainer Why Malwa is facing polluted water crisis" appearing in The Tribune dated 29.04.2025.

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Filed by: Advocate Srinivas Vishven

On behalf of Central Pollution Control Board

Dated: 17.09.2025

Place: Delhi

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

Original Application No. 243 Of 2025

In the matter of:

News Item titled "Explainer Why Malwa is facing polluted water crisis" appearing in The Tribune dated 29.04.2025.

REPLY ON BEHALF OF CENTRAL POLLUTION CONTROL BOARD (CPCB) i.e RESPONDENT NO. 1**MOST RESPECTFULLY SHEWETH:**

1. That, Hon'ble NGT vide order dated 16.05.2025 has sought the reply of Central Pollution Control Board (hereinafter referred as "CPCB" or "the Answering respondent") in the instant matter. Thereby, the reply is made in succeeding paragraphs.
2. That, CPCB is a statutory Board constituted under Section 3 of The Water (Prevention and control of Pollution) Act, 1974. It performs the functions under The Water (Prevention and control of Pollution) Act 1974 (hereinafter Water Act), The Air (Prevention and control of Pollution) Act, 1981 (hereinafter Air Act) and The Environment (Protection) Act, 1986.
3. That, it is humbly submitted that the State Pollution Control Boards /Pollution Control Committees (hereinafter referred as SPCBs/PCCs) have been constituted in States / Union Territories under the Water Act



and Air Act, are empowered to perform the functions and implement the provisions of these Acts in respect of their territorial Jurisdiction.

4. That, Hon'ble Tribunal has suo-motu registered the instant OA No. 243 of 2025 on the basis of News item titled "Explainer Why Malwa is facing polluted water crisis" appearing in The Tribune dated 29.04.2025. The issues raised in the news item is about the serious water pollution problem in the Malwa region of Punjab, particularly in canals across Ferozpur, Faridkot, Muktsar, and Fazilka districts in the southwestern part of the State, allegedly due to the inflow of contaminated water. It is also mentioned in the news item that the situation has arisen because polluted water is flowing into the Sirhind Feeder Canal from Harike Barrage. The news item further states that the Sutlej River is being polluted by the Buddha Nullah, which flows through the industrial town of Ludhiana and carries untreated wastewater.



5. That, in compliance with Hon'ble NGT's order dated 16.05.2025 passed in the instant matter, the Answering Respondent herein has taken up the case with Punjab Pollution Control Board (hereinafter PPCB), vide letter dated 08.07.2025 and 05.08.2025 and have sought the status report in the matter. Copies of the letters are enclosed and marked as **Annexure-I**. The receipt of status report is awaited from the Punjab Pollution Control Board in this regard.
6. That, in year 2018, based on water quality data for the years 2016 and 2017, 351 polluted river stretches ("PRS") were identified in the country. Out of these PRS, 4 PRS have been identified in Punjab. Based

on the level of organic load which is measured in terms of biochemical oxygen demand (BOD) concentration, the PRS have been categorized into Priority I to V wherein Priority I being most polluted with BOD value of more than 30 mg/L and Priority V being least polluted with BOD ranging between 3 – 6 mg/L. Such 4 PRS in Punjab were classified as Priority I (2 PRS), Priority II (0 PRS), Priority III (0 PRS), Priority IV (1 PRS) and Priority V (1 PRS). Out of these 4 PRS, the stretch of River Satluj from Rupnagar to Harike Bridge was identified as PRS under Priority I with maximum BOD value of 108 mg/L.

7. That, for rejuvenation of identified PRS, comprehensive action plans have been prepared by River Rejuvenation Committee (“RRC”) constituted by the respective State Government/ UT Administration, under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/ Union Territory for bringing all the polluted river stretches identified by the Answering Respondent as fit for bathing purposes. The action plans cover relevant aspects such as Source control (Municipal sewage management, Industrial pollution control, Waste management), River catchment/Basin Management (Adoption of good irrigation practices, Utilization of treated sewage, ground water recharge aspects), Flood Plain Zone protection and its management (Setting up of bio-diversity parks, Removal of encroachments, Rainwater harvesting and Plantation on both sides of the river).

8. That, the action plans are being implemented by the state of Punjab. Presently, the progress of implementation of action plans is reviewed by the RRC at State Level and Central Monitoring Committee (“CMC”)



constituted under the Chairmanship of Secretary, Ministry of Jal Shakti, at Central Level.

9. That, in the year 2022, based on water quality data for the year 2019 and 2021, 311 PRS were identified in the country. Out of these PRS's, 5 PRS have been identified in Punjab and were categorized into five priority classes as Priority I (3 PRS), Priority II (0 PRS), Priority III (0 PRS), Priority IV (0 PRS) and Priority V (2 PRS). The stretch of River Satluj from Ludhiana to Harike was identified as PRS under Priority I with maximum BOD value of 120 mg/L.



10. That, it is humbly submitted that the Answering Respondent in association with the SPCBs/ PCCs has established Water Quality Monitoring Network under National Water Quality Monitoring Programme (hereinafter referred as "NWMP") to assess the status of water quality of water resources in the respective States/ UTs to facilitate prevention and control of pollution in the water bodies. In Punjab, presently, there are 155 number of water quality monitoring locations under NWMP. Out of these 155 locations, the water quality of Sutlej River was monitored at 24 locations in Punjab during 2024. The water quality data of stretch of River Sutlej from the upstream of Ludhiana to Harike Bridge at 12 locations for the year 2024 is provided as **Annexure-II**. The water quality data reveals that the River Sutlej was non-complying with notified Primary Water Quality Criteria for Outdoor Bathing at 10 locations out of 12 locations in the stretch of River Sutlej from the upstream of Ludhiana to Harike Bridge.

11. That, in another matter taken up suo moto by Hon'ble NGT in News item titled "Ludhiana PPCB report flags 54 dyeing units in Buddha Nullah's catchment" appearing in the Hindustan Times dated 25.04.2024, in OA No. 546/2024, CPCB has filed an affidavit and compliance report before Hon'ble NGT on 13.08.2024 (**Annexure-III**) and 19.03.2025 (**Annexure-IV**) respectively in the matter.

12. The answering respondent No. 1 craves leave of this Hon'ble Tribunal for filing additional reply, if required, in future.

13. That, in light of the above submission, it is respectfully submitted that this Answering respondent i.e. CPCB, shall abide by any order(s) or direction(s) passed by this Hon'ble tribunal in the instant OA and render justice.




(Nazimuddin)

Scientist- 'F'

Central Pollution Control Board

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

Original Application No. 243 Of 2025

In the matter of:

News Item titled "Explainer Why Malwa is facing polluted water crisis" appearing in The Tribune dated 29.04.2025.

AFFIDAVIT

I, **Nazimuddin** working as Scientist 'F' in Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi, the Respondent No. 1 in the above matter, do hereby solemnly affirm, declare on oath and state as under: -

1. That I, the deponent herein is well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent to verify, sign and swear this affidavit on behalf of the Respondent CPCB.
2. That the accompanying reply may be read part and parcel of the present affidavit as I am competent to swear this affidavit.
3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof are true and correct on the basis of the record maintained during ordinary course of business of CPCB and available records and documents and the contents of the same



are read over and explained to me and are not repeated herein for the sake of brevity.



DEPONENT

नाज़िमउद्दीन / Nazimuddin
वैज्ञानिक 'एफ' / Scientist 'F'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)
(Mo Environment, Forest And Climate Change, Govt. of India)
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

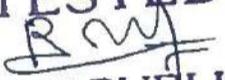


VERIFICATION

Verified at Delhi on this day of 17 SEP 2025 2025 that the contents of the above reply are correct and true on the basis of the records of the case as mentioned in the day-to-day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.



DEPONENT

ATTESTED

NOTARY PUBLIC
GOVT. OF INDIA
17 SEP 2025

नाज़िमउद्दीन / Nazimuddin
वैज्ञानिक 'एफ' / Scientist 'F'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)
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Parivesh Bhawan, East Arjun Nagar, Delhi-110032



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केन्द्रीय प्रदूषण नियंत्रण बोर्ड

CENTRAL POLLUTION CONTROL BOARD

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार.

MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA.

Speed Post /Email

Reminder-I

Dated: 05.08.2025

F. No. A-14011/2024-WQM-I /168

To

The Member Secretary
Punjab Pollution Control Board
Vatavaran Bhavan, Nabha Road,
Patiala, Punjab, 147001

Sub: Compliance of Hon'ble NGT (PB) order dated 16.05.2025 in the matter of OA No. 243/2025; "Explainer Why Malwa is facing polluted water crisis appearing in The Tribune dated 29.04.2025"

Reference: CPCB letter no. F. No. A-14011/2024-WQM-I/203 dated 08.07.2025

Sir,

Kindly refer to our earlier letter dated 08.07.2025, wherein, it was requested to provide the status report in reference to the issue raised in the matter of OA No. 243/2025; "Explainer Why Malwa is facing polluted water crisis appearing in The Tribune dated 29.04.2025"

It is requested to kindly provide the aforesaid information at the earliest.

Thanking you

Yours faithfully

(Nazimuddin)

Divisional Head, WQM-I

Encl.: As above

‘परिवेश भवन’ पूर्वी अर्जुन नगर, दिल्ली - 110032.

Parivesh Bhawan, East Arjun Nagar, Delhi - 110 032.

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



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केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार.

MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA.

Speed Post /Email

Dated: 08.07.2025

F. No. A-14011/2024-WQM-I/ 203

To

The Member Secretary
Punjab Pollution Control Board
Vatavaran Bhavan, Nabha Road,
Patiala, Punjab, 147001

Sub: Compliance of Hon'ble NGT (PB) order dated 16.05.2025 in the matter of OA No. 243/2025; "Explainer Why Malwa is facing polluted water crisis appearing in The Tribune dated 29.04.2025".

Sir,

Enclosed please find a copy of Hon'ble NGT (PB) order dated 16.05.2025 in the matter of OA No. 243/2025; "Explainer Why Malwa is facing polluted water crisis appearing in The Tribune dated 29.04.2025"

In this regard, it is requested to kindly provide the status report in the said matter at earliest.

Thanking you

Yours faithfully

(Nazimuddin)

Divisional Head, WQM-I

Encl.: As above

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली - 110032.

Parivesh Bhawan, East Arjun Nagar, Delhi - 110 032.

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

Water Quality Data of River Satluj (from upstream of Ludhiana to Harike Bridge) in Punjab Monitored under NWMP-2024									
Monitoring Location	Dissolved O2 (mg/L)		pH		BOD (mg/L)		Fecal Coliform (MPN/100ml)		Compliance Status
	Min	Max	Min	Max	Min	Max	Min	Max	
	> 5 mg/L		6.5-8.5		< 3 mg/L		< 2500 MPN/100 ML		
RIVER SATLUJ AT LUDHIANA U/S	6.1	8.9	7.2	8.3	1	1.9	110	460	Complying
RIVER SATLUJ AT PHILLAUR U/S	5.4	7.7	6.9	8	1	5	450	1700	Non-Complying
RIVER SATLUJ AT PHAGWARA U/S (CHACHERU BRIDGE)	0.3	5.8	6.9	7.9	4.8	27	920	7800	Non-Complying
RIVER SATLUJ AT PHAGWARA D/S (KANGANIWAL BRIDGE)	0.3	2.3	6.9	7.6	4.2	52	7800	490000	Non-Complying
RIVER SATLUJ AT U/S BUDHA NALLAH (UPPER), PUNJAB	6.2	8.8	7.4	8.2	1	3	140	1700	Complying
RIVER SATLUJ AT 100M D/S BUDHA NALA CONFL., LUDHIANA	0.3	5.4	7.2	7.7	9.2	60	38000	790000	Non-Complying
RIVER SATLUJ AT JALANDHAR U/S (PEERU SHAH KA DARGAH)	0.3	0.3	6.4	7.5	54	131	110000	630000	Non-Complying
RIVER SATLUJ AT LUDHIANA D/S	0.3	6	7.2	7.8	2.8	42	7000	170000	Non-Complying
RIVER SATLUJ AT BOAT BDG. DHARMKOTNAKODAR ROAD, JALANDHAR	0.3	8.1	7.1	7.7	1.8	40	7900	79000	Non-Complying
RIVER SATLUJ AT JALANDHAR D/S (MALSIA BRIDGE)	0.3	0.3	7.2	7.6	42	82	110000	460000	Non-Complying
RIVER SATLUJ AT D/S EAST BEIN, PUNJAB	1.1	5.1	6.9	7.5	1.2	50	450	170000	Non-Complying
RIVER SATLUJ AT BRIDGE HARIKE, AMRITSAR	5	9.7	7.4	7.9	1.2	4.2	390	2200	Non-Complying

*Fecal Streptococci was not analysed during 2024

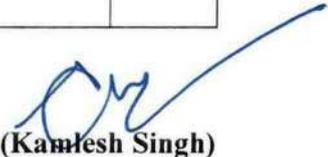
**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No. 546/2024**

In the matter of:

News Item Titled "Ludhiana PPCB Report Flags 54 Dyeing Units In Buddha Nullah's Catchment" Appearing In The Hindustan Times Dated 25.04.2024

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Sr. No.	Particulars	Page No.
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2.	Annexure- I A copy of status report filed by PPCB in compliance of the Hon'ble NGT order dated 04.01.2024.	
3.	Annexure- II A copy letter dated 27.05.2024 issued by CPCB to National River Conservation Directorate regarding Water Quality data of Buddha Nalla drain and River Sutlej.	
4.	Annexure- III A copy of direction dated 12.08.2024 issued by CPCB to PPCB.	
5.	Annexure- IV A copy of Hon'ble NGT order dated 13.05.2024.	


(Kamlesh Singh)
Scientist 'E'

Central Pollution Control Board

Place: Delhi
Dated: 13.08.2024

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No. 546/2024**

News Item Titled "Ludhiana PPCB Report Flags 54 Dyeing Units In Buddha Nallah's Catchment" Appearing In The Hindustan Times Dated 25.04.2024

**REPLY ON BEHALF OF CENTRAL POLLUTION CONTROL BOARD
(CPCB) i.e. RESPONDENT NO 2**

Most Respectfully Showeth: -

1. That Hon'ble NGT vide Order dated 13.05.2024 and Notice dated 20.05.2024 impleaded the Central Pollution Control Board (hereinafter referred as CPCB) as Respondent no. 2. Thereby, the reply is made in succeeding paragraphs.
2. That CPCB is a statutory Board constituted under Section 3 of the Water (Prevention and Control of Pollution) Act, 1974. It performs the functions under the Water (Prevention and Control of Pollution) Act, 1974, The Air (Prevention and Control of Pollution), Act 1981 and the Environment (Protection) Act, 1986.
3. That, the Hon'ble NGT took a suo motto matter vide Original Application No. 546 of 2024 based on News item titled "Ludhiana PPCB report flags 54 dyeing units in Buddha Nallah's catchment" appearing in the Hindustan Times dated 25.04.2024".
4. That the matter in the news article relates to the findings of the Punjab Pollution Control Board in response to NGT's directives in the case, Nitin Dhiman V State of Punjab Original Application No. 225/2022 (hereinafter referred as OA). The report reveals that the water from Buddha Nallah in Ludhiana is unfit for



irrigation due to high Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) levels. According to the report, about 54 dyeing units are not connected to the common effluent treatment plants (hereinafter referred as CETP) due to geographical reasons and scale of the industries. Out of these 54 dyeing units, 12 are large scale, 16 are small category scattered at different places and 26 units are situated at Industrial Area A, Ludhiana. It states that there were 300 dyeing units operating in the district, out of which about 265 fall in the catchment area of Buddha Nallah, which originates in Koom Kalan village and runs parallel to Sutlej river on its south till it joins the river at Walipur Kalan village. The report further adds that there are 108 dyeing units connected to CETP of capacity 50 MLD (Full form), 67 dyeing units connected to CETP of capacity 40 MLD and 36 dyeing units are connected with CETP that has a capacity of 15 MLD.

5. That the Hon'ble NGT in Original Application No. 225 of 2022 with I.A No, 596/2023 and I.A No.815 of 2023 in the matter titled as "*Nitin Dhiman Vs State of Punjab and Others*" directed the Punjab State Pollution Control Board and Municipal Corporation, Ludhiana to file status report to the action taken against the non-compliance Units, present status of closure, compliance status of all dyeing industries not connected to CETPs, status of dyeing industries with regard to withdrawal and utilization of groundwater, wastewater generated by dyeing industries, wastewater of dyeing industries received in the CETPs, production capacity and share in CETPs. Punjab Pollution Control Board (hereinafter referred as PPCB) has filed the status report in compliance of Hon'ble NGT order dated 04.01.2024 (in OA No. 225/2022). The copy of the status report filed by PPCB in compliance of the Hon'ble NGT order dated 04.01.2024 is annexed as **Annexure-I**.



6. That, it is humbly submitted that, the 18th meeting of Central Monitoring Committee (CMC) was held on 11.01.2024 under the Chairmanship of Secretary, Department of Water Resource, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, wherein following was directed:

"The water quality testing of Buddha Nallah may be taken up by CPCB and State PCB in order to ascertain the improvement in water quality in the drain and ensuring the effectiveness of the completed STP projects. NRCD is to review the Buddha Nallah Rejuvenation project separately before the next CMC meeting".

7. That 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. Accordingly, CPCB vide its letter dated 27.05.2024 provided the water quality data of Buddha Nallah and River Sutlej to the National River Conservation Directorate (hereinafter referred as NRCD), Dept. of Water Resource, River Development & Ganga Rejuvenation, Ministry of Jal Shakti. The major findings of the said monitoring are:

- i. The monitored water quality parameters of Buddha Nalla, when compared with the General Standards for Discharge of Environmental Pollutants prescribed under Schedule-VI of Environment (Protection) Rules, 1986, for inland surface water and land irrigation, reveal that the water quality was found non-complying w.r.t BOD, COD and TSS parameters for the inland surface water standard and non-complying w.r.t BOD and TSS parameters for land irrigation standard.
- ii. The analysis results of River Sutlej upstream (U/s) and downstream (D/s) of Buddha Nalla were compared with the Primary Water Quality Criteria for Outdoor Bathing and it was observed that River Sutlej D/s



of Buddha Nalla was found non-complying w.r.t. the criteria.

- iii. Comparative analysis of water quality of Buddha Nalla and river Sutlej at D/s of Buddha Nalla for the year 2022 and 2024 reveals that concentration of BOD, COD and TSS increased from the year 2022 to 2024.

The true copy of the letter dated 27.05.2024 is annexed as **Annexure-II**.

8. That, it is humbly submitted that, CPCB also carried out the inspection of 04 common effluent treatment plant (CETPs) located in Ludhiana during April 22-23, 2024 to verify the compliance status. It was observed that out of 04 CETPs, 01 CETP of 500 Kilo Litre per day (KLD) is a zero liquid discharge (ZLD) plant and 03 CETPs were found exceeding the discharge standards. As per environment clearance (hereinafter referred as 'EC') granted to the CETPs, the treated water shall not be discharged into Buddha Nallah, however the three (03) CETPs are reportedly discharging into Buddha Nallah and not complying with the disposal condition stipulated in the environmental clearance issued by Ministry of Environment, Forest and Climate Change (hereinafter referred as 'MoEF&CC'). The overall compliance status of the three CETPs are tabulated below:

Sr. No.	1	2	3
Location of CETP	CETP 40 MLD (Focal point Module) Tajpur Road Near Central Jail, Ludhiana (Punjab)	CETP 50 MLD Tajpur Road, Near Central Jail, Ludhiana Punjab.	CETP, 15 MLD, Bahadur Ke Road, District Ludhiana (Punjab).
Industrial Area	Dyeing Industrial area Focal Point (Phase 1 to Phase 8)	Dyeing industries Tajpur Road Ludhiana	Textile & Knitwear Dyeing units Industrial Zone Bahadur Ke Road, Ludhiana



Treatment system of CETP	Physico-chemical followed by biological (SBR) process SBR	Physico-chemical followed by biological (SBR) process	Physico-chemical followed by biological (SBR) process
Designed capacity	40 MLD	50 MLD	15 MLD
Status of operation during inspection	Operational	Operational	Operational
OCEMS Installed	Yes	Yes	Yes
Validity of Water Consent/Authorization	No	No	No
Compliance Status	Non-compliance (w.r.t BOD, COD and Chloride, sulphide parameter) and discharge condition of MoEF&CC	Non-compliance (w.r.t BOD, COD and chloride parameters) and discharge condition of MoEF&CC	Non-compliance (w.r.t BOD, COD, Chloride and Sulphide) and discharge condition of MoEF&CC
Final discharge	Buddha Nallah	Buddha Nallah	Buddha Nallah

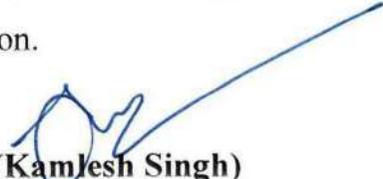
Further, it is humbly submitted that based on the observed non-compliance in the CETPs discharging into Buddha Nallah, CPCB has issued Direction dated 12.08.2024 under Section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974 to Punjab Pollution Control Board to take appropriate action including imposing environmental compensation. The true copy of the direction dated 12.08.2024 issued to Punjab PCB is annexed as **ANNEXURE-III**.

9. The answering respondent craves leave of the Hon'ble Tribunal to file additional reply, in future, if required.



10. That in the light of the above submission, it is respectfully submitted that this Answering Respondent, i.e., CPCB, shall abide by any order(s) or direction(s) passed by this Hon'ble Tribunal in the instant Original Application.




(Kamlesh Singh)
Scientist 'E'

Central Pollution Control Board

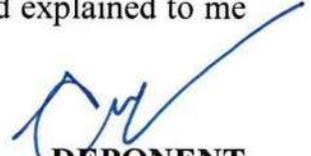
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Original Application No. 546/2024**

News Item Titled "Ludhiana PPCB Report Flags 54 Dyeing Units In Buddha Nullah's Catchment" Appearing In The Hindustan Times Dated 25.04.2024

AFFIDAVIT

I, Kamlesh Singh, working as Scientist 'E' in Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi, the Respondent No. 2 in the above matter, do hereby solemnly affirm, declare on oath and state as under:-

1. That I, the deponent herein is authorized representative to represent the Respondent CPCB in the present case, and as such, I am well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent and authorized to verify, sign and swear this affidavit on behalf of the Respondent CPCB.
2. That the accompanying reply may be read part and parcel of the present affidavit as I am competent to swear this affidavit.
3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof are true and correct on the basis of the record maintained during ordinary course of business of CPCB and available records and documents and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.


DEPONENT

कमलेश सिंह / Kamlesh Singh
वैज्ञानिक 'ई' / Scientist 'E'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o Env. Forest & Climate Change, Govt. of India
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110 032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032



VERIFICATION

13 AUG 2024

Verified at New Delhi on this day of _____ 2024 that the contents of the above reply are correct and true on the basis of the records of the case as mentioned in the day-to-day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.

[Handwritten Signature]
DEPONENT

कमलेश सिंह / Kamlesh Singh
वैज्ञानिक 'ई' / Scientist 'E'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
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ATTESTED
[Handwritten Signature]
NOTARY PUBLIC
GOVT. OF INDIA
13 AUG 2024

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

Original Application No. 225 of 2022

with

I.A No. 596/2023 and I.A No.815 of 2023

In the matter of

Nitin Dhiman

..... Applicant

V/s

State of Punjab and Others

..... Respondent

Status Report of Punjab Pollution Control Board through Er. Gurmit Singh, Environmental Engineer, Regional Office -3, Ludhiana in compliance of order dated 04.01.2024.

RESPECTFULLY SHOWETH

- Ma*
- 1) That the subject cited case is pending for adjudication before the Hon'ble National Green Tribunal. The Hon'ble National Green Tribunal was pleased to pass an order dated 04.01.2024 thereby directing the Punjab Pollution Control Board to take samples from Buddha Nallah at different locations in the District Ludhiana and get the same analyzed for quality with respect to all parameters prescribed for treatment of sewage/industrial effluents and file its report regarding the same one week before the date of hearing fixed hereinafter. At the same time, the Hon'ble Tribunal has directed the Punjab State Pollution

Control Board and Municipal Corporation, Ludhiana to file status report in tabular format relating to the action taken against the non-compliant units, present status of closure, compliant status of all dyeing industries not connected to CETPs, status of dyeing industries with regard to withdrawal and utilization of groundwater, wastewater generated by dyeing industries, wastewater of dyeing industries received in the CETPs, Production capacity and share in CETPs. The Punjab State Pollution Control Board and Municipal Corporation, Ludhiana have been further directed to include their response to the observations made by the Amicus Curiae in his report. In this regard, the relevant extract of para no. 18 and 19 of the order dated 04.01.2024 is reproduced herein below for kind perusal and reference.

18. As per report submitted by the PSPCB, all CETPs are discharging their treated effluent into Buddha Nallah leading to River Sutlej. The PSPCB is directed to take samples from Buddha Nallah at different locations in the district Ludhiana and get the same analyzed for quality with respect to all parameters prescribed for treatment of sewage/industrial effluents and file its report regarding the same one week before the date of hearing fixed hereinafter.
19. The PSPCB and the MC, Ludhiana are directed to file status reports in tabular format regarding (i) action taken against all the non-compliant units; (ii) present status of units which are stated to be closed as to whether the same have been temporarily or permanently closed; (iii) detailed compliance status of all the dyeing industries which are not connected to the three CETPs; (iv) the compliance status of all the dyeing industries with respect to withdrawal and utilization of ground water and compliance with conditions, if any, imposed at the time of grant of permission by the Punjab State Ground Water Authority particularly condition regarding re-charge of ground water; and (v) the wastewater generated by each of the dyeing industries

connected with all the three CETPs, the wastewater from each of the said dyeing industries received in the CETPs, the production capacity and the share in the CETP of each of the said dyeing industries. The PSPCB and the MC, Ludhiana are also directed to include in their status report their response to the observations made by the Amicus Curiae in his report filed vide email dated 03.08.2023.

COLLECTION AND ANALYSIS OF SAMPLES

- 2) That in compliance to order dated 04.01.2024 of the Hon'ble Tribunal, it is submitted that the Punjab Pollution Control Board had collected water samples from various locations of Buddha Nallah in District Ludhiana on 19.01.2024. The samples so collected were got analyzed for quality with respect to parameters prescribed for treatment of sewage as well as industrial effluents. The examination of the analysis report has revealed that the concentration of different parameters of water flowing in Buddha Nallah are more than the prescribed standards for STP, thus making the water not fit for irrigation w.r.t. parameters like coliform, COD and BOD etc. Analysis report of the samples collected from various locations of the Buddha Nallah is enclosed herewith as Annexure-A.
- 3) That in further compliance to order dated 04.01.2024 of the Hon'ble Tribunal, it is respectfully submitted that about 300 (315) dyeing units are operating in the area of Ludhiana District, out of which about 265 units fall in the catchment area of Buddha Nallah, which originates in village Koom Kalan of District Ludhiana and runs parallel to River Sutlej on its south till Buddha Nallah joins River Sutlej at Village Walipur Kalan, District Ludhiana.

For the treatment of wastewater of the dyeing industries, 03 Common Effluent Treatment Plants (CETPs) of total capacity 105 MLD have been installed at Ludhiana by the Special Purpose Vehicles (SPVs). The details regarding dyeing cluster, capacity of CETPs, site of installation, technology with name of SPV and existing member units are given herein below:

S.No.	Dyeing Cluster of Ludhiana City	Capacity of CETP	Site of installation	Name of Special Purpose Vehicle (SPV)	Based on Technology	Existing Member Units	Disposal of treated wastewater
1	Bahadurke Road	15 MLD	Bahadurke Road	Bahadurke Textile and Knitwear Association (BKTKA), Ludhiana	SBR	36	Buddha Nallah
2	Tajpur Road	50 MLD	Tajpur Road	Punjab Dyers Association (PDA), Tajpur Road, Ludhiana	SBR	108	Buddha Nallah
3	Focal Point	40 MLD	Tajpur Road	Punjab Dyers Association (PDA), Focal Point, Ludhiana	SBR	67	Buddha Nallah
Total	03	105 MLD	03		-	211	

4) That apart from the above mentioned 211 dyeing units, about 54 dyeing units are such which could not join the CETPs due to geographical reasons and scale of the industries. Out of these 54 dyeing units, 12 units are of large scale category, 16 units are of small category scattered at different places and 26 units are situated at Industrial Area-A, Ludhiana. All these 54 dyeing units are having their own captive effluent treatment plants for the treatment of wastewater and discharge their treated wastewater into public sewer for which standards have been laid down by the MOEF&CC, Government of India.

5) That after the installation and commissioning of CETPs for the wastewater treatment of dyeing industries, the domestic and industrial effluent of these industries stands segregated from the domestic sewerage of Ludhiana city. However, the treated wastewater of 54 dyeing units which are having captive effluent treatment plants is being discharged and further treated in Sewage

Treatment Plants installed by Municipal Corporation, Ludhiana for domestic sewage.

- 6) That the three Common Effluent Treatment Plants (CETPs) are being monitored on monthly basis by the Punjab Pollution Control Board and recently the effluent samples of the CETP 50 MLD, 40 MLD and 15MLD were collected by the officers of the Board in the month of February, 2024 and March, 2024. The analysis results of the samples collected by the Board officers reveals as under:
- a) The CETP of 50 MLD capacity was found to be achieving the prescribed standards of MOEF&CC, Government of India except the parameter of TDS only.
 - b) The CETP of 40 MLD capacity was found to be achieving the prescribed standards of MOEF&CC, Government of India except the parameters of TDS only.
 - c) The CETP of 15 MLD capacity was found to be achieving the prescribed standards of MOEF&CC, Government of India except the parameter of TDS only.
- 7) That reply to the queries raised by the Hon'ble Tribunal in paragraph 19 of the order dated 04.01.2024 containing the direction of the Hon'ble Tribunal and the reply of the Punjab Pollution Control Board may kindly be read as under:

i) **ACTION TAKEN AGAINST NON-COMPLIANT UNITS**

12 number of dyeing units were found to be in violation of the provisions of the Water (Prevention and Control of Pollution) Act, 1974. Notices were issued and appropriate action in the form of levying of environmental compensation, Bank Guarantee, directions for shifting of the industries to CETP compatible area was taken. List of 12 number of non-compliant units along with present status is enclosed as **Annexure-B**.

ii) **PRESENT STATUS OF UNITS WHICH ARE STATED TO BE CLOSED AS TO WHETHER THE SAME HAVE BEEN TEMPORARILY OR PERMANENTLY CLOSED.**

Total 04 number of dyeing units have been closed after the issuance of directions by the Punjab Pollution Control Board. 03 units have been closed permanently and one unit has been closed on temporary basis due to various violations of the Water (Prevention and Control of Pollution) Act, 1974. The list of 04 units is enclosed as **Annexure-C**.

iii) DETAILED COMPLIANCE STATUS OF ALL THE DYEING INDUSTRIES WHICH ARE NOT CONNECTED TO THE THREE CETPS;

About 54 dyeing units are such which could not join the CETPs due to geographical reasons and scale of the industries. Out of these 54 dyeing units, 12 units are of large-scale category, 16 units are of small category scattered at different places and 26 units are situated at Industrial Area-A. All these 54 dyeing units are having their own captive effluent treatment plants for the treatment of wastewater and discharge their treated wastewater into public sewer for which standards have been laid down by the MOEF&CC, Government of India. It is pertinent to mention here that out of 54 dyeing industries, 05 units have been permanently closed. The list of 54 dyeing industries is enclosed as **Annexure-D**.

iv) THE COMPLIANCE STATUS OF ALL THE DYEING INDUSTRIES WITH RESPECT TO WITHDRAWAL AND UTILIZATION OF GROUND WATER AND COMPLIANCE WITH CONDITIONS, IF ANY, IMPOSED AT THE TIME OF GRANT OF PERMISSION BY THE PUNJAB STATE GROUND WATER AUTHORITY PARTICULARLY CONDITION REGARDING RE-CHARGE OF GROUND WATER;

It is submitted that the Board has considered the case and observed that whenever NOC for abstraction of Ground Water is granted to any project proponent / industry, a condition is imposed to provide ground water recharging system in the premises. Such condition to recharge the ground water by way of rain water harvesting system is not viable / advisable in the case of trade effluent generating industries. It is apprehended that such

system can easily be used for discharge of treated or untreated trade effluent by the erring / defaulting industries, which will be very difficult for the Board to detect / prevent. Such rain water harvesting / recharging system will act as "by-pass" in the industries.

The Board has taken up the matter separately with the Central Ground Water Authority (CGWA), recommending thereby the non-imposition of condition, to provide rain water harvesting recharging system in the trade effluent generating industries.

In view of above facts, the Board has issued letter bearing no. 19049-74 dated 19.06.2018 to all the officers including Regional Officers advising them to ensure that no red category trade effluent generating industry is allowed to provide the rain water harvesting recharging system. A copy of the letter no. 19049-74 dated 19.06.2018 is enclosed as **Annexure-E**.

v) **THE WASTEWATER GENERATED BY EACH OF THE DYEING INDUSTRIES CONNECTED WITH ALL THE THREE CETPs, THE WASTEWATER FROM EACH OF THE SAID DYEING INDUSTRIES RECEIVED IN THE CETPs, THE PRODUCTION CAPACITY AND THE SHARE IN THE CETP OF EACH OF THE SAID DYEING INDUSTRIES.**

Presently 108 dyeing units are connected with CETP 50 MLD, 67 dyeing units are connected with CETP 40 MLD and 36 dyeing units are connected with CETP 15 MLD. The facts given in para no.3 above may kindly be read as part of this reply. The detail of industries connected with all three CETPs, alongwith production data, consented discharge and the shareholding is given in **Annexure-F**.

- 8) That apart from the above the Hon'ble Tribunal vide the said order dated 24.01.2024 has also directed the Punjab State Pollution Control Board and the Municipal Corporation, Ludhiana to include in their Status Report their Response to the observations made by the Amicus Curiae in his report filed vide email dated 03.08.2023. In this regard, the reply of the Board has been given in a

separate annexure enclosed herewith as **Annexure-G**. The same may kindly be perused.

- 9) That the status report on behalf of Punjab Pollution Control Board is hereby submitted in compliance to order dated 24.01.2024 for kind consideration and appropriate orders.

Submitted by



(Gurmit Singh)

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

Date: 22-04-2024

Place: Ludhiana

On behalf of Punjab Pollution Control Board



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

Speed Post

F. No. A-14011/1/2024-WQM-I 1837

27/05/2024

To

Sh. S. K. Shrivastava,
Scientist 'F',
National River Conservation Directorate
Department of Water Resources, RD & GR
Ministry of Jal Shakti, Pt. Deendayal Antyodaya Bhawan
CGO Complex, Lodhi Road, New Delhi- 110003

Subject: Water Quality data of Buddha Nalla drain and River Sutlej

Reference: Your Letter No. F.No. J-24018/1/2020-NRCD-II dated 15.02.2024

Sir,

With reference to above, this is to inform that Central Pollution Control Board has conducted water quality monitoring of River Sutlej and Buddha Nalla jointly with Punjab Pollution Control Board during the month of April 2024.

Accordingly, a brief note on water quality of Buddha Nalla and River Sutlej upstream & downstream of Buddha Nalla monitored during April 2024 and also monitored on September 2022 are attached. In addition, water quality data of River Sutlej upstream and downstream of Ludhiana for the year 20 23 monitored under NWMP is also attached herewith for your kind reference.

Yours faithfully

(Vishal Gandhi)

Scientist -E, WQM-I

Encl: As above

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, New Delhi - 110032

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

**BRIEF NOTE ON WATER QUALITY OF BUDDHA NALLA AND RIVER SUTLEJ
AT UPSTREAM AND DOWNSTREAM OF BUDDHA NALLA**

In pursuance to communication received from NRCD regarding water quality of Buddha Nalla Drain, CPCB has carried out water quality monitoring of River Sutlej and Buddha Nalla jointly with Punjab Pollution Control Board during the month of April 2024. Further, the water quality data of River Sutlej U/s and D/s Ludhiana for the year 2023 is attached as **Annexure**.

Water Quality of Buddha Nalla and River Sutlej at Upstream (u/s) and Downstream (d/s) of Buddha Nalla with respect to Physico-chemical and Biological parameters are placed in table 1 and 2.

Table 1: Analytical results of Buddha Nalla

Sr. no.	Monitoring Locations	Sampling Date	Parameters					
			pH	BOD (mg/L)	COD (mg/L)	TSS (mg/L)	Chloride (mg/L)	Fecal Coliform (MPN/100 ml)
General Effluent Discharge Standards as per Schedule-VI of E (P) Rules, 1986			5.5-9.0	30	250	100	-	-
1	Buddha Nalla	02.04.2024	7.2	161	456	328	-	49 x 10 ⁵
2	Buddha Nalla	29.09.2022	6.7	77	322	322	272	-

Table 2: Analytical Results of River Sutlej

Sr. No.	Monitoring Location	Sampling Date	Parameters			
			DO (mg/L)	pH	BOD (mg/L)	Fecal Coliform (MPN/100 ml)
Primary Water Quality Criteria for Outdoor Bathing			> 5 mg/L	6.5-8.5	<3 mg/L	< 2500 MPN/100mL
1	River Sutlej U/s Buddha Nalla	02.04.2024	8.9	8.1	1.7	200
2	River Sutlej D/s Buddha Nalla	02.04.2024	4.7	7.6	8	13 x 10 ⁵
3	River Sutlej U/s Buddha Nalla	29.09.2022	6.8	7.9	1.9	33 x 10 ²
4	River Sutlej D/s Buddha Nalla	29.09.2022	5.5	7.8	3	230

Close examination of Water quality data reveals following observations:

1. The water quality data of Buddha Nalla were compared with the General Effluent Discharge Standards as per Schedule-VI of E (P) Rules, 1986. The analytical reveals that the water quality was found non-complying w.r.t. BOD, COD and TSS.
2. The analysis results of River Sutlej U/s and D/s of Buddha Nalla were compared with the Primary Water Quality Criteria for Outdoor Bathing and it was observed that River Sutlej D/s of Buddha Nalla was found non-complying w.r.t. the criteria.
3. Comparative analysis of water quality of Buddha Nalla and river Sutlej at d/s of Buddha Nalla for the year 2022 and 2024 reveals that concentration of BOD, COD and TSS increased from the year 2022 to 2024.

NWMP WATER QUALITY DATA OF RIVER SUTLEJ U/s & D/s LUDHIANA 2023:

Sr. No.	Sampl ing Month	Name Of Monitoring Location	Dissolved O ₂ (mg/L)	pH	BOD (mg/L)	Fecal Coliform (MPN/100 ml)
1	Jan	RIVER SUTLEJ AT LUDHIANA U/S	8.0	8.0	1(BDL)	260
	Feb		8.8	8.1	1(BDL)	780
	Mar		8.4	8.2	1(BDL)	310
	Apr		7.6	8.1	1(BDL)	460
	May		7.6	7.8	1(BDL)	320
	Jun		6.3	8.0	1.8	330
	Jul		6.8	8.1	1(BDL)	380
	Aug		7.1	7.9	1(BDL)	270
	Sep		7.0	7.6	1(BDL)	230
	Oct		6.8	7.8	1(BDL)	310
	Nov		7.6	8.3	1(BDL)	260
	Dec		7.2	8.2	1(BDL)	130
2	Jan	RIVER SUTLEJ AT LUDHIANA D/S	3.5	7.2	13.0	47000
	Feb		1.6	7.4	25.0	260000
	Mar		3.9	7.2	45.0	330000
	Apr		0.3(BDL)	7.4	75.0	1700000
	May		0.3(BDL)	7.6	32.0	490000
	Jun		0.3(BDL)	7.3	45.0	940000
	Jul		5.7	7.9	2.3	46000
	Aug		6.6	7.9	4.5	20000
	Sep		3.2	7.4	8.0	79000
	Oct		3.9	7.4	4.0	17000
	Nov		6.4	7.3	7.0	49000
	Dec		6.0	7.6	7.0	39000



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

Speed Post

CPCB/IPC-VII/CETP-Ludhiana/3431

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 therefore; 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

o/c 1

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

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.
- 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

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

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



(Bharat Kumar Sharma)



o/c

Item No. 08

Court No. 1

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

Original Application No. 546/2024

News item titled "Ludhiana PPCB report flags 54 dyeing units in Buddha Nallah's catchment" appearing in the Hindustan Times dated 25.04.2024

Date of hearing: 13.05.2024

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

ORDER

1. This Original Application is registered *suo-motu* on the basis of the news item titled "Ludhiana PPCB report flags 54 dyeing units in Buddha Nallah's catchment" appearing in the Hindustan Times dated 25.04.2024.

2. The matter relates to the findings of the Punjab Pollution Control Board in response to NGT's directives in the case, Nitin Dhiman V State of Punjab (OA No. 225/2022). The report reveals that the water from Buddha Nallah in Ludhiana is unfit for irrigation due to high Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) levels from dyeing units. However residents of the area have claimed that the colour of the water is pitch black and showcases the chemical mixed, but the reports of the PPCB show concentration of COD and BOD, which do not involve the dyeing units waste.

3. According to the report, about 54 dyeing units are not connected to the common effluent treatment plants (CETP) due to geographical reasons and scale of the industries. Out of these 54 dyeing units, 12 are

large scale, 16 are small category scattered at different places and 26 units are situated at Industrial Area A, Ludhiana. It states that there were 300 dyeing units operating in the district, out of which about 265 fall in the catchment area of Buddha Nallah, which originates in Koom Kalan village and runs parallel to Sutlej river on its south till it joins the river at Walipur Kalan village. The report further adds that there are 108 dyeing units connected to CETP of capacity 50 MLD, 67 dyeing units connected to CETP of capacity 40 MLD and 36 dyeing units are connected with CETP that has a capacity of 15 MLD.

4. The article alleges that despite substantial investments in the rejuvenation of Buddha Nallah, environmental activists have raised concerns over the findings of the report and stated that the NGT should conduct sampling from the independent body and with the presence of locals, without any prior warning to the industrialists. The article alleges that the PPCB is not doing its duty. It comes up with baseless reports which do not match with the current status and it always does inspection and checking at dyeing units after prior information.

5. The news item raises substantial issue relating to compliance of the environmental norms

6. Power of the Tribunal to take up the matter *suo-motu* has been recognized by the Hon'ble Supreme Court in the matter of "*Municipal Corporation of Greater Mumbai vs. Ankita Sinha & Ors.*" reported in 2021 SCC Online SC 897.

7. Hence, we implead following as respondents in this matter:

- (i). Punjab Pollution Control Board, Through its Member Secretary Head Office, Vatavaran Bhawan, PPCB, Nabha Road, Patiala

- (ii). Central Pollution Control Board, Through its Member Secretary Parivesh Bhawan, East Arjun Nagar, Delhi-110032
- (iii). Deputy Commissioner, Ludhiana Deputy Commissioner Office, Ludhiana- 141001

8. Let notice be issued to the above Respondents for filing their response, at least one week before next date of hearing.

9. Another matter being O.A. No. 225/2022 is pending before the Tribunal involving the same issue.

10. This OA be listed along with O.A. No. 225/2022 on 14.08.2024.

Prakash Shrivastava, CP

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

May 13, 2024
OA No. 546/2024
HB

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

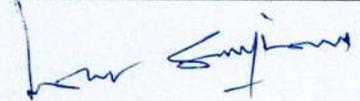
Original Application No. 546/2024

In the matter of:

News item titled "Ludhiana PPCB report flags 54 dyeing units in Buddha Nullah's catchment" appearing in the Hindustan Times dated 25.04.2024

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Sr. No.	Particulars	Page No.
1.	Compliance Report of CPCB in matter of Original Application No. 225/2022; Nitin Dhiman Versus State of Punjab & Others ((IA NO 815/2023, IA NO 668/2023, IA No. 596/2023, IA NO 20/2023, IA NO 21/2023) with OA 546 of 2024; News item titled "Ludhiana PPCB report flags 54 dyeing units in Buddha Nullah,s catchment" appearing in the Hindustan Times dated 25.04.2024"	1-19
2.	Annexure-1 A copy of directions dated 12.08.2024 issued by CPCB.	
3.	Annexure-2 A copy of letter dated 25.09.2024 to 50 MLD CETP.	
4.	Annexure-3&4 A copy of letter dated 26/09/2024 to 40 MLD and 15 MLD.	


Filed by: Adv. Mohit Singhal

On behalf of Central Pollution Control Board

Place: Delhi

Date: 19.03.2025

Compliance Report of CPCB in matter of Original Application No. 225/2022; Nitin Dhiman Versus State of Punjab & Others ((IA NO 815/2023, IA NO 668/2023, IA NO 596/2023, IA NO 20/2023, IA NO 21/2023) with OA 546 of 2024; News item titled "Ludhiana PPCB report flags 54 dyeing units in Buddha Nallah,s catchment" appearing in the Hindustan Times dated 25.04.2024"

1.0. Background and the Directions of Hon'ble National Green Tribunal:

The matter relates to the alleged discharge of pollutants by dyeing units in Ludhiana and the performance of three Common Effluent Treatment Plants (CETPs) set up for the purpose of treating the effluent discharged by these units. The Hon'ble National Green Tribunal is considering the issue of effluent discharge through the sewer system by the dyeing units into Buddha Nallah in the State of Punjab.

The Hon'ble National Green Tribunal, Principal Bench vide order dated 27.11.2024 in **Original Application No. 225/2022** (IA No. 815/2023, IA No. 668/2023, IA No. 596/2023, IA No. 20/2023, IA No. 21/2023); **Nitin Dhiman Versus State of Punjab & Others** has issued following directions to CPCB (Respondent No. 12):

Para-07 : *“Respondent No.12 (CPCB) is also directed to file the compliance report disclosing performance of CETPs and required actions to be taken by issuing necessary directions under the Water (Prevention and Control) of Pollution, 1974 and the Air (Prevention and Control) of Pollution Act, 1981 or under Section of 5 of Environment (Protection) Act, 1986.”*

Accordingly, inspection cum performance evaluation of 04 Common Effluent Treatment Plants (CETPs) in the area were carried out by team of officials from the Central Pollution Control Board on December 24-25, 2024. Three CETPs of capacity 40 MLD, 50 MLD, and 15 MLD were inspected and monitored on December 24, 2024, whereas one CETP of 500 KLD capacity was inspected and monitored on December 25, 2024. The officials of Punjab Pollution Control Board (PPCB) Regional office, Ludhiana were also present at the time of inspection, as per following details:

Name and Designation of Officials from CPCB	Name and Designation of Officials from PPCB
1. Dr. Narender Sharma, Scientist-'F' & Regional Director CPCB, RD Chandigarh	1. Sh. Bhisim Singh, AEE, PPCB, R.O-III, Ludhiana
2. Sh. J. P. Meena, Scientist- 'D' CPCB RD, Chandigarh	2. Sh. Rajpal Gill, AEE, PPCB, R.O-III, Ludhiana

3. Sh. Gokul Kanan, Scientist- 'B' IPC-VI 'CPCB H.O. Delhi	312. Bachanpal, AEE, PPCB -RO-IV, Ludhiana
4. Sh. Shubham Singh, SA, CPCB RD, Chandigarh	
5. Sh. Pankaj Saini, SA, CPCB RD, Chandigarh	

1.1. Details of CETPs:

There are four CETPs located in Ludhiana, three CETPs are for Textile dyeing and printing industries in the area and one CETP for Electroplating units. The basic details of the CETPs located in Ludhiana, including location, catchment area, treatment process/technology, designed capacity, operating agency, location of final discharge etc. were collected and compiled, as summarized in the **Table 1**.

Table 1: Details of CETPs located in Ludhiana.

Particulars/ S. No	1	2	3	4
Location of CETP	CETP 40 MLD (Focal point Module) Tajpur Road Near Central Jail, Ludhiana (Punjab)	CETP 50 MLD Tajpur Road, Near Central Jail, Ludhiana Punjab.	CETP, 15 MLD, Bahadur Ke Road, District Ludhiana (Punjab).	CETP 500 KLD focal point, Electroplating Plot No. D-260-261, Phase-VIII, Focal Point, Ludhiana
Industrial area	Dyeing Industrial area Focal Point (Phase 1 to Phase 8)	Dyeing Industries Tajpur Road area Ludhiana	Textile & Knitwear Dyeing Units Industrial Zone Bahadur Ke Road, Ludhiana	Electroplating Industries and Allied Industries (Metal Surface Treatment) of Ludhiana, Jalandhar, Amritsar, Malerkotla.
Number of member industries	65	105	36	1624
Date of Establishment	January 2022	March, 2022	July, 2020	2007
Treatment System of CETP	Physico-chemical followed by biological (SBR) process SBR	Physico-chemical followed by biological (SBR) process SBR	Physico-chemical followed by biological (SBR) process SBR	Physico-chemical treatment followed by Filtration, two-stage RO and evaporator
Designed capacity	40 MLD	50 MLD	15 MLD	500 KLD
Status of operation during visit	Operational	Operational	Operational	Operational
Special Purpose Vehicle (SPV)	M/s Punjab Dryers Association (PDA) Focal Point Module	M/s Punjab Dryers Association (PDA) Tajpur-	M/s Bahadur-Ke-Textile & Knitwear Association (SPV)	M/s Ludhiana Effluent Treatment Society (LETS)

		Rahon Road Cluster		
Operating Agency	M/s Larson & Tubro Construction Pvt. Ltd.	M/s Triveni Engineering & Industries Ltd.	M/s Sourabh Construction Pvt. Ltd.	M/s J.B.R technologies Pvt. Ltd.
Final discharge	Budha Nallah	Budha Nallah	Budha Nallah	Treated water is used for plantation, gardening, watering to MC parks, DC office, NH-95 etc.

- i. The Buddha Nallah is 47-km natural water stream originating from Koom Kalan and 14 km of the stretch flows through Ludhiana City. The Buddha Nallah eventually merging into the Sutlej River at Walipur Kalan, traveling another 18 km from Ludhiana.
- ii. These CETPs are being operated by different operating agencies under the supervision of 04 different Special Purpose Vehicles (SPVs).
- iii. The 40 MLD CETP is operated by M/s Larsen & Toubro Construction Private Limited under the supervision of the Special Purpose Vehicle (SPV), M/s Punjab Dyers Association (PDA) focal point module Ludhiana Punjab. This CETP treats effluent generated from textile dyeing units located in the Focal Point industrial area, Ludhiana.
- iv. The 50 MLD CETP is operated by M/s Triveni Engineering & Industries Limited under the supervision of SPV namely Punjab Dyers Association (PDA) for the Tajpur-Rahon Road Cluster in Ludhiana. This CETP treats effluent generated from textile dyeing units located in the Tajpur-Rahon Road area, Ludhiana.
- v. The 15 MLD CETP is operated by M/s Sourabh Construction Private Limited under the supervision of the SPV namely M/s Bahadur-Ke-Textile & Knitwear Association. This CETP treats dyeing effluent generated from textile and knitwear dyeing units located in the Bahadurke Road industrial area, Ludhiana.
- vi. 500 KLD CETP is operated by M/s J.B.R Technologies Private Limited, Ludhiana under the supervision of SPV M/s Ludhiana Effluent Treatment Society (LETS). This CETP caters to electroplating and allied industries (metal surface treatment) located in districts of Ludhiana, Jalandhar, Amritsar, and Malerkotla. The CETP with a designed capacity of 500 KLD

1.2. Methodology adopted for Performance Evaluation:

In compliance with the directions of Hon'ble NGT, inspection cum performance evaluation of all 04 CETPs were carried out. The methodology adopted for performance evaluation by collecting samples from various stages of CETPs including final discharge, collecting relevant information, percentage reduction in the monitored parameters have been calculated and reported. The collected samples were analyzed at CPCB central wastewater Laboratory, Delhi.

2.0 Performance Evaluation of CETPs:

The performance of individual CETPs based on the inspection and monitoring carried out by CPCB team is as follows:

2.1 40 MLD CETP, Tajpur Road:

1. The CETP is designed to treat 40 MLD effluent generated from textile dyeing & printing units located at focal point (Phase 1 to 8). ***The CETP is operating at average flow rate of 30 MLD, thus utilizing 75% of its capacity.*** It was observed that the CETP operator has installed Electromagnetic Flow Meters at the inlet receiving chamber, the outlet of the equalization tank, and the final outlet of the CETP.
2. The effluent is received at CETP through a dedicated conveyance system (Pipeline), which is maintained by the Punjab Dyers Association (SPV for 40 MLD capacity). The PPCB has not prescribed inlet standards for CETP.
3. The 40 MLD CETP is operated based on Physico-chemical followed by Biological Process (Sequential Batch Reactor). The CETP is comprised of the components namely Receiving Chamber (20.83 m³) → Coarse Screen (Mechanical + Manual) → Raw effluent Collection Sump (416.670 m³) → Stilling Chamber (20.830 m³) → Fine Screen (Mechanical + Manual) → Grit Chamber (2 No., 81.0 m³ each) → Oil & Grease Skimmer → Equalization Tank (20040 m³) → pH Correction Tank -I (555.560 m³, Lime & FeSO₄ dosing, RT-20 minutes) → Sludge Blanket Clarifier (3721.374 m³, Poly Dosing, RT-2.23 hr) → pH Correction Tank-II (138.890 m³, RT-5 min) > SBR Basins (04, RT-4 hr) → Chlorine Contact Tank (833.33 m³, RT-30 min) → Treated Effluent Disposal. Sludge dewatering system comprising of centrifuge followed by Dryer is provided. 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.

4. The *consent to operate granted to 40 MLD CETP under the Water Act, 1974 has been expired on 15.05.2023*, whereas the Consent to Operate 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 was valid upto 19.12.2024 for the operation of 40MLD CETP. The CETP operator has applied for renewal of consents under Air Act and Water Act to PPCB on 02.01.2025 and 25/10/2024 respectively. No information was made available to CPCB team with regard to application for renewal of authorization.
5. The bio-sludge generated from the SBR basin is collected in the bio-sludge sump followed by centrifugation for dewatering. Similarly, Chemical sludge from the Sludge Blanket Clarifier is collected in the Chemical sludge sump followed by centrifugation for dewatering. The filter cake obtained from centrifugation step is sent to the Paddle dryer to further reduce the water content and the solids recovered from Paddle dryer is sent to the TSDF. The filtrate from the decanters is sent to pH Correction Tank-1 followed by further treatment in CETP.
6. The CETP has provided sludge storage facility and obtained membership from Treatment, Storage, and Disposal Facility (TSDF), M/s Re-sustainability Limited (M/s Ramky Enviro Engineers Limited), Nimbua, Derabassi, Punjab. The CETP had disposed 3517.235 MT sludge during the year 2023- 24, as per the log book records, against the authorized capacity of 11000 MT/annum.
7. The CETP has installed one DG set of 1600 KVA capacity as a backup of power supply, which is equipped with acoustic enclosure and stack.
8. The CETP operator has installed a 1.5 TPH capacity boiler to produce steam, which is utilized in the paddle dryer for drying CETP sludge. Emissions from both the boiler and dryer are released into the atmosphere through a common stack, after passing through a wet scrubber as Air Pollution Control Device (APCD).
9. The grab samples collected by CPCB team from 40 MLD CETP from the following points (**Table 2**) were analyzed in CPCB Head Office laboratory:

Table 2: 40 MLD CETP Sampling Locations.

S. No.	Sampling Location
1.	Inlet of CETP
2.	Outlet of Equalization Tank
3.	Inlet of SBR

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4.	Outlet of SBR
5.	Final treated effluent
6.	SBR Tank (For MLSS and MLVSS)

10. The analysis results of samples collected by CPCB presented in **Table 3**. The PPCB has not prescribed inlet norms for CETP.

Table 3: Analysis results of the samples collected from 40 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	MoEF&CC notified Std. vide notification . 4 (E), dated 1/1/2016 for discharge into inland surface water
pH	7.4	7.0	6.5	7.1	8.3	6-9
Oil and Grease	BDL	--	--	--	BDL	10
COD	860	1000	468	187	49	250
BOD	319	432	265	62	27	30
TSS	226	385	63	48	29	100
TDS	4532	4340	4040	3972	4204	2100
FDS	4188	4012	3756	3772	3760	2100
Cl ⁻	2423	2325	2280	2375	1805	1000
TKN	7	--	--	--	12	50
NH ₃ -N	4	--	--	--	05	50
PO ₄ -P	1.36	0.80	0.14	0.88	0.31	5
NO ₃ -N	3.70	12.7	6.47	2.53	3.80	10
SO ₄	375	425	486	506	463	1000
Fluoride	0.7	1.1	1.1	2.20	0.9	2.0
Sulphide	3.2	--	--	--	3.6	2.0
Phenolic compounds as C ₆ H ₅ OH	1.9	--	--	--	0.92	1.0

11. As per analysis results of the samples collected by CPCB team, 40 MLD CETP was found to be non-complying with regard to Fixed Dissolved Solids (3760 mg/l > prescribed limit of 2100 mg/l), Sulphide 3.6 mg/l > prescribed limit of 2 mg/l and Chloride (1805 mg/l > prescribed limit of 1000 mg/l) parameters.

12. 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 4**.

Table 4: 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-B1	0.02	BDL	BDL	0.046	0.071	BDL	0.065	0.013	BDL	0.545	BDL	0.078

Final outlet	CT-B5	BDL	BDL	BDL	BDL	BDL	BDL	0.028	0.006	BDL	1.431	BDL	0.011
Prescribed limits (All values are in mg/l) prescribed by MoEF&CC vide notification . 4 (E), dated 1/1/2016 for discharge into inland surface water.		02	0.1	0.05	03	02	0.1	05	03	0.2	03	0.05	0.2

13. The concentration of heavy metal parameters in the samples collected by CPCB from 40 MLD CETP were found within the prescribed limits.

1. *The overall performance of CETP with regard to removal efficiency of COD, BOD and Suspended Solids parameters based on analyzed concentration of respective parameters at inlet and outlet was found to be 95.10%, 93.75 % and 92.47% respectively, which was found to be adequate to achieve the prescribed norms. However, the overall removal efficiency of FDS, Chloride and Sulphide parameters based on analyzed concentration of respective parameters was found to be 6.28 %, 22.36% and 0% respectively, requires improvement to achieve to prescribed limits.*

14. The biomass concentrations in the SBR basin in terms of MLSS and MLVSS were found as 3515 mg/l and 2510 mg/l respectively. ***The MLVSS/MLSS ratio was found to be 0.70. The MLVSS /MLSS ratio between 0.6-0.8 indicates satisfactory operation of biological treatment system (SBR)***

15. Online Continuous Effluent monitoring system (OCEMS) is installed at inlet and final outlet of CETP for measuring pH, TSS, COD BOD and Flow of raw influent and treated effluent quality. The CETP operator calibrated the Online Continuous Effluent Monitoring System (OCEMS) installed at the inlet and outlet on March 26, 2024 and the next calibration is due on March 25, 2025. The variation was observed in the lab analysis value and the OCEMS value on the day of inspection as presented in **Table 5**:

Table 5: Comparison of Laboratory Analysis Values with OCEMS Values.

Sampling location	Analysis results	Date/time	Parameters			
			pH	TSS	COD	BOD
Final outlet of CETP	Lab analysis value	24/12/2024/	8.3	29	49	27
	OCEMS value	22/12/2024/2.58 PM	7.7	39	156.8	20.4
% Variation w.r.t. Laboratory Data			(-) 7.22	(+) 34.48	(+)220	(-)24.44

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The OCEMS values for TSS and COD were found to be 34% and 220% higher and BOD was found to be 24% lower in comparison to laboratory analysis value, which indicates improper calibration and validation of OCEMS.

16. It was observed by CPCB team that the *CETP is discharging treated effluent into Budha Nallah through an underground pipeline as per CTO granted by PPCB and which has expired on 15/05/2023. This treated effluent meets River Sutlej after travelling a distance of about 24-25 km. 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 stated in the special terms and conditions that "there shall be no discharge into Budha Nallah."*

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 & FeSO₄ 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 (04 no's each of 45 m³/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.

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.

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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 ₆ H ₅ OH	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.											
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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 0.6-0.8. 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

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."*

2.1.2 15 MLD CETP, Bahadur Ke Road, Ludhiana

1. The CETP is designed to treat 15 MLD effluent generated from textile dyeing & printing units located at Industrial Area Bahadur Ke Road, Ludhiana. The CETP is operating with a flow rate of 10 MLD, thus utilizing 66.66% of its capacity.
2. The CETP receives effluent through a common dedicated underground pipeline. The CETP has installed electromagnetic flow meter at inlet of receiving chamber and final outlet. The records of the flow were found maintained by the CETP Operator and records of the same were maintained. The PPCB has not prescribed inlet standards for CETP.
3. The 15 MLD CETP is operated based on Physico-chemical followed by Biological Process (Sequential Batch Reactor). The CETP is comprised of the components namely Receiving Chamber → Coarse screen → Raw Effluent Pumping Station → Inlet chamber → Fine Screen (6mm) → Grit Chamber → Oil & Grease Removal system → Equalization Tank (Coarse Diffuser, 5002 m³) → Dissolved Air Flotation (DAF of capacity 750 m³/hr dosing Lime, FeSO₄ and Poly Electrolyte) → Clari-Flocculator (1718.75 m³) → Sequential Batch Reactor (02, each capacity 4823 m³) → Chlorine Contact Tank (312.50 m³, Chlorine dosing) → Treated water Tank (1000 m³) → Thickener (01 of capacity 398.94 m³) → Screw Press (03 nos of capacity each 25 m³/hr). The CETP has installed two C-tech Basin (SBR Tanks) which operates in cyclic batch mode having total cycle time 6hr (Filling and Aeration Phase-3 hr + Settling Phase-02 hr + Decanting Phase-01 hr). 04 Nos. of cycles per day /basin is carried out as informed by the CETP operator.
4. *The consent to operate granted to 15 MLD CETP under the Water Act, 1974 was valid upto 04/01/2023, whereas the Consent to Operate under the Air Act, 1981 is valid upto 31/03/2025. The Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 was valid upto 04/01/2023. **The 15 MLD CETP was found operating without valid consent to operate under the 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 07/09/2023.
5. The chemical sludge from Dissolved Air Flotation (DAF) is collected in the Primary Sludge sump and then passed through a thickener. The thickened sludge is collected in the thickened

sludge sump. The thickened sludge is fed into a belt press for dewatering. The filter cake obtained from the above step is sent to the Paddle dryer to further reduce the water content and the solids recovered from Paddle dryer is sent to the TSDF. The filtrate from the decanters is sent to main pumping station for further treatment.

6. It was observed that the CETP has provided sludge storage facility and obtained membership from TSDF, M/s Re-sustainability Limited (M/s Ramky Enviro Engineers Limited), Nimbua Derabassi, Punjab, for disposal of sludge. The CETP had disposed 602.685 MT sludge during the period from 02.04.2023 to 31.03.2024 through TSDF against authorized capacity of 735 MT/annum.
7. The CETP has installed one Boiler of 1 TPH capacity based on wood as fuel, for producing steam, which is used for drying of the CETP sludge. The boiler is using wood as fuel. Boiler and hot emission of paddle dryer is emitted through common stack after passing through wet scrubber as air pollution control device.
8. It was observed by CPCB team that :
 - i. ***The CETP is discharging treated effluent into Budha Nallah through a dedicated underground pipeline at around 5 Km from the CETP. However, as per the Environmental Clearance (EC) issued by MoEF&CC to the CETP dated 08/12/2014, the CETP is required to establish a Zero Liquid Discharge (ZLD) System.***
 - ii. Further, the Examination of documents shared by CETP with CPCB revealed that ***it was decided in the meeting of Appraisal Committee of MoEF&CC held on 03/03/2016 that 15 MLD CETP will be installed in two phases that is Phase 1: Non-ZLD Operation with discharge of treated effluent in Budda Nallah and Phase 2: Zero Liquid Discharge.*** A communication in this regard was also sent by MoEF&CC to PPCB vide letter dated 18/03/2016 on the Subject: "Follow up of the Minutes of the Appraisal Committee Meeting on CETPs held on 03/03/2016".
 - iii. Subsequently, a letter No. 2836 dated 21/04/2016 was ***issued by PPCB to Bahadurke Textile & Knitwear Association, communicating that 15 MLD CETP has to achieve the stringent standards with regard to Oil & Grease (nil mg/l), COD (50 mg/l), BOD (10 mg/l), TSS (20 mg/l), TDS (2100 mg/l), Sulphide (0.01 mg/l), Phenolic Compounds (nil mg/l) and Total Chromium (Nil mg/l) parameters, for discharge of 15 MLD treated trade effluent into***

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Budda Nallah, which is to be used as a carrier for irrigation purpose. Such prescribed standards are stringent as compared to the standards notified by MoEF&CC vide notification 4 (E), dated 1/1/2016 for discharge of treated CETP effluent into inland surface water.

iv. *The consent to operate under Water Act, 1974, was granted to 15 MLD CETP by PPCB on 11/9/2020 with validity upto 31/03/2021, for discharging treated effluent into Budda Nallah. The CTO was further renewed upto 04/01/2023. CTO has not been renewed by PPCB beyond 04/01/2023.*

9. The grab samples collected by CPCB team from 15 MLD CETP from the following points (Table 10) were analyzed in CPCB Head Office laboratory:

Table 10: 15 MLD CETP Sampling Locations.

S. No.	Description of sampling locations
1.	Inlet of CETP
2.	Outlet of Equalization Tank
3.	Inlet to SBR
4.	Final outlet of CETP (after Chlorination)
5.	SBR Tank

16. The analysis results of samples collected by CPCB presented in Table 11. The PPCB has not prescribed inlet standards for 15 MLD CETP.

Table 11: Analysis results of the samples collected from 15 MLD CETP.

Parameters (All values are in mg/l except pH)	Inlet of CETP	Outlet Equalization Tank	Inlet 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 and Stringent standards prescribed for 15 MLD CETP by PPCB (Given in parenthesis) .
pH	7.3	7.1	7.4	7.6	6-9
Oil and Grease	BDL	--	--	BDL	10 (NIL)
COD	411	419	144	330	250 (50)
BOD	258	200	56	123	30 (10)
TSS	393	318	69	52	100 (20)
TDS	3828	4264	4416	3776	2100 (2100)
FDS	3472	3900	4180	3492	2100
Cl ⁻	1805	1900	1995	1948	1000
TKN	20	--	--	13	50

NH ₃ -N	13	--	02	50
PO ₄ -P	1.64	0.5	0.06	0.51
NO ₃ -N	11.88	1.62	4.27	2.34
SO ₄	42	474	517	42
Fluoride	0.4	1.9	1.2	0.5
Sulphide	7.2	--	--	6.0
Phenolic compounds as C ₆ H ₅ OH	1.45	--	--	0.97
				1.0 (NIL)

10. *As per analysis results of the samples collected by CPCB team, 15 MLD CETP was found to be non-complying with regard to COD (330 mg/l > Prescribed limit of 250 mg/l), BOD (123 mg/l > Prescribed limit of 30 mg/l), FDS (3492 mg/l > prescribed limit of 2100 mg/l), Sulphide (6.0 mg/l > prescribed limit of 2 mg/l) and Chloride (1948 mg/l > prescribed limit of 1000 mg/l) parameters.*
11. *15 MLD CETP is also not complying with the stringent standards prescribed by PPCB for discharge into Budda Nallah, for COD (330 mg/l > Prescribed limit of 50 mg/l), BOD (123 mg/l > Prescribed limit of 10 mg/l), TSS (52 mg/l > Prescribed limit of 20 mg/l), TDS, (3776 mg/l > prescribed limit of 2100 mg/l), Sulphide (6.0 mg/l > prescribed limit of 0.1 mg/l) and Phenolic Compounds (0.97 mg/l > prescribed limit of Nil mg/l) parameters.*
12. 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 12**.

Table 12: 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-C1	0.018	BDL	BDL	0.168	1.337	BDL	0.068	0.041	BDL	5.273	BDL	0.193
Final outlet	CT-C5	BDL	BDL	BDL	BDL	0.163	BDL	0.021	0.01	BDL	1.501	BDL	0.011
Prescribed limits (All values are in mg/l) (Stringent standards prescribed for 15 MLD CETP by PPCB (Given in parenthesis))		02 (NIL)	0.1	03	0.05	02	0.1	05	03	0.2	03	0.05	0.2

13. The concentration of heavy metal parameters in the samples collected by CPCB from 15 MLD CETP were found within the limits prescribed by MoEF&CC and PPCB.
14. *The overall performance of CETP with regard to removal efficiency of COD, BOD, TSS, FDS, Chloride and Sulphide based on the analyzed concentration of respective parameters was*

found to 21.2%, 38.5%, 83.6%, 3.2%, 0% and ~~12.7%~~ ^{12.6%} respectively which needs improvement to achieve the prescribed standards.

15. The biomass concentrations in the SBR basin in terms of MLSS and MLVSS were found as 2175 mg/l and 807 mg/l respectively, with MLVSS/MLSS ratio as 0.37, which is too low to operate biological treatment system efficiently, as indicated from very low COD and BOD removal efficiency. The recommended MLVSS/MLSS ratio is 0.6 to 0.8.
16. 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 13**:

Table 13: Comparison of Laboratory Analysis Values with OCEMS Values.

Sampling location	Analysis results/Grab	Date/time	Parameters			
			pH	TSS	COD	BOD
Final outlet of CETP		6.04 PM				
	Lab data	24/12/24	7.60	52	330	123
	OCEMS data	24/12/24	7.95	16.2	79.5	19.9
% Variation w.r.t. Laboratory Data			(+) 4.6	(-) 68.84	(-) 75.90	(-) 83.82

A wide variation was observed in the lab analysis value and the OCEMS value on the day of inspection. The OCEMS values for TSS, COD and BOD were found to be 69% to 84% lower in comparison to laboratory analysis values, which indicates improper calibration.

2.1.3 500 KLD CETP, Phase-VIII, Focal Point, Ludhiana:

- The CETP is designed to treat 500 KLD effluent generated from electroplating, metal finishing industries, and allied industries located across Punjab, excluding Mohali, District Fatehgarh Sahib, Patiala, Khanna, and Rupnagar. The CETP is operating with flow rate of 400 KLD, thus utilizing 80% of its capacity.
- The CETP receives raw effluent through dedicated tankers from member units through vehicles (54 in number) equipped with GPS system for carrying effluent. The PPCB has not prescribed inlet standards for CETP.
- The CETP operator has installed electromagnetic flow meter at outlet of Tube settler, R.O Feed, R.O Permeate R.O Reject and records of the same were found maintained.

5. The CETP has obtained consent to operate under water act with validity upto 30/06/2027 and under the Air Act, 1984 with validity upto 30/06/2028. The Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 is valid upto 06.08.2029
6. The 500 KLD CETP is operated based on Physico-chemical treatment followed by filtration, two stage Reverse Osmosis (RO) and Evaporator. The CETP is comprised of the components namely Raw effluent collection Tank- (162.5m³)→ Oil & Grease removal System → Equalization Tank (02 each 750 KL x 2) → Reaction Tank (04 No's, 26.3 m³ x 2 + 18.64 m³ x 1 + 35.65 m³ x 1) (adding lime + Sodium metabisulfite + poly electrolyte)→ Primary Tube Settler (6 No's, 20.62 m³ x 5 + 15 m³ x 1) → Secondary Tube Settler (6 No's, 12.83 m³) → Clarifier (235.5 m³) → Sand Filter → Activated Carbon Filter (1.58 m³ x 1 + 1.727 m³ x 2) → Anion Ion exchange Unit (5.46 m³) → Cation Ion Exchange Unit (5.46 m³) → Reverse Osmosis (500 m³/day) → Evaporator Vessels (04, each 7.84 m³) → Sludge Thickener → Dryer (01)→ Centrifuge → Sludge Drying Beds (04 No's).
7. The CETP operator has installed one Thermopac of 1 Lac KCal/hr capacity, to produce steam for utilization in the evaporation plant for treatment of R.O Reject.
8. The CETP has provided sludge storage room of (24 ft x 15 ft x 10 ft) size for storage of the CETP sludge and obtained membership from TSDF, M/s Re-sustainability Limited (M/s Ramky Enviro Engineers Limited) for final disposal of CETP sludge. The CETP had disposed 738.87 MT sludge during the period of 01.04.2023 to 31.03.2024 through TSDF against the authorized capacity of 540.24 MT/annum.
9. The CETP operator has installed 03 KLD Sewage Treatment Plant (STP) based on Moving Bed Biofilm Reactor (MBBR) technology for treatment of domestic wastewater. The STP is comprised of Collection Tank > MBBR Reactor > Tube Settler > Filter Press > Treated water Tank. The treated effluent of STP is used for inhouse plantation.
10. The grab samples collected by CPCB team from 500KLD CETP from the following points (**Table 14**) were analyzed in CPCB Head Office laboratory:

Table 14: 500 KLD CETP Sampling Locations.

S. No.	Description of sampling locations
1.	Equalization Tank of CETP
2.	Outlet of Tube Settler
3.	R.O. Feed
4.	Final outlet (R.O permeate)

11. The analysis results of samples collected by CPCB presented in **Table 15**.

Table 15: Analysis results of the samples collected from 500 KLD CETP.

Parameters (All values are in mg/l except pH)	Outlet of Equalization Tank	Outlet of Tube settler	Inlet of R.O Feed	Final outlet (R.O permeate)	MoEF&CC notified Std. vide Notification S.O. 4 (E), dated 1/1/2016
pH	< 2.0	8.2	7.3	7.5	6-9
Oil and Grease	BDL	--	--	BDL	10
COD	2162	396	59	65	250
BOD	1570	137	27	28	30
TSS	--	81	17	< 10	100
TDS	--	8340	2672	1016	--
FDS	--	7408	1920	680	2100
Cl ⁻	--	3135	998	63	1000
TKN	156	--	--	BDL	50
NH ₃ -N	150	--	--	< 1	50
PO ₄ -P	3.47	BDL	0.08	0.71	5
NO ₃ -N	BDL	14.4	12.0	12.69	10
SO ₄	28	669	495	149	1000
Fluoride	1.1	15.5	3.1	0.9	1.0
Sulphide	6.8	--	--	4.0	2.0
Phenol compounds as C ₆ H ₅ OH	1.41	--	--	BDL	1.0

12. As per analysis results of the samples collected by CPCB team, 500 KLD CETP was found to be non-complying with regard to Sulphide (4.0 mg/l > prescribed limit of 2 mg/l) and Nitrate (12.69 mg/l > prescribed limit of 10 mg/l) parameters.

13. 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 16**.

Table 16: 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-D1	193.2	BDL	0.054	35.1	78.1	13.3	1355	108.5	0.08	11650	0.586	0.2
Final outlet	CT-D4	BDL	BDL	BDL	0.026	0.106	0.008	0.021	BDL	BDL	0.278	BDL	BDL
Prescribed limits (All values are in mg/l) prescribed by MoEF&CC vide notification . 4 (E), dated 1/1/2016 for discharge into inland surface water.		02	0.1	03	0.05	02	0.1	05	03	0.2	03	0.05	0.2

14. The concentration of heavy metal parameters in the samples collected by CPCB from 500 KLD CETP were found within the prescribed limits.
15. The overall performance of CETP with regard to removal efficiency of COD, BOD, TSS and FDS parameters was found to be 83.6% , 79.5%, 87.6% and 90.8% respectively, which is adequate to meet the limits prescribed for respective parameters. ***The overall performance of CETP with regard to removal efficiency of NO₃-N and Sulphide parameters was found to be 9.3% and 71.6% respectively, requires improvement to achieve to prescribed limits.***
16. The treated effluent (RO Permeate) of 500 KLD CETP is used for cooling tower makeup water, plantation, gardening, watering to MC parks, DC office, NH-95, construction work as per CTO granted by PPCB. The CETP has also entered into an agreement with M/s Vardhman Special Steels Limited C-58, Focal Point Phase-3, Ludhiana, for taking 100 KLD treated effluent through tankers. Since, 500 KLD was installed before 2006, EIA notification is not applicable and the CETP was not required to obtain environmental clearance.
17. The CETP operator has installed OCEMS (flow meter and PTZ Camera) at final outlet/ RO permeate, and is connected to CPCB/PPCB server.

2.2. Summary of Performance Evaluation of CETPs conducted by CPCB Team:

2.2.1. 40 MLD CETP, Tajpur Road:

The overall performance of CETP with regard to removal efficiency of COD, BOD and Suspended Solids parameters based on analyzed concentration of respective parameters at inlet and outlet was found to be 95.10%, 93.75 % and 92.47% respectively, which was found to be adequate to achieve

the prescribed norms. However, the overall removal efficiency of FDS, Chloride and Sulphide parameters based on analyzed concentration of respective parameters was found to be 6.28 %, 22.36% and 0% respectively, requires improvement to achieve to prescribed limits. The biomass concentrations in the SBR basin in terms of MLSS and MLVSS were found as 3515 mg/l and 2510 mg/l respectively. The MLVSS/MLSS ratio was found to be 0.70. The MLVSS /MLSS ratio between 0.6-0.8 indicates satisfactory operation of biological treatment system (SBR)

2.2.2. 50 MLD CETP, Tajpur Road:

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. 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 0.6-0.8. The MLVSS /MLSS ratio between 0.6-0.8 indicates satisfactory operation of biological treatment system (SBR)

2.2.3. 15 MLD CETP, Bahadur Ke Road, Ludhiana:

The overall performance of CETP with regard to removal efficiency of COD, BOD, TSS, FDS, Chloride and Sulphide based on the analyzed concentration of respective parameters was found to be 21.2%, 38.5%, 83.6%, 3.2%, 0% and 16.7% respectively, requires improvement to achieve to prescribed limits. The biomass concentrations in the SBR basin in terms of MLSS and MLVSS were found as 2175 mg/l and 807 mg/l respectively, with MLVSS/MLSS ratio as 0.37, which is too low to operate biological treatment system efficiently, as indicated from very low COD and BOD removal efficiency. The recommended MLVSS/MLSS ratio is 0.6 to 0.8.

2.2.4. 500 KLD CETP, Phase-VIII, Focal Point, Ludhiana:

The overall performance of CETP with regard to removal efficiency of COD, BOD, TSS and FDS parameters was found to be 83.6% , 79.5%, 87.6% and 90.8% respectively, which is adequate to meet the limits prescribed for respective parameters. The overall performance of CETP with regard to removal efficiency of NO₃-N and Sulphide parameters was found to be 9.3% and 71.6% respectively, requires improvement to achieve to prescribed limits.

2.3. Non-compliances/Violations observed by CPCB Team:

The non-compliances/violations observed by CPCB Team are summarized in the following **Table 17:**

Table 17: Summary of the non-compliances/violations observed by CPCB Team.

S.No.	CETP	Non-compliances/Violations observed by CPCB Team
1	40 MLD CETP, Tajpur Road, Ludhiana	<ol style="list-style-type: none"> 1. The CETP is <i>non-complying with regard to concentration of FDS (3760 mg/l > prescribed limit of 2100 mg/l), Sulphide 3.6 mg/l > prescribed limit of 2 mg/l and Chloride (1805 mg/l > prescribed limit of 1000 mg/l) parameters.</i> 2. <i>The CETP is discharging treated effluent into Budha Nallah through an underground pipeline and this treated effluent meets River Sutlej after travelling a distance of about 24-25 km. 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 stated in the special terms and conditions that "there shall be no discharge into Budha Nallah." The CETP is not complying with the disposal condition stipulated in the environmental clearance issued by Ministry of Environment, Forest and Climate Change.</i> 3. <i>The CETP is operating without valid consent to operate under Water Act, 1974.</i> 4. <i>A wide variation was observed in the lab analysis value and the OCEMS value on the day of inspection, which indicates improper calibration of OCEMS.</i>
2	50 MLD CETP, Tajpur Road, Ludhiana	<ol style="list-style-type: none"> 1. The CETP is <i>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.</i> 2. <i>The CETP is discharging treated effluent into Budha Nallah through an underground conveyance channel, which ultimately meets River Sutlej. As per environment clearance granted to the CETPs. The treated water shall not be discharged into Buddha Nallah. The CETP is not complying</i>

		<p>with the disposal condition stipulated in the environmental clearance issued by Ministry of Environment, Forest and Climate Change.</p> <p>3. <i>The CETP is operating without valid consent to operate under Water Act, 1974 and without valid Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.</i></p> <p>4. <i>A wide variation was observed in the lab analysis value and the OCEMS value on the day of inspection, indicating improper calibration of OCEMS.</i></p>
3	15 MLD CETP, Bahadur Ke Road, Ludhiana	<p>1. <i>The CETP is non-complying with regard to COD (330 mg/l > Prescribed limit of 250 mg/l), BOD (123 mg/l > Prescribed limit of 30 mg/l), FDS (3492 mg/l > prescribed limit of 2100 mg/l), Sulphide (6.0 mg/l > prescribed limit of 2 mg/l) and Chloride (1948 mg/l > prescribed limit of 1000 mg/l) parameters prescribed by MoEF&CC vide notification 4 (E), dated 1/1/2016 for discharge into inland surface water.</i></p> <p>5. <i>The CETP is also not complying with the stringent standards prescribed by PPCB for discharge into Budda Nallah, for COD (330 mg/l > Prescribed limit of 50 mg/l), BOD (123 mg/l > Prescribed limit of 10 mg/l), TSS (52 mg/l > Prescribed limit of 20 mg/l), TDS, (3776 mg/l > prescribed limit of 2100 mg/l), Sulphide (6.0 mg/l > prescribed limit of 0.1 mg/l) and Phenolic Compounds (0.97 mg/l > prescribed limit of Nil mg/l) parameters.</i></p> <p>6. <i>As per the Environmental Clearance (EC) issued by MoEF&CC to the CETP dated 08/12/2014, the CETP is required to establish a Zero Liquid Discharge (ZLD) System. However, it was decided in the meeting of Appraisal Committee of MoEF&CC held on 03/03/2016 that 15 MLD CETP will be installed in two phases that is Phase 1: Non-ZLD Operation with discharge of treated effluent in Budda Nallah and Phase</i></p>

2: Zero Liquid Discharge. A communication in this regard was also sent by MoEF&CC to PPCB vide letter dated 18/03/2016 on the Subject: "Follow up of the Minutes of the Appraisal Committee Meeting on CETPs held on 03/03/2016". **PPCB vide letter No. 2836 dated 21/04/2016 prescribed the stringent standards with regard to Oil & Grease (nil mg/l), COD (50 mg/l), BOD (10 mg/l), TSS (20 mg/l), TDS (2100 mg/l), Sulphide (0.01 mg/l), Phenolic Compounds (nil mg/l) and Total Chromium (Nil mg/l) parameters, for discharge of 15 MLD treated trade effluent into Budda Nallah, which is to be used as carrier for irrigation purpose. Such prescribed standards are stringent as compared to the standards notified by MoEF&CC vide notification 4 (E), dated 1/1/2016 for discharge of treated CETP effluent into inland surface water. The consent to operate under Water Act, 1974, was granted to 15 MLD CETP by PPCB on 11/9/2020 with validity upto 31/03/2021, for discharging treated effluent into Budda Nallah. The CTO was further renewed upto 04/01/2023. CTO has not been renewed by PPCB beyond 04/01/2023.**

2. **CETP is discharging treated effluent into Budha Nallah through a dedicated underground pipeline without complying with the stringent parameters prescribed by PPCB, for this purpose and also without having valid consent to operate under Water Act, 1974.**
3. **The CETP is operating without valid consent to operate under Water Act, 1974 and without valid Authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.**
4. **A wide variation was observed in the lab analysis value and the OCEMS value on the day of inspection, which indicates improper calibration.**

4	500 KLD CETP, Phase-VIII, Focal Point, Ludhiana	1. <i>CETP is non-complying with regard to Sulphide (4.0 mg/l > prescribed limit of 2 mg/l) and Nitrate (12.69 mg/l > prescribed limit of 10 mg/l) parameters.</i>
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2.4. Directions issued by CPCB for the required action to be taken:

Based on the non-compliances observed during inspection and monitoring of 04 common effluent treatment plant (CETPs) located in Ludhiana during April 22-23, 2024, CPCB has issued Direction dated 12.08.2024 (copy given at **Annexure 1**) under Section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974 to Punjab Pollution Control Board to take appropriate action.

Subsequent to the directions issued by CPCB, Punjab Pollution control board has issued the following directions under section 33 A of the Water (Prevention and Control of Pollution) Act, 1974 vide letter dated 25.09.2024 to 50 MLD CETP (copy given at **Annexure 2**) and vide letter dated 26/09/2024 to 40 MLD and 15 MLD (copies given at **Annexure 3 and 4**)

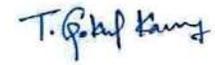
- 1) *That, the SPV shall meet with the prescribed discharge standards and to comply with the disposal conditions mentioned in the Environmental Clearance granted by the Ministry of Environment, Forest and Climate Change.*
2. *That, the SPV shall immediately stop the discharge of effluent from the CETP into Buddha Nallah or any other surface water body.*

As similar non-compliances have been observed by CPCB team during this inspection and monitoring of CETPs also carried out during December 24-25, 2024, the compliance of the above directions issued by CPCB and the directions issued by PPCB need to be ensured by Punjab Pollution Control Board in a time bound matter.

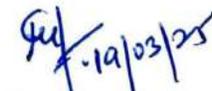
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केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

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 therefore; 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

‘परिवेश भवन’ पूर्वी अर्जुन नगर, दिल्ली-110032

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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.
- 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

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

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



(Bharat Kumar Sharma)





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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: seezo2dhppcb@yahoo.com

Ph No. 0161-2670141

No. PPCB/SEE/ZO-2/LDH/2024/5805

Regd.

Dated 05/09/24

To

The Chairman,
Punjab Dyers Association 50 MLD CETP Plant,
Backside Central Jail, Tajpur Road, Ludhiana.

Sub:

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

Whereas, Punjab Dyers Association (SPV) is operating a Common Effluent Treatment Plant (CETP) of capacity 50 MLD installed for treatment of waste water of the cluster of textiles dyeing industries located at Tajpur Road in Ludhiana.

And whereas, since the inception and commissioning, the SPV of 50 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 was granted consent to operate under Water (Prevention & Control of Pollution) Act, 1974, vide no. CTOW/Fresh/LDH3/2022/18475759 dated 23.08.2022, valid upto 22.08.2023 for the treatment of waste water generated from the cluster of textiles dyeing industries located at Tajpur Road in Ludhiana with following special conditions that:

1. The SPV shall install and connect the flow meters at individual outlets of industries into conveyance system and flow meter at inlet / outlet of CETP with the web-based server by 25.08.2022.
2. The SPV shall complete the construction work of hazardous waste storage room at site by 25.08.2022.
3. The SPV shall submit the feasibility report to reuse treated effluent onto land for irrigation by 25.08.2022.
4. The SPV shall ensure that there is no overflow from the manholes in the conveyance system of CETP 50 MLD at any locations.
5. The SPV shall construct a proper outlet before discharge into Buddha Nallah, from where effluent sample can be collected, within 10 days and also install one set of additional OCEMS at the said location, within one month.
6. The SPV shall stabilize the CETP so as to achieve the prescribed standard at the final outlet by 30.09.2022 failing which the Board shall be constrained to refuse consent to operate the outlet & issue closure directions to the member industries & impose Environmental Compensation without any further notice.
7. The SPV shall submit the feasibility report for discharge of treated effluent onto land for irrigation by 25.08.2022.

And whereas, the officer further brought out that 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 to the Punjab Pollution Control Board regarding non-compliance of four CETPs of Ludhiana. The CETP of capacity 50 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 46 MLD. The CETP receives effluent through dedicated underground pipeline and the treatment is based on Sequential Batch Reactor (SBR) technology. It was informed to the team that as per the consent, the CETP is permitted to discharge the treated effluent into Buddha 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 Buddha Nallah".
2. 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 not got its consent under the Water (Prevention & Control of Pollution) Act, 1974 and authorization under the Hazardous & Other Wastes (Management and Trans-boundary Movement) Rules, 2016 renewed, till date.
3. It was reported that 110 Dyeing and Printing units have obtained membership from common effluent treatment plant, it was also informed by the CETP operator that inlet norms for CETP is not prescribed in the consent.
4. 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 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.
5. 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.
6. 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.
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 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.

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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 team of officers in operation of the CETPs of Ludhiana installed for dyeing units during 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 to the Punjab Pollution Control Board vide letter no. CPCB/IPC-VII/CETP-Ludhiana/3471 dated 12.08.2024 to take appropriate action in the matter including imposition of 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 OCEMS analysers as per standard operating procedures/recommendations of the suppliers, so as to ensure generation of continuous & reliable data.

And whereas, vide the said directions dated 12.08.2024, the Punjab Pollution Control Board has been 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, considering the directions issued by the Central Pollution Control Board u/s 18(1) (b) of the Water (Prevention and Control of Pollution) Act, 1974 to the Punjab Pollution Control Board vide letter dated 12.08.2024, 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. Vivek Jindal & Sh. G.P. Singh, Directors of SPV (CETP 50 MLD) and Sh. I.K. Kapila, Advocate, Hon'ble Supreme Court of India attended the hearing and submitted a written reply which was taken on record. At first instance, the representatives had shown disagreement with the technical report of the CPCB in light of assumed technical errors and requested for resampling of the CETP. The representatives further informed that the OCEMS system had been got calibrated. Regarding utilization of treated wastewater for irrigation purposes, no proposal was submitted by the representatives of the SPV. It was further informed that the SPV has applied for obtaining consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 to the Board.

And whereas, during hearing, it was observed by the Competent Authority that the SPV was earlier granted Environmental Clearance by the MoEF&CC on 03.05.2013 with a specific condition that there shall be no discharge into the Buddha Nallah. The SPV is constantly being pursued by the Board to submit proposal / feasibility report to re-use the effluent onto land for irrigation as a condition of consent to operate granted temporarily under the Water (Prevention & Control of Pollution) Act, 1974 as well as in various hearings afforded to the SPV by the Competent Authority / Chairman of the Board. But, the SPV has failed to submit any proposal in this regard and thus the SPV is violating the provisions of Environmental Clearance obtained from the Ministry of Environment, Forest and Climate Change, Government of India. Even after the imposition Environmental Compensation and Bank Guarantee for compliance of environmental norms, the SPV is still violating the provisions of the Water (Prevention & Control of Pollution) Act, 1974 as concluded by the CPCB in its report.

And whereas, the representatives of the SPV could not give any satisfactory reply to the observations raised by the competent authority during the course of 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 50 MLD capacity at Tajpur 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 50 MLD capacity:

1. 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.
2. The SPV shall immediately stop the discharge of effluent from the CETP of 50 MLD capacity into Buddha Nallah or any other surface water body.

And whereas, the proceedings of the hearing were conveyed to the industry vide no. 5795-96 dated 25.09.2024.

Now, therefore, the Competent Authority of the Punjab Pollution Control Board, in 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 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.
2. That, the SPV shall immediately stop the discharge of effluent from the CETP of 50 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.

Endst. No. 5806

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

PUNJAB POLLUTION CONTROL BOARD		
Zonal Office-1, E-648-B, Phase-V, Focal Point, Ludhiana		
Tele Fax:- 0161-4673789	Website:- www.ppcb.gov.in	email:- ppcbzo1ldh@gmail.com

No. 5647

Speed post/Regd.

Date 26/09/24

To

M/s Punjab Dyers Association (Focal Point Module),
8.65 Acre Land, Tajpur Road, Jamalpur Awana,
Ludhiana.

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

Whereas, the Punjab Dyers Association (PDA) was earlier granted consent under the Water Act, 1974 vide no. CTOW/Renewal/LDH1/2024/23519336 dated 28.06.2024 valid upto 30.06.2026 for discharge of trade effluent into Budha Nallah after treatment through CETP of 40 MLD (Focal Point Module) and domestic effluent onto land for plantation through septic tank.

And whereas, the SPV was earlier given personal hearing before Chairman of the Board on 12.06.2023, wherein it was decided that on the basis of best assessment and judgment, an interim amount of Environmental Compensation (EC) of Rs. 75 lacs (Seventy Five Lacs) be imposed on the SPV (CETP 40 MLD, Focal Point Module) for violations made by the SPV and the SPV shall immediately deposit the same in the O/o Environmental Engineer, Regional Office-4, Ludhiana, within one week.

And whereas, the CETP has deposited Environmental Compensation amounting to Rs. 40 Lacs vide RRR1722355084065 dated 21.06.2023 & Rs. 35 Lacs vide RRR1732355120611 dated 22.06.2023.

And whereas, the Central Pollution Control Board (CPCB) has jointly carried out the inspection of Common effluent treatment plant (CETP- 40 MLD Focal Point Module) located in Ludhiana during April 22- 23, 2024 alongwith PPCB officers to verify the compliance status. The observations of the team are as under :-

1. The CETP is designed to treat 40 MLD capacity for treatment of effluent generated from dyeing & printing units located at focal point (Phase 1 to 08). However, presently, CETP operated at flow rate 29.00 MLD. The CETP is utilizing 73% of its capacity.
2. The CETP receives effluent through dedicated underground pipe line from member units to the CETP.
3. Pre-treatment system has not installed at individual member units level prior to send CETP inlet for treatment, as informed by the CETP operator.
4. Team observed that CETP operator has installed Electromagnetic Flow Meter at locations of Inlet receiving chamber, outlet of Equalization Tank, and final outlet of CETP.
5. The CETP is based on physico-chemical followed by biological (SBR) process. The CETP comprised of Receiving Chamber (20.83 m²) > Coarse Screen (Mechanical Manual) Raw effluent Collection Sump (416.670 m²) > Stilling Chamber (20.830 m³) > Fine Screen (mechanical + manual) Manual Grit Chamber (2 No., 81.0 m³) > Oil & Grease Skimmer > Equalization Tank (20040 m²) > PH Correction Tank-1 (555.560 m² Lime & FeSO₄, dosing, RT-20 min) > Sludge Blanket Clarifier (3721.374 m³, Poly Dosing, RT-2.23 hr) > pH Correction Tank-II (138.890 m³, RT-5 min) > SBR Basins (04), Chlorine Contact Tank (833.33 m³, RT-30 min) Treated Effluent Disposal > Centrifuge > Dryer.
6. The sample analysis result of collected samples from Equalization tank, final outlet of CETP are tabulated below:

Parameters	Sampling Locations		Standards
	Inlet of Equalization Tank	Final outlet of CETP	
Ph	8.2	8.3	6-9
TSS	181	28	100
TDS	4972	4636	--
Chloride	2551	2284	1000
Fluoride	1.1	0.9	2

Sulphate	295	461	1000
Sulphide	--	2.4	2
Phosphate as P	0.7	0.20	5
Ammonical Nitrogen	15	04	50
Nitrate-N	9.3	4.7	10
TKN	20	06	50
Phenol as (C ₆ H ₅ OH)	0.2	0.1	1
Oil & Grease	-	BDL	10
BOD	376	54	30
COD	943	262	250

All values are in mg/l except pH

- It is evident from the above analysis results that the CETP is not complying with the prescribed MoEF & CC effluent norms w.r.t BOD, COD, Sulphide and Chloride.
- During monitoring, the biomass concentration in the SBR basins MLSS 4661 mg/l (against the designed range 5000-7000 mg/l) MLVSS 3000 mg/l (against the designed range 3500-4200 mg/l) were respectively.
- The MLSS and MLVSS were found less against designed range which indicates poor operation of the biological system.
- Team collected samples of heavy metals from inlet and final outlet of CETP to verify the stipulated norms. The analysis results of heavy metal samples are given as below:

Sampling Location	Sample Code	T-Cr	Cd	Cu	Mn	Pb	Zn	Ni	As
I/L of Eq. Tank	40 A1	0.034	BDL	0.081	0.117	BDL	0.151	0.01	BDL
Final O/L	40 A6	BDL	BDL	1.108	0.107	BDL	0.015	0.005	BDL
Prescribed norms		02	0.05	03	02	0.1	05	03	0.2

All values are in mg/l except pH

- The analysis results of heavy metals revealed that the CETP is complying with the prescribed effluent norms.
- Online Continuous Effluent monitoring system OCEMS is installed at inlet and final outlet of CETP for measuring influent and effluent waste water quality. On the day of inspection, OCEMS at Inlet and final outlet of CETP were found operational. As informed by the CETP operator OCEMS of final outlet is connected to PPCB/CPCB server. The final outlet OCMES values observed at time of sampling. The relative difference between online data and laboratory analysis data are presented below:

Sampling Location	Analysis results	Date/time 12.00 PM	Parameters			
			pH	TSS	COD	BOD
Final outlet of CETP	Lab Data	22/04/2024	8.3	28	262	54
	Online data	22/04/2024	7.9	46	188	25.7
% Variation w.r.t. Laboratory Data			(-)5.06	(+)64.28	(-)28.24	-52.40

- The value recorded on line monitoring system values of pH, BOD, COD is lower than the lab analysis data however, value of TSS is higher than lab analysis data. Further it has been reported by CPCB that the CETP installed Online Continuous Effluent Monitoring System (OCEMS) at 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.
- As informed by CETP operator that Bio sludge generated from SBR basin is collected into bio-sludge sump its further fed into centrifuge for dewatering whereas chemical sludge generated from Sludge Blanket Clarifier is collected into chemical sludge sump and it is fed

into centrifuge for dewatering of the sludge. The filtrate of decanter is enrouted to pH Correction Tank -1 for further treatment.

15. At the time of visit, team observed that The CETP has made Shed for storage of the CETP sludge. As per log book records CETP sludge 3517.235 MT during (FY 23-24) was sent to TSDF M/s Re sustainability Limited (M/s Ramky Enviro Engineers Limited) for final disposal.
16. As per EC issued (MoEF&CC dated 13/05/2013) mentioned in special Terms & condition that the CETP shall not discharge into Budha Nallah. However, treated effluent of CETP is discharged into Budha Nallah through underground pipeline 1 km. The Budha Nallah is ultimately meeting into River Sutlej.

And whereas, the Punjab Pollution Control Board is regularly monitoring the quality of the effluent at the inlet & outlet of the CETP and the latest results are as under:

Date	01.01.24	03.02.24	25.02.24	21.03.24	03.04.24	05.04.24	02.05.24	06.06.24	01.07.24	02.08.24	Standards	Design Standards
Parameter	Outlet	Outlet	Outlet	Outlet	Outlet	Outlet	Outlet	Outlet	Outlet	Outlet	MoEF/CC	
pH	8.1	8.3	8.2	8.2	8.0	8.0	8.2	8.2	8	8.26	6.0 - 9.0	5.5-9.0
TSS	12	28	85	39	20	49	34	59	50	43	100	50
TDS	2409	3541	4636	5688	3341	3993	3639	3984	2923	4074	2100	Inlet TDS +/- 10 % variation
COD	120	112	140	152	148	136	148	139	76	142	250	100
BOD	17	16	22	27	22	20	28	27	14	26	30	10
O & G	8.0	5.8	4.8	7.2	6.2	6.6	5.8	5.4	5.6	6.2	10	10
Phenolic Compound	BDL	BDL	1.0	0.8	1.5	BDL	1	1	1	2.2	1	-
Sulphides	BDL	BDL	BDL	BDL	BDL	0.6	BDL	BDL	BDL	1.1	2	-
Amm. Nitrogen	2.5	4.7	5.4	BDL	3.4	2.8	2.8	1.2	BDL	1.6	50	2
SAR	32.5	34	36.16	41	20.9	36.0	25.8	BDL	BDL	BDL	-	-
Total Chromium	BDL	BDL	BDL	0.14	0.15	BDL	BDL	379	180	292	-	-
RSC	7.36	7.92	8.8	7.84	6.36	6.8	6.96	2	0.44	0.3	-	-
Bio-assay	90% survival of fish in 100% effluent in 96 Hr	100% survival of fish in 100% effluent in 96 Hr	100% survival of fish in 100% effluent in 96 Hr	100% survival of fish in 100% effluent in 96 Hr	100% survival of fish in 100% effluent in 96 Hr	100% survival of fish in 100% effluent in 96 Hr	100% survival of fish in 100% effluent in 96 Hr	90% survival of fish in 100% effluent in 96 Hr	90% survival of fish in 100% effluent in 96 Hr	70% survival of fish in 100% effluent in 96 Hr	90% survival of fish in 100% effluent in 96 Hrs.	90% survival of fish in 100% effluent in 96 Hrs.

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

And whereas, the CPCB vide its letter no. 3471 dated 12.08.2024, issued directions under section 18(1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention and control of pollution) Act, 1981, to the Punjab Pollution Control Board (PPCB) to take appropriate action including imposing Environmental Compensation and to ensure that CETPs are operated ensuring:

- 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.
- 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.
- 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:

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 achieved except with the issuance of directions in 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 40 MLD capacity at Tajpur 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 40 MLD capacity:

1. The consent to operate granted under the Water (Prevention & Control of Pollution) Act, 1974 be revoked.
2. 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.
3. The SPV shall immediately stop the discharge of effluent from the CETP of 40 MLD capacity into Buddha Nallah or any other surface water body.

And whereas, the proceedings of personal hearing held before the Chairman of the Board on 18.09.2024 has been conveyed to the CETP and consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 has been revoked.

Now, therefore, the Competent Authority of the Punjab Pollution Control Board, in 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 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.
2. That, the SPV shall immediately stop the discharge of effluent from the CETP of 40 MLD capacity into Buddha Nallah or any other surface water body.

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

For and on behalf of
 Punjab Pollution Control Board

Dated 26/09/24

Endst. No. 5848

A copy of the above is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office-1, Ludhiana for information and necessary action. It 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



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: seezo2dhppcb@yahoo.com

Ph No. 0161-2670141

No. PPCB/SEE/ZO-2/LDH/2024/5809-03

Regd.

Dated 25.09.24

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.

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. CTOV/Renewal/LDH3/2022/18251904 dated 05.07.2022 and Air (Prevention & Control of Pollution) Act, 1981 vide no. CTOA/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 15.06.2023 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 PERT 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 also work on 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 alongwith 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/ 25302219 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 that 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 form 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.

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:

1. 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. 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 no. 5798-99 dated 25.09.2024.

Now, therefore, the Competent Authority of the Punjab Pollution Control Board, in 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.

Endst. No. 5804

For and on behalf of
 ok 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
 ok Punjab Pollution Control Board