

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

Original Application No. 682 of 2019

In the matter of

Beant Singh Bajwa, President, National Anti-Corruption Council

V/s


State of Punjab

Factual / Action Taken Report on behalf of Punjab Pollution Control Board in compliance of order dated 16.9.2019 of this Hon'ble Tribunal.

RESPECTFULLY SHOWETH

1. That the Hon'ble National Green Tribunal has taken cognizance of complaint dated 24.5.2019 made by the applicant Sh. Beant Singh Bajwa and the same was treated as O.A No. 682 of 2019. The Hon'ble Tribunal was pleased to pass an order dated 16.9.2019 in the above mentioned case, whereby the Punjab Pollution Control Board has been directed to look into the matter, take appropriate action in accordance with Law and furnish a factual and action taken report to the Hon'ble Tribunal within one month from the date of receipt of copy of the order by E-mail. The relevant extract of the order dated 16.9.2019 is reproduced below for kind perusal and reference:

"Let the Punjab Pollution Control Board (State PCB) look into the matter, take appropriate action in accordance with Law and furnish a factual and action taken report to this Tribunal within one month from

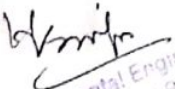

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Regional Officer, SANGRUR

the date of receipt of copy of this order by e-mail at judicial-ngt@gov.in. "

2. That in compliance to the order dated 16.9.2019 of this Hon'ble Tribunal, it is submitted that nine industrial units are operating in Trident complex situated at Village Dhaula, Mansa Road, District Barnala. The detail of the units, with product manufacturing, validity of consent of the Board under the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981, quantity of effluent generated, effluent treatment detail with mode of disposal and the treatment as well as mode of disposal of emissions may kindly be read in the following sub paras:

A) Trident Ltd., PCD Division, Village Dhaula, Distt. Barnala.

- i. The industry is a paper mill and has been granted consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981, both valid upto 31.03.2020, for manufacturing of Writing and Printing of Paper @ 375 MTD, by using agro waste as raw material, Writing and Printing Paper @ 75 TPD by using bleached pulp as raw material and captive power plant of 49.4 MW capacity with certain conditions as mentioned therein.
- ii. As per the consent granted, the industry, has been allowed to discharge its treated trade effluent onto land for plantation to the tune of 12800 KLD and into Dhanaula Drain to the tune of 8700 KLD. A perusal of the records maintained by the industry for the months of August, September and October 2019 reveals that the average discharge of treated trade effluent onto land for plantation is 9276 KLD and into Dhanaula Drain is 6835 KLD, which is well within the permitted quantities.
- iii. The industry has already obtained the permission from the Department of Irrigation, Government of Punjab vide endst. no. 2/7/02-IN(5)/2154 dated 03/02/2003 for discharge of its treated trade effluent into Dhanula drain.


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- iv. The industry has installed Effluent Treatment Plant to treat its trade effluent consisting of :-
- a) **Anaerobic Treatment for High Concentration effluent**
Equalization tank → Bio clarifier → Buffer Tank → UASB reactor → Gas Holder
- b) **Aerobic Treatment For Low Concentration effluent**
Collection Pit → Primary Clarifier-1,2 → Over flow → lagoon → Aeration Tank 1 → Aeration Tank 2 → Secondary Clarifier → overflow → Final collection pit → Treated trade effluent partially pumped to Dhanula drain and partially onto land for plantation purposes.
- v) The analysis report of the samples collected by officers of the Board in the last two quarters i.e. on 20.6.2019 and 30.9.2019 are annexed as Annexure-1 & Annexure-2 respectively and the same are found to be within the prescribed limits.
- vi) The Officer of the Board also collected sample of ground water from the borewell of Sh. Harbans Singh S/o Sh. Mehar Singh, Dhaula, District Barnala on 26.6.2019 as requested by a complainant Sh. Sandeep Singh Dhaliwal. The analysis results are annexed as Annexure-3. A perusal of analysis results reveals that the concentration of different parameters is within the desirable limits prescribed in IS:10500-2012.
- vii) The domestic effluent @ 128 KLD generated from the unit is treated in the STP installed by it and is utilized onto land for plantation.
- viii) The sources of Air Pollution in the industrial premises are tabulated herein below for kind perusal:-

Sources of Fuel / Process Emissions	No.	Steam Gen./ capacity	Type & Qty. of fuel to be consumed	Detail of Stack and its height (m)		Air Pollution Control Device
				Above GL.	Above RL.	
Cogen 2 (FBC Based) i.e Power Boiler-2 20 MW	02 nos	130 TPH	Rice Husk 200 TPD and Coal 250 TPD	Common stack Height 70 mtr	50 mtr (combined chimney is used)	Electrostatic Precipitator

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Cogen 3 (FBC based) i.e. Power Boiler-3 20 MW		130 TPH	Rice Husk 200 TPD and Coal 200TPD CH4 2000m3/day			Electrostatic Precipitator
IJT (FBC based) Cogen 1 9.4 MW i.e Power Boiler-1	01	50 TPH	Rice husk @ 240 TPD (Stand-by boiler, made operational on the basis of production requirement.)	Made of MS material Dia 2.1 mtr, Height 67 m	45 m	Electrostatic Precipitator
Recovery 1 Old Unit	1 nos	20 TPH	Black Liquor 165 TPD	Made of MS having dia 2.6 mtr & ht 55 mtr	33 mtr	Electrostatic Precipitator
Recovery 2 New Unit	1 nos	50 TPH	Black Liquor 400 TPD	Made of RCC having dia 2.6 mtr, Height 70 mtr	40	Electrostatic Precipitator
Lime Kilin	1 Nos	140 MTD	Furnace Oil @ 18.5 KL (During Startup)	50 mtr	30 mtr	Adequate
D. G sets	01	125 KVA	HSD @ 40 ltr/day	35 feet	15 feet	Canopy Provided

The analysis results of emission samples collected by the Board for last two quarters i.e. on 20.06.2019 & 20.09.2019 are tabulated as under: -

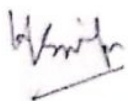
Sr. No.	Point of sample collection	Parameters	Results for sample collected on 20.06.2019	Results for sample collected on 20.09.2019
1.	Port hole on stack of CRP-II after APCD	Particulate Matter	121 mg/Nm ³	92 mg/Nm ³
2.	Port hole on stack of CRP-I after APCD	Particulate Matter	116 mg/Nm ³	135 mg/Nm ³
3.	Port hole on stack of Energy Section APCD	Particulate Matter	94 mg/Nm ³	69 mg/Nm ³

The copies of the analysis results are annexed as **Annexure-4 A & 4B** respectively.

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B) M/s Trident Ltd., (HTD) Mansa Road, vill. Dhaula, Distt. Barnala.

- i. The industry is a Towel manufacturing unit engaged in the manufacturing of Terry Towels @ 100 MTD & Dyed Yarn @ 20 MTD by using Cotton Yarn @ 129 MTD & Processing Chemicals @ 65 MTD, as raw material.
- ii. The industry was granted consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 vide no. CTOW/Renewal/BAR/2018/7239447 dated 31/03/2018, further extended upto valid upto 31/03/2020 and the Air (Prevention & Control of Pollution) Act, 1981 vide no. SEE(ZP-II)/SGR/APC/2010-11/V-(325)239 dated 23/07/2010 valid upto 31/03/2021, with conditions as mentioned therein.
- iii. As per the consent granted, the industry has been allowed to discharge its treated trade effluent onto land for plantation to the tune of 3000 KLD and into Dhanaula Drain to the tune of 6702 KLD. A perusal of the records maintained by the industry for the months of August, September and October 2019 reveals that the average discharge of treated trade effluent onto land for plantation is 2825 KLD and into Dhanaula Drain is 2302 KLD, which is well within the permitted quantities.
- iv. The industry has already obtained permission from the Department of Irrigation, Government of Punjab vide letter endst. no. 2/7/02-IN(5)/2154 dated 03/02/2003 for discharge of treated trade effluent into Dhanula Drain.
- v. The industry has installed Effluent Treatment Plant consisting of Screening Chamber →Lifting sump →Storage & Homogenizing tank →Neutralization tank → Distributor →Biological Oxygen tank → Sludge Recycle tank →Secondary Lamella Clarifier →Sludge thickener → Activated Carbon filter →Treated Water collection sump.
- vi. The analysis results of the samples collected by the Officer of the Board on 20.6.2019 are annexed as **Annexure-5**. A perusal of analysis results reveals that the concentration of various pollutants in the treated trade effluent is well within the permissible limits.



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- vii. The domestic effluent @ 40 KLD generated from the unit is treated in the STP installed by its sister concern unit M/s. Trident Ltd. (PCD) and is utilized onto land for plantation.
- viii. There is no source of air pollution in the industrial premises of this unit and the steam requirement is being met from the boiler installed in the premises of its sister concern unit namely M/s. Trident Ltd (PCD).

C) M/s Lotus Processor Pvt. Ltd. (Processing Unit of M/s Lotus Integrated Texpark Ltd), Mansa Road, Dhaula, District Barnala.

- i. The industry has been granted consent to operate under Water (Prevention & Control of Pollution) Act, 1974 vide no. CTOW/Renewal/BAR/2019/9672452 dt. 11.05.2019 valid up to 31.03.2020 and Air (Prevention & Control of Pollution) Act, 1981 vide no. CTOA/Renewal/BAR/ 2019/8299991 dt. 19.02.2019 valid up to 31.03.2020 to manufacture Dyed Terry Towels @ 6.06 MTD by using Grey Fabric @ 6.52 TPD and Processing Chemicals @ 5.0 TPD alongwith certain general and special conditions as mentioned therein.
- ii. As per consent, the industry has been allowed to generate and discharge trade effluent @ 455 KLD onto land for plantation after its treatment in the ETP installed by its sister concern unit namely M/s. Trident Ltd. (HTD).
- iii. The domestic effluent @ 2 KLD generated from the unit is treated in the STP installed by its sister concern unit M/s. Trident Ltd. (PCD) and is utilized onto land for plantation.
- iv. There is no source of air pollution in the industrial premises of this unit and the steam requirement is being met from the boiler installed in the premises of its sister concern unit M/s. Trident Ltd (PCD).
- v. At present the unit is lying closed.

D) M/s Lotus Texpark Ltd., (Fiber Dyeing Unit), LTL Textile Park, Trident Complex, Mansa-Road, Vill-Dhaulta, Barnala.

- i. The industry is engaged in Fiber dyeing @ 6.0 TPD by using Cotton yarn @ 6.0 TPD & dyeing chemicals @ 2.3 TPD as raw material. The industry was granted consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 vide

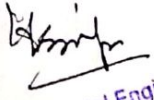

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no. CTOW/Renewal/BAR/2018/7074398 dated 30.04.2018 valid up to 31.03.2019 and under the Air (Prevention & Control of Pollution) Act, 1981 vide SEE(ZP-II)/SGR/APC/2012/F-572 dated 04.05.2012 valid upto 03.11.2012 subject to certain conditions as mentioned therein. The validity of consent to operate granted under the Water (Prevention & Control of Pollution) Act, 1974 has been extended vide no. CTOW/Renewal/BAR/2019/9672402 dated 01.07.2019 valid up to 31.12.2019. The validity of Consent to Operate granted under the Air (Prevention & Control of Pollution) Act, 1981 has also been extended from time to time and lastly vide CTOA/Renewal/BAR/2019/8299991 dated 19.02.2019 upto 31.03.2020.

- ii. As per consent, the industry has been allowed to generate and discharge trade effluent @ 400 KLD onto land for plantation after its treatment in the ETP installed by its sister concern unit namely M/s. Trident Ltd. (HTD).
- iii. The domestic effluent @ 1 KLD generated from the unit is treated in the STP installed by its sister concern unit M/s. Trident Ltd. (PCD) and is utilized onto land for plantation.
- iv. There is no source of air pollution in the industrial premises of this unit and the steam requirement is being met from the boiler installed in the premises of its sister concern unit namely M/s. Trident Ltd (PCD).

E) M/s Trident Ltd. (Unit-III), Weaving Unit, (Unit of M/s. Lotus Integrated Textpark Ltd.) Trident Complex, Mansa Road, Village Dhaula, Distt. Barnala.

- i. The industry is engaged in manufacturing of Grey Terry Towels @ 6.52 TPD. The industry has obtained consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 vide No. R16BARCTOW3475107 & Air (Prevention & Control of Pollution) Act, 1981 vide no. R16BARCTOA3475000 on 19.01.2016 valid upto 30.06.2020. The consents had been granted with suitable conditions as mentioned therein.


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- ii. As per consent, the industry has been allowed to generate and discharge trade effluent @ 10 KLD onto land for plantation after treatment in ETP installed by its sister concern unit namely M/s. Trident LTD (TTD).
- iii. The domestic effluent @ 10 KLD generated from the unit is treated in the STP installed by its sister concern unit M/s. Trident Ltd. (PCD) and is utilized onto land for plantation.
- iv. There is no source of air pollution in the industrial premises as there is no requirement of steam in the process.

F) M/s. Satyam Home Furnishing (P) Ltd., Made up Packing Unit of M/s Lotus Integrated Texpark Ltd, Mansa Road, Dhaula, District Barnala.

- i. The industry was granted consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 vide no. CTOW/Renewal/BAR/2019/8910531 dated 11.04.2019 valid upto 31.12.2021 and under the Air (Prevention & Control of Pollution) Act, 1981 vide no. CTOA/Fresh/BAR/2018/7103731 dated 16.04.2018 valid upto 30.06.2022, for made up Packing @ 6.0 TPD by using Dyed Terry Towel @ 6.06 TPD as raw material, with certain conditions mentioned therein.
- ii. There is no generation of trade effluent. The industry is treating its domestic effluent @ 8 KLD in the STP installed by the sister concern unit namely of M/s Trident Ltd. (PCD), Mansa road, Village Dhaula, District Barnala
- iii. There is no source of air pollution in the industrial premises of this unit as there is no requirement of steam in the process of the industry.
- iv. At present this unit is lying closed.

G) M/s Lotus Integrated Texpark Ltd (Melange Unit), Trident Complex, Mansa Road, Dhaula, Distt. Barnala.

- i. The industry was granted consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 vide no. CTOW/Fresh/BAR/2019/8562684 dated 30.01.2019 valid upto 30.09.2020 and under the Air (Prevention & Control of Pollution) Act, 1981 vide no. CTOA/Renewal/BAR/2019/8452194 dated

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15.01.2019 valid upto 30.09.2022, for Cotton and Blended Yarn @ 16.20 TPD and Process Waste Cotton @ 6.0 TPD by using Natural Cotton @ 20 TPD, Synthetic Fiber @ 2.5 TPD as raw material, with certain conditions as mentioned therein.

- ii. There is no generation of trade effluent. The industry has been allowed to discharge its domestic effluent @ 10 KLD onto land for plantation after passing through septic tank.
- iii. There is no requirement of steam in the process of the industry, but the industry has provided required rotary air filters to contain fluffs generated from the process.

H) M/s Creative Line Cotspin Pvt. Ltd., (Garmenting Unit of M/s Lotus Integrated Texpark Ltd, Mansa Road, Dhaula, District Barnala.

- i. This industry is engaged in the manufacturing of Bath rob @ 5.0 TPD using Terry Towel @ 5.5 TPD as raw material. The industry has obtained consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 vide letter dated 07.12.2015 having validity upto 31.12.2024.
- ii. There is no generation of trade effluent.
- iii. The industry is treating its domestic effluent @ 15 KLD in the STP installed by the sister concern unit namely of M/s Trident Ltd. (PCD), Mansa road, Village Dhaula, District Barnala
- iv. There is no source of air pollution in the industrial premises of this unit as there is no requirement of steam in the process of the industry.

I) M/s Trident Ltd. (SAP), Village Dhaula, Tehsil & Distt. Barnala.

- i. The industry is engaged in manufacturing of H₂SO₄ (98% Purity) @ 300 TPD Liquid Form (Licensed capacity). The industry has obtained consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 vide no. CTOW/Renewal/BAR/2019/9672684 & Air (Prevention & Control of Pollution) Act, 1981 vide no. CTOA/Renewal/BAR/2019/9672714 on 30.03.2019 valid upto 31.03.2023.

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 Environmental Engineer
 Pollution Control Board
 Regional Officer, SANGRHA

- ii. There is no generation of trade effluent and domestic effluent @ 0.5 KLD is treated in the STP of sister concern unit namely M/s Trident Ltd., (PCD).
 - iii. The industry has installed Mist Eliminator followed by Alkali Scrubber as Air Pollution Control Device to control the process emissions from final absorption tower and has provided stack of height 40 meters above the ground level.
 - iv. The air emission samples were also collected by the officers of the Board on 20.6.2019 and the analysis results are annexed as **Annexure-6**. A perusal of analysis results reveals that all the parameters are within the prescribed limits.
3. That it is evident from the facts summarized above, that all the industrial units of M/s Trident Group located at Dhaula, District Barnala have taken requisite measures to control water and Air pollution from their operations. The industries are being monitored by the Board regularly to ensure the compliance of norms. In case at any stage, any industry is found non complying, immediate action is initiated against the said industrial unit under the provisions of the relevant Pollution Control Laws and it is ensured that necessary corrective measures are taken by the said unit.
 4. That the Board is further pressing and pursuing the industries continuously for reduction in water consumption as well as wastewater generation from their processes by technological upgradation and byway of adopting suitable measures such as reduce, reuse, recycle & reprocess. As per records maintained by the industries, year wise production viz-a-viz effluent generation for years 2015,2016,2017,2018,2019 (till Oct) is tabulated in **Annexure- 7**
 5. That further it is submitted that the Board is also extending the opportunities of hearing to the industrial units as and when required. The detail of last hearings extended to the industrial units before the Competent Authority of the Board are summarized here in below for kind perusal:-

A) **Trident Ltd. (PCD), Village Dhaula, Distt. Barnala.**

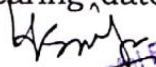

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 Regional Officer, SANGRUR

Hearing was held before Chairman of the Board on 27.06.2018, wherein after hearing, it was decided as under:

- a) The industry shall operate the ETP effectively and efficiently, so as to achieve the prescribed standards at all the times.
- b) The industry will take all necessary steps to ensure that the treated trade effluent discharged onto land for plantation is properly and uniformly distributed in entire plantation area through proper distribution system.
- c) The industry shall submit scheme for laying of piping network to make arrangements for use of remaining treated trade effluent for irrigation purposes by the farmers of the surrounding areas.
- d) The industry shall take services of any expert in the paper industry, for the reduction in the waste water generation from the unit.
- e) The industry shall adopt 10 villages at CSR activities for providing greenery and improving hygiene with the rehabilitation of village ponds on the model of Seechewal and to depute any plantation expert for designing the green plants.

B) M/s Trident Ltd. (HTD) Mansa Road, Vill. Dhaula, Barnala.

A personal hearing before the Chairman of the Board was held on 13/02/2019. The industry previously on hearing dated 27.6.2018 had submitted that since the installation of the first module of RO system of 2500 KLD alongwith MEE in April 2014, the industry is facing technical problem in stabilizing the plant. However, in spite of working continuously with the original equipment manufacturer M/s Euromech, Italy to stabilize the plant, the problem could not be resolved. Further, with the guidance of NEERI, Nagpur, the industry has taken offers from 5 manufacturers for the installation of RO system. The industry has now decided to replace UF technology with MBR technology as pre-treatment to RO. Further, instead of installing 3 modules of 2500 KLD each separately, the industry has now decided to install RO system of total capacity of 7500 KLD in one go. Later, the industry during the hearing dated 13.2.2019 stated as under:-


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- a. The industry is continuously working on the reduction of fresh water consumption and succeeded in reducing about 25% consumption of fresh water.
- b. The industry has hired Mr. Silvano Storti having expertise in this field and has entered into a contract with M/s Innovation Water Treatment and Recovery Services Pvt. Ltd. for preparation of technical comparative statement of quotation among all the offers received by the industry. He assured that after the installation of above project, no effluent shall be discharged into drain.
- c. The industry is regularly & properly operating its effluent treatment plant and the prescribed parameters are analyzed by it on daily basis and indicating conc. of prescribed parameter is within permissible limits.
- d. The industry has already taken all necessary steps to ensure that treated trade effluent is discharged onto land for plantation uniformly.
- e. The industry has completed plantation in 5 villages as per decision of the hearing.

After hearing the officers of the Board and representative of the industry, the Chairman of the Board decided as under:

- a) The industry shall submit PERT Chart regarding proposed RO followed by MEE, within 15 days and install the same by 31/12/2019.
 - b) The industry shall regularly operate & maintain its effluent treatment plant so as to achieve effluent standards for such discharges and shall ensure the compliance of conditions of consent at all times.
 - c) EE, RO, Sangrur shall regularly submit progress report regarding installation of RO followed by MEE by the industry.
- C) M/s Lotus Texpark Ltd., (Fiber Dyeing Unit), LTL Textile Park, Trident Complex, Mansa-Road, Vill-Dhaura, Barnala.**

Hearing was held before the Chief Environmental Engineer of the Board on 13.06.2019 wherein, it was decided as under:

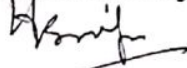
- a) The industry shall install and commission ATFD plant for treatment of mother liquor and recovery of mixed salt from it by 31.12.2019.

[Signature]
 Environmental Engineer
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 Regional Officer, SANGRUR

- b) The industry shall get the detailed ground water study from any reputed agency/institute like PAU along the Dhanuala drain to ascertain the effect on the ground water quality due to the discharge of industry by 31.12.2019.
- c) The renewal of consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 be granted to the industry upto 31.03.2020 subject to the condition that the industry shall comply with the hearing decision no. 1 & 2 in the stipulated period given to it.

The above mentioned factual and action taken report is hereby submitted in compliance of order dated 16.9.2019, for kind consideration and appropriate orders of this Hon'ble Tribunal.

Dated: 2.12.19

Submitted by

(Harjeet Singh) Engineer,
Environmental Engineer,
Punjab Pollution Control Board,
Regional Office, Sangrur

Engineer,
Control Board,
Office, SANGRUR

**POLLUTION CONTROL BOARD VATAVARAN BHAVAN,
NABHA ROAD, PATIALA
WATER ANALYSIS REPORT**



- 1. Laboratory Sample No. E-494-498/H.O.Lab. Monitoring/2019
- 2. ULR No. ULR-TC70451800000001085P
- 3. Name of Industry M/s Trident Ltd, (PCD) Vill Dhaula, Distt. Barnala. **TC-7045**
- 4. Name of Sample collecting Officer Er. Aushpreet Singh, AEE
- 5. Designation of the officer authorizing Test Environmental Engineer, Regional Office, Sangrur
- 6. Type of Sample Grab
- 7. Date & Time of Sample collection 20.06.2019
- 8. Date & Time of Sample receipt in Lab. 21.06.2019
- 9. Period of Analysis 21.06.2019 to 01.07.2019
- 10. Test Methods As per relevant parts of IS:3025/& Methods of APHA

Results

Sr. No.	Parameters	Inlet of ETP	Outlet of ETP leading to Plantation	Outlet of ETP leading to drain	Aeration Tank-I	Aeration Tank-II
1.	pH	11.6	7.79	7.81	-	-
2.	Total Suspended Solids mg/l	910	26	24	-	-
3.	Chemical Oxygen Demand mg/l	2790	210	196	-	-
4.	Bio-chemical Oxygen Demand mg/l	530	20	18	-	-
5.	*Sodium Absorption Ratio	28	10	8	-	-
6.	*Mixed Liquid Suspended Solids mg/l	-	-	-	5390	5070
7.	*Mixed Liquid Volatile Suspended Solids mg/l	-	-	-	3550	3340

*Not covered under scope of NABL

---End of Report---

Analyzed by *Amr*
T7/12/19
Inst. No: 19675-76

Amr

Amr
37

2786
05/07/19

Marama 11/7/19
Scientific Officer

Di. 2-7-19

- A copy of the above is forwarded to the:-
- 1. The Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, II patiala.
 - 2. The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Sangrur

Amr
Asstt. Scientific Officer
T7/12/19

Amr
Amr
21/12/19
Environmental Engineer,
Punjab Pollution Control Board,
Regional Officer, SANGRUR

POLLUTION CONTROL BOARD VATAVARAN BHAVAN,
NABHA ROAD, PATIALA
WATER ANALYSIS REPORT



- 4383
15-10-2019
1. Laboratory Sample No. E- 1138-1142/H.O.Lab. Monitoring/2019
2. ULR No. ULR-TC70451800000001453P
3. Name of Industry M/s Trident Ltd, (PCD) Vill. Dhaula, Distt. Barnala. TC-7045
4. Name of Sample collecting Officer Er. Ramandeep Singh, AEE
5. Designation of the officer authorizing Test Environmental Engineer, Regional Office, Sangrur
6. Type of Sample Grab
7. Date & Time of Sample collection 30.09.2019
8. Date & Time of Sample receipt in Lab. 08.10.2019
9. Period of Analysis 01.10.2019 to 10.10.2019
10. Test Methods As per relevant parts of IS:3025/Methods of APHA

Results

Sr. No.	Parameters	Inlet of ETP	Outlet of ETP	Outlet leading to drain	Aeration Tank-I	Aeration Tank-II
1.	pH	10.4	7.5	7.6	-	-
2.	Total Suspended Solids mg/l	571	33	27	-	-
3	Chemical Oxygen Demand mg/l	3364	236	225	-	-
4	Bio-chemical Oxygen Demand mg/l	815	24	22	-	-
5	*Sodium Absorption Ratio	14.0	8.5	6.1	-	-
6	*Mixed Liquid Suspended Solids mg/l	-	-	-	3690	3290
7	*Mixed Liquid Volatile Suspended Solids mg/l	-	-	-	2650	2250

* Not covered under scope of NABL

---End of Report---

Analyzed by

Scientific Officer

Endst. No:

3/220-21

Dt 10/10/2019

A copy of the above is forwarded to the:-

- The Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office,-II patiala.
- The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Sangrur

Asstt. Scientific Officer

Environmental Engineer,
Pb. Pollution Control Board,
Regional Officer, SANGRUR

**POLLUTION CONTROL BOARD VATAVARAN BHAVAN,
NABHA ROAD, PATIALA
GROUND WATER REPORT**



1. Laboratory Sample No.	GW 150/ ILO.Lab / G.W. Monitoring/2019
2. U/R Number	U/R-TC704518000000001118P
3. Name of Industry	Ground Water Samples received from
4. Name of Sample collecting Officer	Regional Office Sangrur
5. Designation of authorizing Test	Er. Aushpreet Singh/AEE,
6. Date & Time of Sample collection	EE, RO, Sangrur.
7. Date & Time of Sample receipt in Lab.	26.06.2019
8. Period of Analysis	27.06.2019
9. Test Methods	27.06.2019 to 03.07.2019
	As per relevant parts of IS:3025 & Methods of APHA

Sr. no.	Parameters	In the Borewell of Sh. Harbans Singh s/o Mehar Singh, Dhaura, Distt. Barnala.
1	pH	7.53
2	Total Suspended Solids mg/l	BDL
3	Total Dissolved Solids mg/l	988
4	*Chemical Oxygen Demand mg/l	BDL
5	*Bio-Chemical Oxygen Demand mg/l	BDL
6	Total Hardness mg/l	306
7	*Colour Pt.Co.Unit	BDL
8	Sulphate mg/l	71
9	*Ammonical Nitrogen mg/l	BDL
10	Chloride mg/l	124
11	*Phenolic Compounds mg/l	BDL
12	*Oil & Grease mg/l	BDL
13	Total Chromium mg/l	BDL
14	*Sodium Absorption Ratio	2.76
15	*Sulphide mg/l	BDL

Note: 1. Samples for Coliform were not collected as per protocol.
2. BDL means Below Method Detection Limit.

--End of Report--

Sanj Kumar
 Issued by on-7-19
 No: 19944-45
 Dt. 4-7-19
 2897
 11/07/19
 Scientific Officer

Copy of the above is forwarded to the:-
 1. Senior Environment Engineer, Punjab Pollution Control Board, Zonal Office-2, Patiala
 2. Environment Engineer, Punjab Pollution Control Board, Regional Office, Sangrur.

Asstt. Scientific Officer
 04/7/19
 Environmental Engineer
 Pb. Pollution Control Board,
 Regional Officer, SANGRUR
 2.12.19


PUNJAB POLLUTION CONTROL BOARD
 AIR LABORATORY, HEAD OFFICE, VATAVARAN BILAWAN, PATIALA
 Telefax: 0175-2302392 Email : airlabppcb@gmail.com

- | | |
|--|--|
| 1. Laboratory Sample No. | 569-71/ H.O.Lab./Air/Monitoring/2019 |
| 2. Name of Industry | M/s Trident Ltd., (Paper & Chemical Division), Vill.- Dhaula, Dist.- Barnala |
| 3. Name of Sample collecting Officer | Er. Aushpreet Singh, AEE and Dr. Shankarjit Singh, JSO |
| 4. Designation of authorizing Test | Environmental Engineer, Regional Office, Sangrur. |
| 5. Type of Sample | Stack Emission |
| 6. Date & Time of Sample collection | 20-06-2019 |
| 7. Date & Time of Sample receipt in Lab. | 24-06-2019 |
| 8. Point of Sample collection | Details as Given Below |

Results

Point of sample Collection	Parameter	Results
Port hole on stack of CRP-II after APCD	Particulate Matter	121 mg/Nm ³
Port hole on stack of CRP-I after APCD	Particulate Matter	116 mg/Nm ³
Port hole on stack of Energy Section APCD	Particulate Matter	94 mg/Nm ³ at 12% of CO ₂

AEE
 3/7
 19504-05

Scientific Officer
 (Air Lab)

Bl. 2-7-19

Endst. No: 19504-05

A copy of the above is forwarded to the following for information and necessary action:-
 1. The Senior Environmental Engineer, Punjab Pollution Control Board, Z/O, Patiala-II.
 2. The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Sangrur.



Scientific Officer
 (Air Lab)

AE
 2.12.19
 Environmental Engineer
 Pb. Pollution Control Board,
 Regional Officer, SANGRUR

Annexure- 4B

PUNJAB POLLUTION CONTROL BOARD
AIR LABORATORY, HEAD OFFICE, VATAVARAN BHAWAN, PATIALA
 Telefax: 0175 2302392
 Email : airlabppcb@gmail.com

4381
 15-10-19

- 1. Laboratory Sample No. 821-23/ H.O.Lab./Air/Monitoring/2019
- 2. Name of Industry M/s Trident Ltd., (Paper & Chemical Division), Vill.- Dhaula, Distt.- Barnala
- 3. Name of Sample collecting Officer Er. Ramandeep Singh, AEE and Dr. Gurpreet Singh Singh, JSO
- 4. Designation of authorizing Test Environmental Engineer, Regional Office, Sangrur.
- 5. Type of Sample Stack Emission
- 6. Date & Time of Sample collection 20-09-2019
- 7. Date & Time of Sample receipt in Lab. 21-09-2019
- 8. Point of Sample collection Details as Given Below

AEE/SA
 b/w p/w
 21/9

Results

Point of sample Collection	Parameter	Results
Port hole on stack of CRP II after APCD	Particulate Matter	92 mg/Nm ³
Port hole on stack of CRP I after APCD	Particulate Matter	135 mg/Nm ³
Port hole on stack of Energy Section APCD	Particulate Matter	69 mg/Nm ³ at 12% of CO ₂



[Signature]
 Scientific Officer
 (Air Lab)

Enst. No: 30487-88

3-10-19

- A copy of the above is forwarded to the following for information and necessary action:-
- 1. The Senior Environmental Engineer, Punjab Pollution Control Board, ZO, Patiala-II.
 - 2. The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Sangrur.

[Signature]
 Scientific Officer
 (Air Lab)

[Signature]
 2.12.19
 Environmental Engineer,
 Pb. Pollution Control Board,
 Regional Officer, SANGRUR

POLLUTION CONTROL BOARD VATAVARAN BHAVAN,
HABHA ROAD, PATIALA
WATER ANALYSIS REPORT



- | | |
|--|--|
| 1. Laboratory Sample No. | E- 499-502/H.O.Lab. Monitoring/2019 |
| 2. ULR No. | ULR-TC70451800000001086P |
| 3. Name of Industry | M/s. Trident Limited (HTD)
Vill Dhaula , Barnala. |
| 4. Name of Sample collecting Officer | Er. Aushpreet Singh, AEE |
| 5. Designation of authorizing Test | EE, RO Sangrur |
| 6. Type of Sample | Grab |
| 7. Date & Time of Sample collection | 20.06.2019 |
| 8. Date & Time of Sample receipt in Lab. | 21.06.2019 |
| 9. Period of Analysis | 21.06.2019 to 01.07.2019 |
| 10. Test Methods | As per relevant parts of IS:3025/Method of APHA |

Results

Sr. No.	Parameters	Inlet of ETP	Outlet of ETP Leading to Plantation	Outlet of ETP leading to Drain	Aeration Tank
1	pH	9.88	7.75	8.00	-
2	*Colour Pt.Co.Unit	185	35	30	-
3	Total Suspended Solids mg/l	190	20	18	-
4	Total Dissolved Solids mg/l	4701	1845	1823	-
5	Chemical Oxygen Demand mg/l	962	58	54	-
6	Bio-chemical Oxygen Demand mg/l	210	14	12	-
7	Sulphide mg/l	4.0	BDL	BDL	-
8	*Ammonical Nitrogen as N mg/l	4.8	BDL	BDL	-
9	*Sodium Absorption Ratio	26	18	16	-
10	Total Chrome as Cr. mg/l	BDL	BDL	BDL	-
11	*Oil & Grease mg/l	8.0	BDL	BDL	-
12	*Phenolic compound mg/l	BDL	BDL	-	1130
13	*Mixed Liquid Suspended Solids mg/l	-	-	-	680
14	*Mixed Liquid Volatile Suspended Solids mg/l	-	-	-	-

*Not covered under the scope of HABL
BDL means Below Method Detection Limit.

---End of Report---

Analyzed by *Asst. Scientist*
 Indst. No: 19677-78
 Scientific Officer *M. Sharma* 11/7/19
 Dt. 2-7-19
 A copy of the above is forwarded to the *Asst. Scientist*

- The Senior Environment Engineer, Punjab Pollution Control Board, Zonal Office-II, Patiala.
- The Environment Engineer, Punjab Pollution Control Board, Regional Office, Sangrur.

Asst. Scientist
11/7/19

Asst. Scientist
2.12.19
 Environmental Engineer
 Pb. Pollution Control Board,
 Regional Officer, SANGRUR

Annexure - 6

PUNJAB POLLUTION CONTROL BOARD
 AIR LABORATORY, HEAD OFFICE, VATAVARAN BHAWAN, PATIALA
 Telefax: 0175-2302392 Email: airlabppcb@gmail.com

- 1. Laboratory Sample No. 572/ H.O.Lab./Air/Monitoring/2019
- 2. Name of Industry M/s Trident Ltd.,(S. A. P.). Vill.- Dhaula, Dist.- Barnala
- 3. Name of Sample collecting Officer Er. Aushpreet Singh, AEE and Dr. Shankarjit Singh, JSO
- 4. Designation of authorizing Test Environmental Engineer, Regional Office, Sangrur.
- 5. Type of Sample Stack Emission
- 6. Date & Time of Sample collection 20-06-2019
- 7. Date & Time of Sample receipt in Lab. 24-06-2019
- 8. Point of Sample collection Details as Given Below

Results

Point of sample Collection	Parameter	Results
Port hole on stack of Sulphuric Acid Plant after APCD	Acid Mist (H ₂ SO ₄)	N.D
	SO ₂	110PPM.

[Signature]
 Scientific Officer
 (Air Lab)

DI. 2-7-19

Encl. No: 19510-11

A copy of the above is forwarded to the following for information and necessary action:-
 1. The Senior Environmental Engineer, Punjab Pollution Control Board, ZO, Patiala-II.
 2. The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Sangrur.



[Signature]
 Scientific Officer
 (Air Lab)

[Signature]
 Environmental Engineer,
 Pb. Pollution Control Board,
 Regional Officer, SANGRUR

Annexure-7

Year wise production viz-a-viz Effluent generation of M/s. Trident Ltd. (HTD) & M/s. Trident Ltd. (PCD) Dhaula, Distt. Barnala from year 2015 onwards

Year	M/s. Trident Ltd (HTD)						M/s. Trident Ltd (PCD)		Specific Effluent Generation	Drain	Plantation
	Production	ETP inlet	Specific Effluent Generation	Drain	R.O	Plantation	Production	ETP inlet			
UoM	MTD	KLD	Ltr/Kg	KLD	KLD	KLD	MTD	KLD	Ltr/Kg	KLD	KLD
2015	79.2	7149	90.2	2842	1431	3200	417	19656	47.1	6301	13389
2016	76.8	6705	87.3	1922	1677	3066	418	19845	47.5	6329	13516
2017	75.9	6248	82.3	1985	1189	3034	417	19598	47.0	6455	13143
2018	77.7	6462	83.1	2716	827	2892	417	19924	47.8	7560	12364
2019 till Oct	82.0	6264	76.4	2573	866	2793	417	17251	41.4	7270	9981
Average	78.3	6566	83.9	2408	1198	2997	417	19255	46.2	6783	12479