



Speed Post

File No. A-14011/1/2015-UPC-I

Date: 05/04/2019

To,

The Commissioner,
Ludhiana Municipal Corporation,
Mata Rani Chowk, Ludhiana,

SHOW CAUSE NOTICE UNDER SECTION 5 OF THE ENVIRONMENT (PROTECTION) ACT, 1986 FOR NON-COMPLYING SEWAGE TREATMENT PLANTS INSTALLED AT LUDHIANA, PUNJAB

WHEREAS, Ministry of Environment & Forests, Govt. of India, vide notification S.O.157(E) of 27.02.1996 has delegated powers vested under section 5 of the Environment (Protection) Act,1986 (29 of 1986) to the Chairman ,Central Pollution Control Board (CPCB), to issue direction to any Industry, Municipal Corporation, Municipal Council, Cantonment Board to any local or other Authority for the violation of emission and effluent standards notified under the Environment (Protection) Rules,1986 and other standards and norms; and

Whereas, sewage is a major cause for poor water quality and adversely impacts human health and aquatic life. The discharge of untreated, partially treated and treated sewage not meeting standards is further adding to the problem of water pollution and very sizeable gap exist in generation and treatment of sewage at Ludhiana; and

Whereas, the Central Government has notified the General Discharge Standards of Environmental Pollutants from various sources including municipal wastewater under the Environment (Protection) Act,1986 and the rules framed there under (schedule VI); and

Whereas, CPCB had issued directions to Punjab Pollution Control Board vide letter no. No. A-19014/43/06-MON dated 21/04/2015 under Section 18 (1) b of Water (Prevention and Control of Pollution) Act, 1974 to direct Ludhiana Municipal Corporation to develop infrastructure for sewage management and operate the STPs within stipulated norms; and

Whereas, CPCB had issued directions to Ludhiana Municipal Corporation vide letter No A-14011/1/2015-MON dated 09/10/2015 under Section 5 of the Environment (Protection) Act, 1986 regarding Treatment and Utilization of Sewage for Restoration of water quality of River. Compliance report / Action taken report from Ludhiana Municipal Corporation is still awaited; and

Whereas, CPCB had directed you to install Continuous Effluent Monitoring System at the outlet of STPs vide direction dated 09/10/15. However, no installation has been made till date and;

Whereas, Hon'ble NGT in matter of OA No. 593/2017 (WP (Civil) No. 375/2012) dated 31/08/2018 has directed CPCB as under:

"The CPCB may take penal action for failure, if any, against those accountable for setting up and maintaining STPs, CETPs and ETPs. CPCB may also assess and recover compensation for damage to the environment".

Whereas, CPCB prepared a methodology for levying penalty in reference to Hon'ble NGT order dated 31/08/2018 for discharge in violation of consent conditions mainly prescribed standards/consent limits; and

Whereas, CPCB has carried out monitoring of STPs installed at Ludhiana during the year of 2018. There are 05 STPs installed in Ludhiana with capacity of **466 MLD** and actual utilization is **543 MLD**. Out of 05 STPs, 03 STPs are UASB based and remaining 02 STPs based on SBR technology installed at Jamalpur (01 STP), Bhattian (02 STPs) and Balloke (02 STPs). Detailed assessment report is attached as **Annexure-I**. Brief status of non-compliant STPs are as follows:

Sl. No	STP Location	Date of Inspection	Installed Capacity (MLD)	Parameters				Non-Complying Parameter (s)
				pH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	
General Discharge Standards				5.5-8.5	30	250	100	
1	Jamalpur	7-9/09/18	48	7.07	47	248	133	BOD, TSS
2	Bhattian	-do-	111	7.05	31	147	110	BOD, TSS


WHEREAS, it is evident from the above observations that STPs at Jamalpur and Bhattian located in Ludhiana, Punjab have violated General Discharge Standards and discharging partially treated effluent and posing potential threat to the surrounding environment; and

WHEREAS, it is obvious that non-compliance by the STPs operated by Ludhiana Municipal Corporation is continuing, water quality of river Satluj is getting adversely affected and there is a need to prevent further deterioration of the water quality of natural water resources.

Now, therefore, in view of the above observations and in exercise of powers delegated to the Chairman, Central Pollution Control Board under section 5 of the Environment (Protection) Act, 1986, show cause notice is hereby served to explain the reasons as to why action should not be taken against Ludhiana Municipal Corporation including levying of Environmental Compensation for non-compliances of identified STPs with respect to General Discharge Standards and non-installation of OCEMS.


Ludhiana Municipal Corporation is also hereby directed to submit time bound action plan for corrective action in the matter including augmentation and upgradation of these STPs so as to ensure compliance with the notified/prescribed standards.

The reply to the Show Cause Notice shall be submitted by Ludhiana Municipal Corporation to this office within 7 days from the date of receipt of this notice failing which appropriate action as per the provision of the Environment (Protection) Act, 1986 /National Green Tribunal Act, 2010 including prosecution will be initiated.


(S. P. Singh Parihar)
CHAIRMAN

Copy to:

1. The Chairman,
Punjab Pollution Control Board
Vatavaran Bhawan, Nabha Road,
Patiala - 147 001 : for kind information and ensure
compliance please.
2. The Secretary,
Ministry of Environment, Forests, & Climate Change
Indira Bhawan, Aliganj, Jorbagh Road,
New Delhi-110003
3. The Secretary
Ministry of Water Resources,
River Development & Ganga Rejuvenation
626, Shram Shakti Bhawan, Rafi Marg.
New Delhi 110001
4. The Secretary
Ministry of Housing and Urban Affairs
Mulana Azad Road, Rajpath Area
Central Sectariat, New Delhi- 110001
- ✓ 5. DH-IT Division
6. DH-IPC-VI Division
7. DH-WQM-I Division


(A. Sudhakar)
Member Secretary



BRIEF STATUS REPORT OF SEWAGE TREATMENT PLANTS (STPS) MONITORED IN LUDHIANA, PUNJAB

Ludhiana is a large industrial city in the north Indian state of Punjab. As per Census of India the population of Ludhiana city is 16,18,879. Central Pollution Control Board (CPCB) has carried out Inventorization of Sewage Treatment Plants in India during 2014-15 and published a report "Inventorization of Sewage Treatment Plants in India". As per the information received there are 05 STPs installed in Ludhiana with capacity of **466 MLD** and actual utilization is **543 MLD**.

Out of 05 STPs, 03 STPs are operating on UASB based technology and remaining 02 STPs are operating on SBR based technology and installed at Jamalpur (01 STP), Bhattian (02 STPs) & Balloke (02 STPs).

CPCB carried out monitoring of 05 STPs during 07/09/2018 to 09/09/2018 and analytical results of Sewage Treatment Plants are tabulated at **Annexure – I**. The major observations made with respect to analysis report and field visit are mentioned below:

- With respect to BOD, 02 STPs installed at Jamalpur (48 MLD) & Bhattian (111 MLD) are not meeting the General Standards for Discharge of Environmental Pollutants into inland surface, public Sewers, land for irrigation, marine coastal areas under Schedule-VI of The Environment (Protection) Rules, 1986
- With respect to TSS, 02 STPs installed at Jamalpur (48 MLD) & Bhattian (111 MLD) are not meeting the General Standards for Discharge of Environmental Pollutants into inland surface, public Sewers, land for irrigation, marine coastal areas under Schedule-VI of The Environment (Protection) Rules, 1986.
- With respect to Total Coliform & Fecal Coliform, 01 STP installed at Bhattian, SBR unit (50MLD) is <1000 (MPN/100 ml) and remaining all STPs are 10^4 MPN/100 ml.
- Jamalpur STP receives industrial waste from dyeing units located in nearby area. The installed capacity of STP is 48 MLD and actual utilization is 80-90 MLD. The structure of sewage treatment plant is almost corroded and UASB reactor was found non-functional.
- STP at Bhattian receive 175 MLD of sewage against the capacity of 161 MLD. At Bhattian, 02 STPs installed in two phase i.e. Phase-I - 111 MLD (UASB based) and Phase-II – 50 MLD (SBR). STP is also receiving industrial effluent of Dyeing units.
- STP at Balloke receive 257 MLD of sewage against the capacity of 257 MLD. At Balloke, 02 STPs installed in two phase i.e. Phase-I - 152 MLD (UASB based) and Phase-II – 105 MLD (SBR). During inspection, it was observed that STP was receiving waste from Dairy farms and due to this, grit chamber of SBR and UASB reactor was not able to operate.

Annexure-I

Table 1: Analytical results of Physio-Chemical & Microbiology Lab

S. No.	STP Name	Technology	Installed Capacity (MLD)	Actual Treatment Capacity (MLD)	Sampling Location	Parameters							
						Physio-Chemical						Microbiology	
						pH	TSS (mg/l)	COD (mg/l)	BOD (mg/l)	NH ₃ -N (mg/l)	PO ₄ -P (mg/l)	Total Coliform (MPN/100 ml)	Fecal Coliform (MPN/100 ml)
1	Jamalpur	UASB	48	111	Inlet	7.09	142	286	65	11.8	0.76	92 x 10 ⁷	54 x 10 ⁷
					Outlet	7.07	133	248	47	15.1	0.91	17 x 10 ⁵	11 x 10 ⁵
2	Bhattian	SBR	50	55	Inlet	6.94	240	364	132	20.2	1.8	14 x 10 ⁵	11 x 10 ⁵
					Before Chlorination	6.51	77	147	58	-	-	6 x 10 ⁸	6 x 10 ⁸
					Outlet	7.5	51	70	14	10.6	0.21	790	490
3	Bhattian	UASB	111	120	Inlet	6.94	240	364	132	20.2	1.8	14 x 10 ⁵	11 x 10 ⁵
					Before Chlorination	7.22	62	127	32	-	-	92 x 10 ⁴	54 x 10 ⁴
					Outlet	7.05	110	147	31	24.1	1.8	35 x 10 ⁴	24 x 10 ⁴
4	Balloke	SBR	105	105	Inlet	6.77	152	151	36	15	0.93	92 x 10 ⁵	35 x 10 ⁵
					Before Chlorination	7.05	14	42	7	-	-	92 x 10 ³	14 x 10 ³
					Outlet	6.79	38	45	15	12	0.14	92 x 10 ³	92 x 10 ³
5	Balloke	UASB	152	152	Inlet	6.77	152	151	36	15	0.93	92 x 10 ⁵	35 x 10 ⁵
					Before Chlorination	7.15	47	91	27	-	-	11 x 10 ⁵	4 x 10 ⁵
					Outlet	7.15	47	94	30	30	0.41	24 x 10 ⁴	34 x 10 ³
Total			466	543									

Note : Monitoring was conducted during September 07-09, 2018.

Table 2: Analytical results of Heavy Metals

S. No.	STP Name	Technology	Installed Capacity (MLD)	Actual Treatment Capacity (MLD)	Sampling Location	PARAMETERS									
						Cd (mg/l)	Co (mg/l)	Cr (mg/l)	Cu (mg/l)	Fe (mg/l)	Mn (mg/l)	Ni (mg/l)	Pb (mg/l)	Sb (mg/l)	Zn (mg/l)
						0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.013	0.015	0.002
1	Jamalpur	UASB	48	111	Inlet	BDL	BDL	0.16	0.12	10.38	0.16	0.06	0.02	0.13	1.08
					Outlet	BDL	BDL	0.08	0.08	7.24	0.12	0.05	BDL	0.07	0.34
2	Bhattian	SBR	50	55	Inlet	BDL	BDL	0.03	0.04	7.85	0.35	0.03	0.02	0.02	0.27
					Outlet	BDL	BDL	BDL	0.01	1.32	0.14	0.02	BDL	0.02	0.06
3	Bhattian	UASB	111	120	Inlet	BDL	BDL	0.03	0.04	7.85	0.35	0.03	0.02	0.02	0.27
					Outlet	BDL	BDL	0.02	0.02	4.55	0.22	0.02	BDL	0.01	0.14
4	Balloke	SBR	105	105	Inlet	BDL	BDL	0.09	0.03	25.46	0.33	0.03	0.02	BDL	0.41
					Outlet	BDL	BDL	BDL	BDL	8.08	0.2	0.01	BDL	BDL	BDL
5	Balloke	UASB	152	152	Inlet	BDL	BDL	0.09	0.03	25.46	0.33	0.03	0.02	BDL	0.41
					Outlet	BDL	BDL	BDL	BDL	3.29	0.18	0.01	BDL	BDL	0.06

Note : Monitoring was conducted during September 07-09, 2018.