2nd REPORT OF JOINT COMMITTEE WITH REFERENCE TO HON'BLE NGT ORDER IN O.A. 276/2022 IN THE MATTER OF SHRI RAKESH PATEL V/S STATE OF GUJARAT

BACKGROUND:

Hon'ble NGT Principal Bench, Delhi passed an order Dated 28.04.2022 in O.A. No. 276/2022 based on a complaint received from Shri Rakesh Patel, resident of Padra, Dist. Vadodara, State: Gujarat regarding 4 nos. of industries located in Padra causing water pollution, wherein a Joint Committee was constituted by Hon'ble NGT comprising of CPCB, GPCB, CGWA (Central Ground Water Authority) and District Magistrate, Vadodara to investigate the allegations raised by the complainer and to ascertain the factual position in the matter. GPCB was appointed as Nodal Agency for coordination and compliance.

Accordingly, the Joint committee comprising of following members investigated the matter and submitted the status report to Hon. NGT on dtd. 19/07/2022.

1) Shri A.B. Gor (IAS), Collector& District Magistrate, Vadodara
2) Shri R. B. Trivedi, Regional Officer, GPCB, Vadodara
3) Dr. N. Semwal, Scientist C, CPCB, Regional Directorate, Vadodara
4) Shri Saddam Husain, Asst. Hydro Geologist, CGWA, Ahmedabad

Subsequently, Hon. NGT further passed an Order on dated 21/07/2022 and directed the Joint Committee *"to undertake site visits, look into grievances regarding discharge of highly polluted and dangerous chemicals mixed water effluent in Padra canal through pipeline without requisite treatment by other industries and also improper working of CETPs and mis-management of channel by VECL, verify factual position of quality of effluents discharged, compliance with consent conditions and environmental norms including Coastal regulation Zone (CRZ) Notification by the members/beneficiary units and take appropriate remedial action by following due process of law and submit further Action Taken Report".*

With reference to the above Order, the rest of the industries including the two CETPs and the VECL channel were visited by the joint team of CPCB and GPCB. As decided by the Joint Committee, the entire monitoring has been carried out by hired vehicles & team members and member industries were selected by randomization to maintain surprise element during visit.

Out of total of 37 industries including 02 CETPs, which are discharging directly into VECL channel, 04 industries have already been inspected earlier by the Joint Committee with reference to the first Order of Hon. NGT in the same matter, one unit has surrendered its membership of VECL and thus rest of the 32 units and the VECL channel were visited by the Joint Team during present investigation. Detailed inspection reports of individual units are attached as **Annexure – A (A1 to A32)** with this report. List of VECL member industries visited by the joint team is given at **Annexure – B.**

Status of VECL

As explained in the earlier report, Vadodara Enviro Channel Limited (VECL) is responsible for the operation and maintenance of the effluent conveyance channel meant for disposal of treated effluent of 37 member industries including 2 CETPs (which further caters to the need of effluent treatment & disposal of more than 300 MSME industries).

As reported in first report of Joint Committee that at final discharge point i.e. J-Point, concentration of critical parameters namely BOD, COD and NH3-N were found significantly violating the prescribed discharge standards till April 2022, however the concentration reduced significantly from May 2022 onwards and further reduced in June 2022. The analysis results of samples collected by GPCB (as part of their monthly sampling exercise) during July-2022, Aug-2022, and September 2022 and also sample collected by the Joint team during September 2022 and its inferences are given in the **Table 1 & 2** to below.

Recent interventions in VECL channel post visit of Joint Committee in May-2022:

- GPCB during their routine inspection of industries in Zone 1, Zone 2 and Zone 3 observed that the online effluent monitoring system installed by the individual industry is not temper proof and therefore GPCB had directed VECL authority to make arrangement to insure that the online effluent monitoring system of individual industry is temper proof. Accordingly, VECL is in the process of shifting the OCEMS (Online Continuous Monitoring System), Online Flow Meter, Auto Sampler, IOT valve, three way valve and SCADA panel from inside the industrial premises to a dedicated room outside the premises of the industry near gate, which can be accessed only by VECL authority. IOT valve is meant for discharge of treated effluent from outlet of the ETP of individual industry to VECL channel as per time slot allotted to the industry. Three Way valve is used to control discharge of non conforming effluent to the VECL channel. The three Way valve returns non conforming effluent to the collection tank of the industry in case of none complying effluent standards.
- The above exercise of shifting has been completed in ZONE-3 and is being taken up in ZONE-1 & 2 in the coming days.
- VECL has provided RTOM (Real Time Online Monitoring) with flow meter at final discharge point of VECL channel, i.e. at J point in the month of June'22 and six strategic locations of Zone 3 in VECL channel as decided jointly by GPCB and VECL.
- Considering the discharge of highly concentrated effluent from Zone-3 in the past, GPCB has installed 06 nos of auto samplers in Zone-3 of VECL channel during last week of Auguest-2022 and one more auto sampler has been added in the last week of September-22 in the downstream of Zone-3 i.e. At Vedach Pumping Station. The 06 auto samplers capture the discharge status of 3 major polluting industries of Zone 3, namely (i) M/s. Mayur Dye Chem Intermediates Private Limited Unit – III (ii) M/s. Kiri Industries Limited -Unit-III (iii) M/s. Bodal Chemicals Ltd (Unit-Vii). The analysis results of samples collected during 27/08/2022 to 13/10/2022, show that there is increase in concentration of COD in the downstream of Zone-3 as compared to what is found in upstream of Zone-3.
  However, average COD value of the analysis of auto sampler at Vedach Pumping Station from 21/09/2022 to 13/10/2022 observed to be 234.4 mg/l, which indicates overall improvement and compliance.
- The auto samplers collect portion of sample from the channel at every fifteen minute interval and thus eight hours composite sample is collected and analyzed in the lab for the key

indicating parameters. The analysis results show that the analysis results of which are attached herewith as **Annexure C**.

- The auto samplers are located in dedicated rooms accessible only to GPCB. Hence, the samples collected by auto samplers cannot be tampered with by the industries. Moreover, it was observed during the industrial visits that most of the industries in the area are operating at less production capacity. Owing to all the above, it is observed that the quality of effluent being discharged at J Point by VECL has shown improvement. Further, it can be inferred that Zone-3 having dyes and dye intermediate units, appeared to be the potential source of COD into VECL.

Other observations about VECL during the visit of September-2022:

- As mentioned in the previous report it is again reiterated that effluent is being discharged through the old open channel, which is non-compliance of the Directions given by GPCB to VECL. VECL has been directed by GPCB to provide close pipeline for conveying the effluent from Zone-1 to J-Point (total length of 55 kms). VECL has provided close pipeline of 800 mm dia in the stretch from Vedach to J point (15 kms). Additionally, a parallel close pipeline of 1400 mm dia has been provided within the old open channel in 19.9 kms. As per submission of VECL to GPCB, the remaining stretch of 9 kms after Vedach will be replaced with close pipeline by July-2023.
- Reportedly, VECL is receiving 50-55 MLD of treated effluent from its members units. The provided close pipeline of 800 mm dia in 15 Km stretch from Vedach to J point is capable of carrying only 46 MLD of treated effluent from Vedach to J Point in the stretch of 15 kms. Hence, the rest of the effluent quantity is discharged vide the old open channel in the said stretch.
- The joint team has collected samples of final discharge point of VECL channel i.e. J Point and old open channel in the stretch leading from Vedach to J Point on 01/09/2022. The analysis report is attached as **Annexure –D**. The analysis results of key parameters is given in the table below :

Table-1

Parameter	COD (mg/lit)	BOD (mg/lit)	NH3-N (mg/lit)
Prescribed Standard	**250**	**100**	**50**
Final discharge point near estuarine zone of River Mahi (J-point)	314	52.2	12.2
Old Open Channel of VECL after Vedach Pumping Station	385	59.3	12.9

- It is observed from the Analysis Reports that one of the key parameter i.e. COD is exceeding the prescribed CCA standards in both the samples. However, the significant improvement is observed as compared to past records.
- GPCB has also been collecting monthly samples of J Point. The analysis report up to June'22 was reported earlier and the reports thereafter are attached as **Annexure –E.** The summary of results of key parameters are as below:

Table-2

Location	Parameters	COD (mg/lit)	BOD (mg/lit)	NH_3-N (mg/L)
Final discharge point near estuarine zone of River Mahi (J-point)	**Jan'22**	1096	240	26
	Feb'22	882	195	87
	Mar'22	1981	420	33
	April'22	1146	157	12
	May'22	309	66	31
	June'22	184	33	14
	July'22	142	30	22.4
	August '22	322	70	11.7
	September' 22	401	78	8.7
	Prescribed Standard	**250**	**100**	**50**

It is observed from above that the key parameter i.e. COD, BOD and NH3-N, which were earlier found to be much higher side, have now been improved because of the continuous efforts being put by GPCB as mentioned in earlier and this report as well.

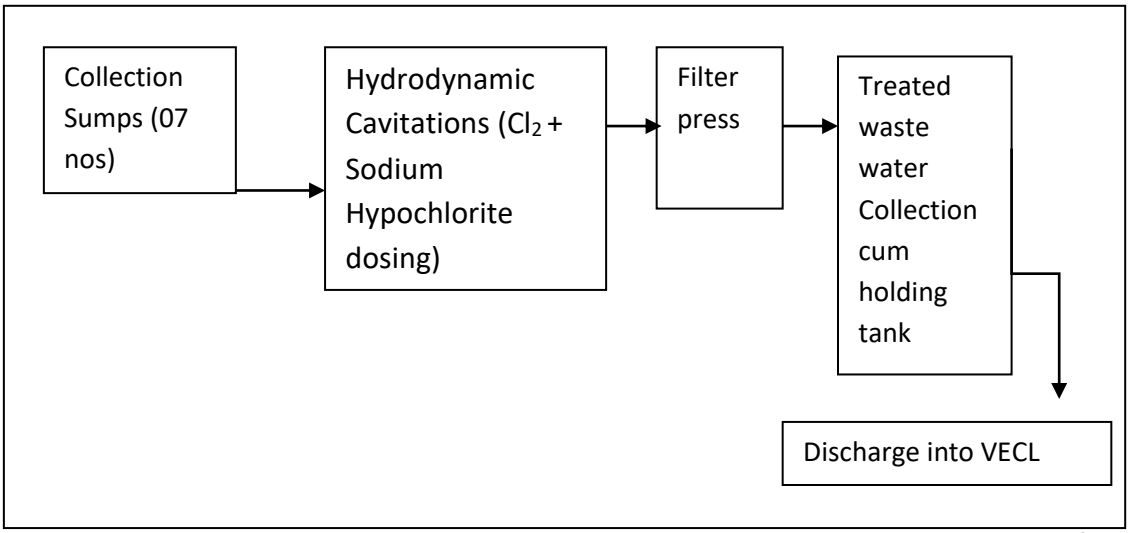
The team has also carried out zone wise sampling of the VECL channel and the detailed analysis reports are attached as **Annexure-F.** The analysis result shows that effluent quality for monitored parameters is within CCA limit prescribed to VECL.

Status of CETPs

There are two CETPs, one in Zone-I and the second in Zone- II. The treated effluent from both the CETPs is discharged into VECL channel. The operational status of CETPs is as follows:

1. **CETP- Nandesari Industries Association**

The CETP was visited by the joint team on 01/09/2022 and it was observed in operation during inspection. The capacity of the CETP is 12 MLD. As per the flow data submitted to GPCB, the actual effluent quantity received varies between 6.2 to 6.5 MLD.
Treatment scheme is given below:



The Sludge generated from filter press is disposed at CHWTSDF. As per online manifest record, the CETP has disposed 10482 MT of sludge during the last one year (01-09-2021 to 31-08-2022).

During inspection, one treated waste water sample was collected from the final outlet of CETP being discharged into VECL and analysis results of key parameters is given in the table below and the detailed analysis report is enclosed as **Annexure- G.**

Table-3

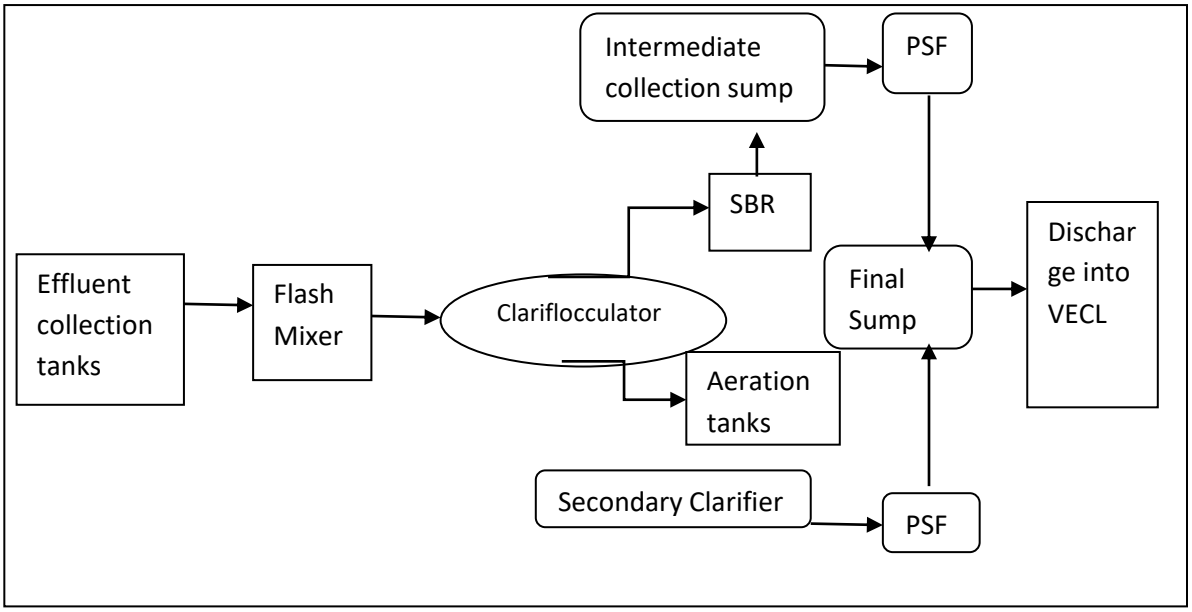
Parameters	**COD mg/lit**	**BOD mg/lit**	**Ammonical Nitrogen mg/lit**
Permissible limit	250	100	50
CETP-NIA	239	49	0.73

The OCEMS provided at the final outlet of CETP showed the following readings during visit: COD: 172 mg/lit, BOD: 52 mg/lit, TOC: 62 mg/lit, pH: 6.96.

- Results of above mentioned key parameters indicate overall compliance.

2. CETP- Enviro Infrastructure Co Ltd

The CETP was visited by the joint team on 01/09/2022 and it is observed to be in operation during inspection. The capacity of the CETP is 4.5 MLD. As per the flow data submitted in GPCB, the actual effluent quantity received varies between 2.20 to 2.25 MLD. The treatment scheme is as given below:



The Sludge generated from the Sludge Drying Bed is disposed at CHWTSDF. As per online manifest records, the CETP has disposed 517 MT of sludge during the last one year (01-09-2021 to 31-08-2022). About 1000MT semi solid sludge is observed stored in a tank at the time of visit. It is informed that when the sludge drying beds were undergoing renovation in the last one year, the hazardous waste generated was stored in the tank and

not disposed. A new screw press is being installed to dewater the sludge and the sludge will be passed through the same before disposal.

During inspection, one treated waste water sample was collected from the final outlet of CETP being discharged into VECL and analysis results of key parameters is given below in the table and the analysis report is enclosed as **Annexure- H.**

Table-4

Parameters	BOD mg/lit	COD mg/lit	Ammonical Nitrogen mg/lit
Permissible limit	100	250	50
CETP-EICL	41	218	1.12

The OCEMS provided at the final outlet of CETP showed the following readings during visit: pH 7.76 mg/lit, TOC: 62.01 mg/lit, TSS: 122.20 mg/lit, color: 108.70 (Hz).

- Results of above mentioned key parameters indicate overall compliance.

Status of Industries Visited by the Joint Team:

The joint team visited 30 industries in addition to the above mentioned 02 CETPs, having direct discharge into the VECL. Out of 30 industrial units visited by the joint team, the effluent management system of the following 03 units namely (a) M/s. Bodal Chemicals Ltd., Unit-VIII, Vill: Ekalbara, Ta: Padra, Dist: Vadodara (b) M/s Chemstar Organics (i) Limited, Vill: Umraya, Ta: Padra, Dist: Vadodara and (c) M/s. TML industries Ltd, Vill: Piludra, Ta: Jambusar, Dist: Vadodara were found unsatisfactory. It was observed that the Effluent management system infrastructure was installed in these 03 units, but the operation of the same was not found satisfactory. There was no major noticeable violation observed in the other 27 units at the time of visit. Related non compliances have been reported to GPCB for further necessary action. The detailed inspection reports of the individual industry are attached as **Annexure A (A1 to A32)**.

CRZ Compliance status

- Regarding compliance with consent conditions and environmental norms including Coastal regulation Zone (CRZ) Notification by the members/beneficiary units :

  VECL channel up to J point at estuary of river Mahi was installed and commissioned long back in the year 1983. Since there was no CRZ notification at that time, no related permission required to be taken by VECL in this regard. Besides, as per the latest CRZ Notification, 2011, Prohibited Activities under CRZ include "Setting up and expansion of units or mechanism for disposal of wastes and effluents except facilities required for discharging treated effluents into the water course with approval under the Water (Prevention and Control of Pollution) Act 1974". In view of this, VECL has to comply with the standards given in their CCA for disposal of treated effluent. However, VECL has not been complying with the norms at the final discharge point i.e. J point and thus violating the CRZ condition. GPCB has issued Directions

to VECL from time to time for necessary compliance. The effluent quality being discharged at J-point has improved from May 2022 onwards, however, it is still not meeting the prescribed discharge standards.

Conclusion:

Following conclusions can be drawn from the above observations:

1. It is to mention that the concentration of various monitored parameters has shown decreasing concentration trend since April-2022 onwards. This improvement is mainly because of stringent monitoring in Zone 3 by GPCB and consequent less discharge or no discharge (the unit installed Zero Liquid Discharge facility) by many of the industries especially those located in Zone 3.
2. The analysis results of samples collected from final discharge point of 02 CETPs inspected by the joint team were found within prescribed CCA standards for key parameters namely COD, BOD and Ammonical Nitrogen in both the CETPs. Concentration of Chloride, Sulphate & TDS in the treated effluent are exceeding the prescribed CCA standards in both the CETPs. However, considering all treated effluent through VECL is being finally discharged into Estuarine zone, CETPs are seeking exemption from the norms of such inorganic parameters under the reference of MOEF & CC Notification dated 01/01/2016. VECL is going for detailed study to be conducted by reputed agency like IITs in this regard as informed by VECL to GPCB.
3. The joint team visited 30 industries other than 02 CETPs. Out of 30 units visited by the joint team, the effluent management system of 03 units namely (i) M/s. Bodal Chemicals Ltd., Unit-VIII, Vill: Ekalbara, Ta: Padra, Dist: Vadodara (ii) M/s Chemstar Organics (i) Limited, Vill: Umraya, Ta: Padra, Dist: Vadodara and (iii) M/s. TML industries Ltd, Vill: Piludra, Ta: Jambusar, Dist: Vadodara were found unsatisfactory. There was no major noticeable violation observed in the other 27 units at the time of visit.
4. The observations on analysis results of 06 nos of auto samplers installed by GPCB in Zone-3 of VECL channel as part of stringent monitoring show that there is increase in COD concentration between upstream & downstream of Zone 3, means the potential contribution of COD in VECL is appeared to be from dyes and dye intermediate units located in Zone-3.
5. Though significant improvement observed in the quality of effluent being discharged at J point when compared to analysis data of prior to Apr 2022. However, Quality of effluent being discharged through VECL channel at J Point is still exceeding the prescribed CCA standards. Especially the presence of cyanide, which was not found earlier and therefore required to be revisited and rechecked for conforming its presence beyond norms.
6. VECL is still discharging some of the effluent through old open channel in the downstream of Vedach pumping station.
7. VECL is discharging the effluent in the estuarine zone of River Mahi. As per CCA specific condition no 11, VECL shall provide deep sea tamper proof pipeline system as observed and advised by NIO and NEERI, Nagpur. However, VECL is still discharging the treated

effluent in the estuarine zone of River Mahi at the J Point downstream of Village Sarod, Taluka Jambusar, Dist: Bharuch.

8. It is observed that all the visited industries have installed ETP. But looking to the above conclusion, it appears that these industries are probably not operating their system properly, to save on the operational costs.

Therefore, the Joint Committee proposes that:

a) There should be CCTV Surveillance System with proper IP Address connected to the control room of VECL and GPCB so that any lacunae of operation shall be dealt with.

OR

b) A Third Party Expert Agency may be engaged on regular and continuous basis to monitor the systems & ensure proper operations of infrastructure of these companies.

Date: 21/10/2022
Place: Vadodara

G. Krishnamurthy Regional Director, CGWA, Ahmedabad	**Dr. N. Semwal** Scientist C, CPCB, RD Vadodara	**R. B. Trivedi** Regional Officer, GPCB, Vadodara	**A.B. Gor (IAS)** Collector & District Magistrate, Vadodara

Annexure A 1

Inspection Report

1	**Name & Address of unit**	M/s Indian oil corporation Ltd (Gujarat Refinery) Po: Jawaharnagar, Tal & Dist : Vadodara : 391320
2	**Date & Time of Inspection**	19/09/2022, 16:45 Hrs
3	**Name, designation & contact number of industry representative**	Mr. B.B.Makwana, DGM-HSE

4	**Operational status of unit at the time of inspection**	At the time of visit unit was observed in operation.
5	**Validity of CCA**	AWH-115975, Valid upto 30/06/2026
6	**Products/Sector**	Crude refining & petroleum products
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Mahi River through French wells NA
8	**ETP system provided**	The unit has provided ETP consisting of the following treatment units. Surge tank (3 Nos) → Surge Sump → Tilted plate interceptor → Equalisation Tank →Flash Mixer →Flocculation Tank → Dissolved air flotation (2 Nos) → Flotation tank → Biotower (2 Nos) → Aeration Tank → Clarifier (2 Nos.) → High rate solid contact clarifier→ Guard pond →PSF → ACF → UF → RO → Discharge into VECL
9	**ETP operational status**	• During visit ETP units are observed in operation. • During visit, unit is instructed to provide signage on effluent conveyance line.
10	**Is treated effluent discharge line provided above ground?**	Yes
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	Yes. One treated waste water sample is collected from the final discharge point into VECL during visit.

Parameters	pH	SS	TDS	COD	BOD	NH_{3}-N	Phenolic compound	Chloride	SO_4
Concentration	7.60	22	1236	40	5	9.74	BDL	250	229
CCA Standard	6.5-8.5	100	5000	250	100	50	1	2000	1000

All values are expressed in mg/l except pH.

<table>
<tr><td>12</td><td>Operational status of OCEMS</td><td>OCEMS has been provided</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>Yes</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No bye pass line has been observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months</td><td>
<table>
<tr><td>Month</td><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>KL</td><td>155804.80</td><td>93719.75</td><td>Flow meter issue</td></tr>
</table>
Source: VECL through email on 07/10/2022.
</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• As per XGN manifest records, unit has disposed 2027 MT oil sludge and emulsion generated from waste water treatment plant during the last one year (01-09-2021 to 31-08-2022)</td></tr>
</table>

Inspection by:

D.C.Patel
AEE, GPCB RO Vadodara

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:360633 - Analysis Completion:30/09/2022

Oil Refinery (Mineral Oil or Petro Refineries) / LAB Inward : 45412

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 45412 Date: 30/09/2022

1. Name of the Customer : Indian Oil Corporation Ltd. (Gujarat Refinery) - 21967
2. Address : -,PO JAWAHARNAGER,-
   Jawahar Nagar-391320, Taluka : Vadodara, District : Vadodara, GIDC :
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : Dhruvinkumar C Patel
5. Quantity of Sample Received : 5 lit
6. Code No. of the Sample : 360633
7. Date & Time of Collection & Inwarding : 19/09/2022 , (1655 to 1655) & 20/09/2022
8. Date of Start & Completion of Analysis : 20/09/2022 & 30/09/2022
9. Sampling Point : From final outlet of ETP ~
10. Flow Details (Remarks) : Flow is going on
11. Mode of Disposal : into VECL Channel
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 28 & pH Range on pH Strip :Around 7-8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :colourless
    : Ind :50342.000 , Dom :22234.000 & Ind :36000.000 , Dom :7500.000
15. Water Consumption & W.W.G (KLPD) : 12 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.60
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	05
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	1236
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	22
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	9.74
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	250
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	229
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	40
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	5

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 30/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 2

Inspection Report

<table>
<tr><td>1</td><td>Name & Address of unit</td><td>M/s. Gujarat State Fertilizers & Chemicals
PO-Fertilizer Nagar,N.H No-8,Vadodara</td></tr>
<tr><td>2</td><td>Date & Time of Inspection</td><td>20/09/2022, 10:20Hrs.</td></tr>
<tr><td>3</td><td>Name, designation & contact number of industry representative</td><td>Mr. Praful Kachchi
Chief EC,U&IMS
Mobile: 9979853430</td></tr>
<tr><td>4</td><td>Operational status of unit at the time of inspection</td><td>In operation.</td></tr>
<tr><td>5</td><td>Validity of CCA</td><td>AWH-117101, Valid up to 30/09/2028.</td></tr>
<tr><td>6</td><td>Products/Sector</td><td>Petrochemical manufacturing</td></tr>
<tr><td>7</td><td>a. Source of Water Supply
b. Status of CGWA permission, if GW is being used</td><td>River Mahi(French well-4 Nos).</td></tr>
<tr><td>8</td><td>ETP system provided</td><td>
<table>
<tr><th>Primary
Yes</th><th>Secondary
Yes</th><th>Tertiary
Yes</th><th>ZLD
No</th></tr>
</table>
</td></tr>
<tr><td>9</td><td>ETP operational status</td><td>

The Unit has provided ETP I for the treatment of effluent generated from Caprolactum plant-1 and Nylon-6 plants and ETP II is mainly for the treatment of effluent from Caprolactum plan-2 and cooling tower blow down.
ETP I consist of API oil separator, Equalization cum aeration tank, Aeration tank, Clarifier and the treated effluent is discharged into VECL line through NPH(New pump house).
ETP II consist of Equalization tank I, II & III, Neutralization tank-1, Ammonia stripper,Bio tower, Aeration tank, Final clarifier, intermediate tank, DITCH I,II&III, Primary clarifier, secondary clarifier, and the treated effluent from ETP-II is discharged into VECL line through NPH(New pump house). All the ETP units were found in operation during visit.

</td></tr>
<tr><td>10</td><td>Is treated effluent discharge line provided above ground?</td><td>The effluent discharge line is provided underground.</td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>Yes,treated waste water sample is collected from Final outlet of ETP. The analysis result of the collected sample is given in table below:
<table>
<tr><td>Parameter</td><td>COD</td><td>BOD</td><td>TDS</td><td>SS</td><td>Cl</td><td>SO4</td></tr>
<tr><td>Results</td><td>98</td><td>21</td><td>2782</td><td>40</td><td>450</td><td>390</td></tr>
<tr><td>CCA Standard</td><td>250</td><td>100</td><td>5000</td><td>100</td><td>600</td><td>1000</td></tr>
<tr><td>Parameter</td><td>PH</td><td>Colour</td><td>Temp</td><td>O&G</td><td>Phenol</td><td>NH3</td></tr>
<tr><td>Results</td><td>7.90</td><td>10</td><td>30</td><td>BDL</td><td>BDL</td><td>24.36</td></tr>
<tr><td>CCA Standard</td><td>6.5-8.5</td><td>100</td><td>40</td><td>10</td><td>1</td><td>50</td></tr>
</table>
* All values are expressed in mg/l except pH.

The Analysis results shows that the concentrations of monitored parameters are within CCA prescribed limit.</td></tr>
</table>

<table>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Operational.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>The reading of OCEMS connected to the final treated effluent discharge line was noted during the visit and the same is given in the table below:

<table>
<tr><td>Flow</td><td>405.64 m3/hr</td><td>Colour</td><td>105- Hazen eq.</td></tr>
<tr><td>COD</td><td>90.41 mg/l</td><td>pH</td><td>7.39</td></tr>
<tr><td>BOD</td><td>18.08 mg/l</td><td>NH4-N</td><td>9.70mg/l</td></tr>
<tr><td>TSS</td><td>25.15 mg/l</td><td>Temp.</td><td>32.1 ‘C</td></tr>
</table></td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No bypass line is observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook is maintained.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><th>Month & Year</th><th>Treated effluent discharged during the month (KL)</th><th>Daily Avg. treated Effluent Discharge (KL/ day)</th></tr>
<tr><td>June’22</td><td>313491 KL</td><td>10450 KL/D</td></tr>
<tr><td>July’22</td><td>365227 KL</td><td>11814 KL/D</td></tr>
<tr><td>August’22</td><td>349410KL</td><td>11271 KL/D</td></tr>
</table></td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>

During inspection, ETP sludge-Nil, Used Oil @152 MT, Discarded container @42 MT, Spent catalyst@8.75 MT, spent catalyst(18.1)@ 94 MT, Organic waste @8 MT, Sulphur muck@191 MT, Spent resin @ 15.76MT, insulation waste @1.26 MT observed stored within premises.
Unit has disposed 99.63MTof Used oil, 148.5 MT of discarded containers and 201.3 MT of Spent catalyst to registered recycler and disposed 33.46 MT ofOrganic waste, 25.45 MT of Spent resin, 2.02 MT of contaminated cotton rags & other cleaning materials forincineration,to CHWIF and disposed 292.5 MT of Sulphur Muck and 59.44 MT of Insulation waste to TSDF facility during the financial year 2021-2022.
</td></tr>
</table>

Inspection by:

R.R.Badgujar
SO, GPCB RO Vadodara.

S. Pradeep Raj
Scientist-D, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:360669 - Analysis Completion:30/09/2022

Fertilizer (basic) (excluding formulation) / LAB Inward : 45413

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 45413 Date: 30/09/2022

1. Name of the Customer : Gujarat State Fertilizers And Chemicals Ltd (GSFC Ltd) - 21968
2. Address : -,PO FERTILIZERNAGAR, N.H. NO. 8,- --391750, Taluka : Vadodara, District : Vadodara, GIDC : Not In Gidc
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : R.R.Badgujar, SO
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 360669
7. Date & Time of Collection & Inwarding : 20/09/2022 , (1100 to 1100) & 21/09/2022
8. Date of Start & Completion of Analysis : 21/09/2022 & 30/09/2022
9. Sampling Point : From final outlet of ETP ~
10. Flow Details (Remarks) : -
11. Mode of Disposal : VECL
12. Ultimate Receiving Body : Estury of Mahi River
13. Temperature on Collection : 30 & pH Range on pH Strip :@ 7 to 8 on PH strip
14. Carboys Nos for : Barcode & Color & Appearance :Brown
    : Ind :29358.700 , Dom :5531.100 & Ind :14565.720 , Dom :3620.500
15. Water Consumption & W.W.G (KLPD) : 12 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.90
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	10
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	2782
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	40
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	24.36
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	450
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	390
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	98
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	21

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 30/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 3

Inspection Report

<table>
<tr><td>1</td><td>Name & Address of unit</td><td>M/s. Reliance Industries Ltd
PO;-Petrochemical
Dist Vadodara-391346.</td></tr>
<tr><td>2</td><td>Date & Time of Inspection</td><td>16/09/2022, 15:30Hrs.</td></tr>
<tr><td>3</td><td>Name, designation & contact number of industry representative</td><td>Purna Paul
Environment Head
Mo. 9662009161</td></tr>
<tr><td>4</td><td>Operational status of unit at the time of inspection</td><td>During visit, Industry is found in operation.</td></tr>
<tr><td>5</td><td>Validity of CCA</td><td>Consolidated Consent & Authorization (CC&A) is granted by Gujarat Pollution Control Board vide order No- AWH-117489 having validity up to 30/09/2023.</td></tr>
<tr><td>6</td><td>Products/Sector</td><td>Petrochemicals manufacturing unit.</td></tr>
<tr><td>7</td><td>a. Source of Water Supply
b. Status of CGWA permission, if GW is being used</td><td>a. River Mahi (French well) via agreement with Vadodara Irrigation Division, Govt. of Gujarat, Narmada, Water Resources, Water Supply &Kalpsar Department for drawal of 2.09116 MLD Water.</td></tr>
<tr><td>8</td><td>ETP system provided</td><td>Primary
Yes</td><td>Secondary
Yes</td><td>Tertiary
Yes
(only domestic purpose)</td><td>ZLD
No</td></tr>
<tr><td>9</td><td>ETP operational status</td><td colspan="4">• During visit ETP was in operation and effluent wasobserved being discharged into VECL
• The Unit has provided ETP of capacity of 24000 M3/day
• The ETP consists of the following units-
Collection sump→ Screw pump(2 Nos.)→ Screen&Grit chamber→ Surge Ponds(4 Nos),→API Oil separator→ Homogenization Tank→Flash mixer→Clariflocculaters→ Aeration tanks→Final clarifier(3Nos)→ Guard ponds(2 Nos)→ Final treated effluent Tank→Dischargeto VECL
• Unit has provided one sludge thickener of capacity 22.3 M^3/ day and 12 sludge drying beds for drying the ETP sludge.
• All ETP units were found in operational condition.</td></tr>
<tr><td>10</td><td>Is treated effluent discharge line provided above ground?</td><td colspan="4">Yes.Industrial discharge line is above the ground level.</td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td colspan="4">Yes, Duringvisit treated effluent was observed being discharged to VECL and treated waste water sample was collected from the final Outlet of ETP.
<table><tr><th>Monitored Parameter</th><th>COD</th><th>BOD</th><th>TDS</th><th>TSS</th><th>Cl</th><th>SO4</th></tr><tr><td>Analysed Results</td><td>22</td><td>05</td><td>2750</td><td>08</td><td>729</td><td>240</td></tr><tr><td>CCA Standard Limit</td><td>250</td><td>100</td><td>5000</td><td>100</td><td>600</td><td>1000</td></tr></table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><th>Parametr</th><th>PH</th><th>Colour</th><th>Temp</th><th>CN</th><th>F</th><th>NH3</th></tr>
<tr><td>Analysed Results</td><td>7.83</td><td>05</td><td>28</td><td>BDL</td><td>0.74</td><td>BDL</td></tr>
<tr><td>CCA Standard</td><td>6.5-8.5</td><td>100</td><td>40</td><td>0.2</td><td>1.5</td><td>50</td></tr>
</table>
All values are expressed in mg/l except pH.
The Analysis results of the sample from the final outlet of ETP shows that the concentration of Chloride is exceeding the prescribed limit of CC&A. However, it is within the standard limit of VECL inlet norms.
</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>During visit,OCEMS was operational. The unit has installed OCEMS for the parameters namely flow,pH, COD, BOD, TSS, NH3-N.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>
<table>
<tr><td>OCEMS Parameters</td><td>Observed Readings</td></tr>
<tr><td>Flow</td><td>290 m3/hr</td></tr>
<tr><td>COD</td><td>173.2 mg/l</td></tr>
<tr><td>BOD</td><td>27.10 mg/l</td></tr>
<tr><td>TSS</td><td>15.6 mg/l</td></tr>
<tr><td>pH</td><td>7.27</td></tr>
<tr><td>NH4-N</td><td>0.10mg/l</td></tr>
</table>
</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>During visit, no bypass line is observed.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes. The unit is maintaining the logbook for record of effluent generation and treated effluent discharge.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>8643M^3/Day (2,59,290 M^3 /Month)</td><td>7935M^3/Day (245985 M^3/Month)</td><td>7881M^3/Day (244311 M^3/Month)</td></tr>
</table>
.
As per data submitted by the unit, the quantity of effluent discharged into VECL in last three months is given in the above table. The discharge quantity of the effluent is within the consented quantity of 18,800 M3/day.

Unit has provided magnetic flow meter at the final treated effluent discharge line. Flow totalizer reading was verified from the logbook maintained by the unit and the same was found in order.
</td></tr>
<tr><td>17</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>
As per data submitted by the unit, duringSeptember 2021 to August 2022unit has disposed 7,73.921 MT ETP sludge at its own TSDF site at Nandesari, Vadodara.The unit has also disposed 57.53 MT oil emulsion waste for Co processing,toCement industries.
</td></tr>
</table>

		• During inspection, 10.14 MT ETP sludge,4.19 MT Used/spent oil and 2.11 MT Oil emulsion (slop oil) was found stored within the industry premises.

Inspection by:

R.R. Badgujar,
SO, GPCB RO Vadodara.

Manoj Sharma,
Scientist -'B'CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:360295 - Analysis Completion:28/09/2022

Petrochemicals Manufacturing (Including processing of Emulsions of oil and water) / LAB Inward : 45328

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 45328 **Date: 28/09/2022**

1. Name of the Customer	: **Reliance Industries Limited , Vadodara Manufracturing Division - 22051**
2. Address	: **-,PO PETROCHEMICALS,-**
	–391346, Taluka : Vadodara, District : Vadodara, GIDC : PCC Area
3. Nature of Sample	: **REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By	: **R.R.Badgujar, SO**
5. Quantity of Sample Received	: **05 Litter.**
6. Code No. of the Sample	: **360295**
7. Date & Time of Collection & Inwarding	: **16/09/2022 , (1550 to 1550) & 17/09/2022**
8. Date of Start & Completion of Analysis	: **17/09/2022 & 28/09/2022**
9. Sampling Point	: **From final effluent pump house((FEPH) ~**
10. Flow Details (Remarks)	: **-**
11. Mode of Disposal	: **VECL**
12. Ultimate Receiving Body	: **Gulf of Cambay**
13. Temperature on Collection	: **28 & pH Range on pH Strip :@ 7 to 8 on PH strip**
14. Carboys Nos for	: **Barcode & Color & Appearance :Colourless**
	: **Ind :53500.000 , Dom :6500.000 & Ind :41000.000 , Dom :6000.000**
15. Water Consumption & W.W.G (KLPD)	: **12 ,Cap No & Weight :**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.83
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	5
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	2750
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	8
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	bdl
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	729
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	240
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	22
10	Cyanide	mg/l	Titrimetric method. (4500 - CN? D APHA Standard Me	1-10 mg/l	bdl
11	Fluoride	mg/l	SPADNS method (4500-F-D APHA standard Methods	0.10-40 mg/l	0.74
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	5

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 28/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 4

Inspection Report

1	**Name & Address of unit**	M/s Nandesari Industrial Association-(Common effluent treatment plant) Plot no 153/A, Nandesari, Dist : Vadodara -391340
2	**Date & Time of Inspection**	01/09/2022, 14:45 Hrs
3	**Name, designation & contact number of industry representative**	Mr. Mayur Parekh, Incharge

4	**Operational status of unit at the time of inspection**	At the time of visit unit was observed in operation
5	**Validity of CCA**	AWH-105462 , Valid upto 30/09/2024
6	**Products/Sector**	Common Effluent Treatment Plant
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	GIDC RO water NA
8	**ETP system provided**	CETP consisting of the following treatment units. Collection sump (07 Nos.) →Hydrodynamic cavitation tanks (09 Nos)→Filter Press (07 Nos.) →Treated Effluent Tank→Discharge into VECL
9	**ETP operational status**	• During visit, CETP is observed in operation. The capacity of the CETP is 12 MLD. As per the flow data submitted to GPCB, the actual effluent quantity received varies between 6.2 to 6.5 MLD. • Unit is instructed to explore the possibility of providing an equalization tank for homogenous effluent and single inlet and submit time bound program for the same. • During visit it is observed that provided chlorine sensors have gone for repairing, therefore unit is instructed to provide stand by set of chlorine sensors.
10	**Is treated effluent discharge line provided above ground?**	Yes
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	Yes, Treated w/w sample collected from final outlet of CETP –NIA

Parameters	pH	SS	TDS	COD	BOD	NH_3-N	Phenolic compound	**Chloride**
Concentration	8.15	90	19986	239	49	0.73	BDL	**10206**
CCA Standard	6.5-8.5	100	5000	250	100	50	1	**600**

All values are expressed in mg/l except pH.

Result of above mentioned key parameters indicates overall compliance.

<table>
<tr><td></td><td></td><td>The OCEMS provided at the final outlet of CETP showed the following readings during visit: COD: 172 mg/lit, BOD: 52 mg/lit, TOC: 62 mg/lit, pH: 6.96.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>OCEMS has been provided</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>Yes</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No bye pass line has been observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td colspan="3">Flow meter is not in working condition.</td></tr></table>Source: VECL through email on 07/10/2022.</td></tr>
<tr><td>17</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>Unit is collecting ETP sludge directly in tractor beneath the filter press and disposing off to NECL-TSDF. During visit no stock of hazardous waste is observed.

As per XGN manifest records, unit has disposed 10482 MT ETP sludge generated from waste water treatment plant during last one year (01-09-2021 to 31-08-2022).</td></tr>
</table>

Inspection by:

D.C.Patel
AEE, GPCB RO Vadodara

R.N. Shaikh
DEE, GPCB RO Vadodara

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:357927 - Analysis Completion:13/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44757

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 44757 Date: 13/09/2022

1. Name of the Customer : Nandesari Industrial Association (Cetp) - 22336
2. Address : 153/A, ,CETP,-
Nandesari-391340, Taluka : Vadodara, District : Vadodara, GIDC :
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : R.N.Shaikh,ROH
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 357927
7. Date & Time of Collection & Inwarding : 01/09/2022 , (1515 to 1515) & 02/09/2022
8. Date of Start & Completion of Analysis : 02/09/2022 & 13/09/2022
9. Sampling Point : Treated w/w sample collected from final outlet of CETP -NIA ~
10. Flow Details (Remarks) : Flow is going on
11. Mode of Disposal : into VECL Channel
12. Ultimate Receiving Body : Estuary of River Mahi via VECL Channel
13. Temperature on Collection : 30 & pH Range on pH Strip :Around 8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Turbid
: Ind :121.000 , Dom :24.000 & Ind :12000.000 , Dom :12.000
15. Water Consumption & W.W.G (KLPD) : 22 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.15
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	10
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	19986
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	90
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	0.73
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	10206
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	4210
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	239
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	Cyanide	mg/l	Titrimetric method. (4500 - CN? D APHA Standard M	1-10 mg/l	BDL
13	Zinc	mg/l	(3111 B APHA Standard methods 21st edi)	0.005-100mg/l	0.177
14	Total Chromium	mg/l	3111 B APHA Standard methods 21st edi)	0.02-150mg/l	bdl
15	Hexavalent Chromium	mg/l	APHA (22nd Edition) –3500 – Cr B : -2012 Colorimet	0.1 – 100 mg/l	bdl
16	Copper	mg/l	3111 B APHA Standard methods 21st edi)	0.01-150 mg/l	bdl
17	Nickel	mg/l	(3111 B APHA Standard methods 21st edi)	0.02-150 mg/l	bdl
18	Lead	mg/l	(3111 B APHA Standard methods 21st edi)	0.05-150 mg/l	0.131
19	Cadmium	mg/l	(3111 B APHA Standard methods 21st edi)	0.002-100 mg/l	BDL
20	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	49
21	Arsenic	mg/l	(3111 B APHA Standard methods 21st edi)	-	BDL
22	MERCURY	mg/l	(3111 B APHA Standard methods 21st edi)		BDL

Annexure A 5

Inspection Report

<table>
<tr><td>1</td><td>Name & Address of unit</td><td>M/s. Gujarat Alkalies & Chemicals Ltd.
Plot No.: 726,742-748, 866,PO-Ranoli,
Vadodara-391350.</td></tr>
<tr><td>2</td><td>Date & Time of Inspection</td><td>16/09/2022, 12:10Hrs.</td></tr>
<tr><td>3</td><td>Name, designation & contact number of industry representative</td><td>Mr. HimansuBosamia
Sr Manager,
Mo. 9725004250</td></tr>
<tr><td>4</td><td>Operational status of unit at the time of inspection</td><td>During the visit plant was operational.</td></tr>
<tr><td>5</td><td>Validity of CCA</td><td>Consolidated Consent & Authorization (CC&A) is granted by Gujarat Pollution Control Board vide order No-AWH-101053 having validity up to 31/12/2023</td></tr>
<tr><td>6</td><td>Products/Sector</td><td>Chloro Alkali unit</td></tr>
<tr><td>7</td><td>a. Source of Water Supply
b. Status of CGWA permission, if GW is being used</td><td>a. River Mahi French well (JWSS) via agreement with Vadodara Irrigation Division, Govt. of Gujarat, Narmada, Water Resources, Water Supply &Kalpsar Department for supply of Water.</td></tr>
<tr><td>8</td><td>ETP system provided</td><td><table><tr><td>Primary
Yes</td><td>Secondary
No</td><td>Tertiary
Yes</td><td>ZLD
No</td></tr></table></td></tr>
<tr><td>9</td><td>ETP operational status</td><td>• During visit ETP was operational andtreated effluent was observed being discharged to VECL.
• The Unit has provided ETP of capacity of 2150 M^3 /day. The ETP consists of the following treatment units.

Collection pit -4 Nos (from CCU plant, from DM Plant, From H2O2 plant, from CLM plant,)→Final neutralization and treatment pit→pH neutralization system (Acid/Alkali dosing system)→pH meter→ Sand filters (3 nos)→pH meter→Final treated effluent discharged to VECL.

• The unit has provided in line automatic acid/alkali dosing system with pH controlled valve at final treated effluent discharge line with pH sensor to ensure auto shut off valve in case of pH exceedance.</td></tr>
<tr><td>10</td><td>Is treated effluent discharge line provided above ground?</td><td>Yes, within the industrial premises it is above the ground level.</td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>Yes, During the visit effluent was observed beingdischarged to VECL and sample was collected from the final Outlet of ETP.

<table><tr><td>Monitored Parameter</td><td>COD</td><td>BOD</td><td>TDS</td><td>SS</td><td>Cl</td><td>SO4</td></tr><tr><td>Results</td><td>118</td><td>28</td><td>16450</td><td>19</td><td>5346</td><td>402</td></tr><tr><td>CCA Standard</td><td>250</td><td>100</td><td>2100</td><td>100</td><td>600</td><td>1000</td></tr></table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><th>Monitored Parameter</th><th>PH</th><th>Colour</th><th>Temp</th><th>CN</th><th>Oil &Grease</th><th>NH3</th></tr>
<tr><td>Results</td><td>7.52</td><td>05</td><td>28</td><td>BDL</td><td>BDL</td><td>1.12</td></tr>
<tr><td>CCA Standard</td><td>6.5-8.5</td><td>100</td><td>40</td><td>0.2</td><td>10</td><td>50</td></tr>
</table>
All values are expressed in mg/l except pH.

The Analysis results reveal that the concentration of the monitored parameters TDS & Chloride, are exceeding the prescribed standard in CC&A.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>The unit has installed OCEMS for the parameters namely flow, pH, Temperature, COD, BOD, TSS, NH3-N and Colour.

During the visit, sensors of pH meter, temperature and flow meter were found in functional condition.

Sensor for COD, BOD, TSS and color reportedly were not in functional condition since last one month. The same information has been communicated to CPCB Delhi citing the reason that sensor could not be repaired and new sensor have to be procured within one month.

Unit has placed purchase order for new sensors vide purchase order no- 2100014680 dated 25.08.2022.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>Flow: 166 M^3/Hr.
pH : 7.28
Temperature: 35.3^{0}C

During the visit, only pH meter, temperature and flow meter readings were observed and the sensors of other parameters were not in operational condition.</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No.
During visit, no bypass line or accumulation of waste water in industrial premises were observed.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes.
The unit is maintaining the logbook for record of generation of effluent and discharge of treated effluent.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>1533.1 M3/Day (45993.0 M3/Month)</td><td>1623.13 M3/Day (50317 M3/Month)</td><td>1552.26 M3/Day (48120 M3/Month)</td></tr>
</table>
As per details submitted by the unit, the quantity of effluent discharged into the VECL is given in the above table.

Unit has provided magnetic flow meter at the final treated effluent discharge line. Flow totalizer reading was verified from the logbook maintained by the unit and the same was found in order</td></tr>
</table>

17	**Is hazardous waste found stored & disposed as per Rules?**	• Reportedly, during F Y 2021-22 unit has disposed 122 MT ETP sludge to its own TSDF site Near village Dhanora, District Vadodara. From April 2022 to August 2022, unit has disposed 50 MT ETP sludge periodically in the batches of 10 MT/Month to TSDF site vide latest manifest no-1815417 dated 25.08.2022. • During inspection, 8.003 MT Used Oil, 30.00 MT Organic waste, 5.892 MT activated charcoal and 10.00 MT used heating salt were found stored within the industrial premises.

Inspection by:

R.R.Badgujar,
SO, GPCB RO Vadodara.

Manoj Kr. Sharma,
Scientist -'B'CPCB RD Vadodara

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:360294 - Analysis Completion:28/09/2022

Chlor Alkali / LAB Inward : 45327

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 45327 Date: 28/09/2022

1. Name of the Customer : Gujarat Alkalies And Chemicals Ltd, Gacl - 21971
2. Address : 726,742-748,866,PO PETROCHEMICAL,-
   P.O.Ranoli-391350, Taluka : Vadodara, District : Vadodara, GIDC : PCC
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : R.R.Badgujar, SO
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 360294
7. Date & Time of Collection & Inwarding : 16/09/2022 , (1220 to 1220) & 17/09/2022
8. Date of Start & Completion of Analysis : 17/09/2022 & 28/09/2022
9. Sampling Point : From final outlet of ETP ~
10. Flow Details (Remarks) : -
11. Mode of Disposal : VECL
12. Ultimate Receiving Body : Estury of river Mahi through VECL
13. Temperature on Collection : 28 & pH Range on pH Strip :@ 7 to 8 on PH strip
14. Carboys Nos for : Barcode & Color & Appearance :Colourless
    : Ind :5745.000 , Dom :500.000 & Ind :2181.000 , Dom :280.000
15. Water Consumption & W.W.G (KLPD) : 12 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.52
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	5
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	16450
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	19
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	1.12
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	5346
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	402
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	118
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Cyanide	mg/l	Titrimetric method. (4500 - CN? D APHA Standard Me	1-10 mg/l	bdl
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	28

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 28/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Inspection Report

<table>
<tr><td>1</td><td>Name & Address of unit</td><td>M/s. GACL (Nacn complex)
P.No-726,742-748,866
Po-Petrochemical,Ranoli.
Vadodara.</td></tr>
<tr><td>2</td><td>Date & Time of Inspection</td><td>20/09/2022, 14:30Hrs.</td></tr>
<tr><td>3</td><td>Name, designation & contact number of industry representative</td><td>Mr. HimansuBosamia
Sr.ManagerS&E
Mo. 9725004250.</td></tr>
<tr><td>4</td><td>Operational status of unit at the time of inspection</td><td>In operation.</td></tr>
<tr><td>5</td><td>Validity of CCA</td><td>AWH-97343, Valid up to 30/06/2023.</td></tr>
<tr><td>6</td><td>Products/Sector</td><td>Inorganic chemical manufacturing (PAC)
Unit has dismantled the sodium cyanide and sodium Ferro cyanide plant and manufacturing of only Poly Aluminum chloride.</td></tr>
<tr><td>7</td><td>c. Source of Water Supply
d. Status of CGWA permission, if GW is being used</td><td>River Mahi (French well).</td></tr>
<tr><td>8</td><td>ETP system provided</td><td><table><tr><td>Primary
Yes</td><td>Secondary
No</td><td>Tertiary
No</td><td>ZLD
No</td></tr></table></td></tr>
<tr><td>9</td><td>ETP operational status</td><td>• The Unit has provided ETP consisting of the following treatment units:
Effluent collection pit, Neutralization pit (2 Nos), Filter press, Final collection pit. Final treated effluent is discharged in to VECL.
• All the ETP units were in found in operation during the visit.</td></tr>
<tr><td>10</td><td>Is treated effluent discharge line provided above ground?</td><td>Yes</td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>Yes, treated waste water sample is collected from Final outlet of ETP. The analysis result of the collected sample is given in table below:

<table><tr><td>Parameter</td><td>COD</td><td>BOD</td><td>TDS</td><td>SS</td><td>Cl</td><td>SO4</td></tr><tr><td>Results</td><td>32</td><td>5</td><td>14092</td><td>52</td><td>7500</td><td>162</td></tr><tr><td>CCA Standard</td><td>250</td><td>100</td><td>5000</td><td>100</td><td>600</td><td>1000</td></tr><tr><td>Parameter</td><td>pH</td><td>Colour</td><td>Temp</td><td colspan="2">Oil& Grease</td><td>NH3</td></tr><tr><td>Results</td><td>8.12</td><td>05</td><td>30</td><td colspan="2">BDL</td><td>BDL</td></tr><tr><td>CCA Standard</td><td>6.5-8.5</td><td>100</td><td>40</td><td colspan="2">10</td><td>50</td></tr></table>* All values are expressed in mg/l except pH.

The Analysis results shows that the concentrations of monitored parameters are within CCA prescribed limit except TDS &Chloride.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Operational (Only PH and flow meter provided).</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>The reading of OCEMS connected to the final treated effluent discharge line was noted during visit and the same is given in table below:</td></tr>
</table>

<table>
<tr><td></td><td></td><td><table><tr><td>Flow</td><td>10.0 m3/hr</td><td>pH</td><td>7.19</td></tr></table></td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No. No bypass line is observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, Logbook is being maintained on a regular basis.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><th>June’22</th><th>July’22</th><th>August’22</th></tr><tr><td>366 KL</td><td>278 KL</td><td>458 KL</td></tr></table></td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• During inspection, 0.36 MT ETP sludge is observed stored within premises.
• Unit has disposed @12 MT ETP sludge to its own TSDF site during FY 2021-22.</td></tr>
</table>

Inspection by:

R.R.Badgujar
SO, GPCB RO Vadodara.

S. Pradeep Raj
Scientist-D, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:360670 - Analysis Completion:30/09/2022

Inorganic Chemical Manufacturing, i.e. ferrous sulphate, zinc sulphate, manganese sulphate, magnesium sulphate, ferric chloride, ferrous chloride, potassium chloride etc. / LAB Inward : 45414

TEST REPORT

Test Report No. : 45414 Date: 30/09/2022

1. Name of the Customer : Gacl (Nacn Complex) - 22701
2. Address : 726,742-748,866,(PO) PETROCHEMICALS,District Vadodara Ranoli-391346, Taluka : Vadodara, District : Vadodara, GIDC : PCC
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : R.R.Badgujar, SO
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 360670
7. Date & Time of Collection & Inwarding : 20/09/2022 , (1450 to 1450) & 21/09/2022
8. Date of Start & Completion of Analysis : 21/09/2022 & 30/09/2022
9. Sampling Point : From final outlet of ETP ~
10. Flow Details (Remarks) : -
11. Mode of Disposal : VECL
12. Ultimate Receiving Body : Estuary of river Mahi through VECL
13. Temperature on Collection : 30 & pH Range on pH Strip :@ 7 to 8 on PH strip
14. Carboys Nos for : Barcode & Color & Appearance :Colourless
: Ind :330.000 , Dom :34.000 & Ind :136.000 , Dom :32.000
15. Water Consumption & W.W.G (KLPD) : 11 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.12
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	05
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	14092
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	52
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	bdl
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	7500
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	162
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	32
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	5

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 30/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 6

Inspection Report

1	**Name & Address of unit**	M/s. Gujarat Industrial Power Company Ltd. Vill.-Dhanora, P.O-Petrochemical, Dist.- Vadodara.			
2	**Date & Time of Inspection**	20/09/2022, 16:100 Hrs.			
3	**Name, designation & contact number of industry representative**	Mr. M.C.Vadalia AGM, Mo.9909925805			
4	**Operational status of unit at the time of inspection**	Unit is not found in operationduring visit. The unit is not in operation reportedly since Nov 2021. The Unit had submitted a letter to GPCB - H.O.,Gandhinagar intimating that their (GIPCL) Baroda plant is not operating commercially since November, 2021 due to higher natural Gas Prices.			
5	**Validity of CCA**	AWH-92757, Valid up to 31/12/2022.			
6	**Products/Sector**	Thermal Power Plant.			
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	River Mahi (French well)			
8	**ETP system provided**	**Primary** **Yes**	**Secondary** **No**	**Tertiary** **No**	**ZLD** **No**
9	**ETP operational status**	• During visit ETP units are not found in operation. There is a little water in the collection tank and the rest of the units are found empty during visit. • It was informed that the ETP is operated as and when required(only during the operation of their DM Plant).Unit is operating their DM plant to supply the DM water to M/s Hettich India Pvt. Ltd., PO Petrochemical, Vadodara @ 70-75 M^3/Day. The unit has made MoU with M/s. Hettich India Pvt. Ltd. in 2018 with validity upto March 2023 to supply DM water. • The unit informed that after the expiry of MoU in March 2023, M/s. GIPCL may not renew the contract with M/s. Hettich India Pvt. Ltd. for supplying DM water and the DM plant shall be operated only to meet the internal requirements.			
10	**Is treated effluent discharge line provided above ground?**	No, the complete line to VECL is provided underground.			
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No discharge to VECL is observed during visit.			

<table>
<tr><td>12</td><td>Operational status of OCEMS</td><td>The OCEMS was in working condition. However, there was no discharge during visit.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>----</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No bypass line is observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook is maintained.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>3969 KL</td><td>3115 KL</td><td>3565KL</td></tr></table></td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• During inspection, No ETP sludge or used oil wasobserved stored in the premises of the unit.</td></tr>
</table>

Inspection by:

R.K.Baggujar
SO, GPCB RO Vadodara.

S. Pradeep Raj
Scientist-D, CPCB RD Vadodara.

Annexure – A 7

Inspection Report

1	**Name & Address of unit**	M/s. INEOS Styrolution India Limited. Plot No.: 51, GIDC Nandesari, Vadodara-391340.
2	**Date & Time of Inspection**	06/09/2022, 11:00 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Divyang Choksi, Plant Head, Mo. 9979890248 Mr. Mohan Patidar, SHE Manager, Mo. 7226098863

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-90874, Valid up to 30/09/2022.
6	**Products/Sector**	Synthetic organic chemical (ABS resin powder)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	GIDC supply.
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Collection Tank → Neutralization Tank →Equalization tank→ Flash Mixer Tank → Flocculator → Primary Clarifier → Aeration Tank → Sec. Clarifier → Holding Tank → Sand & Carbon Filter → Treated Effluent Tank → Discharge into VECL.
9	**ETP operational status**	• All units observed operational. • Unit is doing nutrient dosing in aeration tank. Algae bloom was observed in secondary clarifier and final treated w/w holding tank, hence unit has been instructed to optimize the nutrient dose in aeration tank.
10	**Is treated effluent discharge line provided above ground?**	Yes

<table>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>Yes, Sample is collected and analysis report of the same is attached herewith.

<table>
<tr><th>Parameter</th><th>CCA standard</th><th>Concentration</th></tr>
<tr><td>Temp.</td><td>40</td><td>33</td></tr>
<tr><td>pH</td><td>6.5 - 8.5</td><td>8.44</td></tr>
<tr><td>Colour</td><td>100</td><td>20</td></tr>
<tr><td>TDS</td><td>5000</td><td>4922</td></tr>
<tr><td>SS</td><td>100</td><td>76</td></tr>
<tr><td>Ammonical Nitrogen</td><td>50</td><td>2.86</td></tr>
<tr><td>Chloride</td><td>600</td><td>389</td></tr>
<tr><td>Sulphate</td><td>1000</td><td>2250</td></tr>
<tr><td>COD</td><td>250</td><td>75</td></tr>
<tr><td>O&G</td><td>10</td><td>BDL</td></tr>
<tr><td>Phenolic Compound</td><td>1</td><td>BDL</td></tr>
<tr><td>Sulphide</td><td>-</td><td>BDL</td></tr>
<tr><td>BOD</td><td>100</td><td>14</td></tr>
<tr><td>Phosphate</td><td>-</td><td>7.9</td></tr>
<tr><td>Total Phosphate</td><td>-</td><td>24.6</td></tr>
<tr><td colspan="3">Note: All values are expressed in mg/l except pH, Colour –Hazen unit, Temp-degree C.</td></tr>
</table>
Concertation Value of Sulphate in treated effluent is found exceeding the prescribed standards.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Operational.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>
<table>
<tr><td>Flow</td><td>20.35 m3/hr</td><td>Colour</td><td>67.38 Hazen eq.</td></tr>
<tr><td>COD</td><td>94.98 mg/l</td><td>pH</td><td>7.55</td></tr>
<tr><td>BOD</td><td>35.19 mg/l</td><td>NH4-N</td><td>8.58 ppm</td></tr>
<tr><td>TSS</td><td>48.03 mg/l</td><td>Temp.</td><td>33.9 ℃</td></tr>
</table>
</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>12182 KL</td><td>14740 KL</td><td>14729 KL</td></tr>
</table>
Source: Received from industry via email on 07/09/2022 .</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per</td><td>• During inspection, @2.5 MT ETP sludge and @ 1.5 MT Process waste observed stored within</td></tr>
</table>

	Rules?	premises. • Unit has disposed 1410.965 MT ETP sludge disposed at TSDF site of NECL-Nandesari, BEIL-Dahej and GGEPIL-Rajasthan during last FY 2021-22. • As per XGN manifest records, unit has disposed 964.325 MT Chemical sludge generated from waste water treatment plant during last one year (01-09-2021 to 31-08-2022).

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Kavitha B.V.
Scientist-D, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:359066 - Analysis Completion:17/09/2022

Synthetic resins / LAB Inward : 44993

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 44993 **Date: 17/09/2022**

1. Name of the Customer : **INEOS Styrolution India Limited. - 22179**
2. Address : **51, ,-,-**
NANDESARI-391340, Taluka : Vadodara, District : Vadodara, GIDC :
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : APP-On Application)**
4. Sample Collected By : **MR. JIGNESH JAYSUKHBHAI RAIYAN**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **359066**
7. Date & Time of Collection & Inwarding : **06/09/2022 , (1100 to 1100) & 07/09/2022**
8. Date of Start & Completion of Analysis : **07/09/2022 & 17/09/2022**
9. Sampling Point : **From the final treated w/w discharge into VECL channel ~**
10. Flow Details (Remarks) : **Yes**
11. Mode of Disposal : **VECL Channel**
12. Ultimate Receiving Body : **No generation of industrial wastewater**
13. Temperature on Collection : **33 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **barcode & Color & Appearance :light yellowish**
: **Ind :1163.000 , Dom :40.000 & Ind :855.000 , Dom :20.000**
15. Water Consumption & W.W.G (KLPD) : **15 ,Cap No & Weight :**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	33
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.44
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	20
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	4922
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	76
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	2.86
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	389
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	2250
9	Phosphate	mg/l	(4500-P D APHA Standard method 22nd edi)	0-50mg/l	7.9
10	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-20	5.0- 50000 mg/l	75
11	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
12	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
13	Sulphide	mg/l	APHA (23rd Edi.)4500-s2-F –iodometric Method	1-500.0 mg/l	BDL
14	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	14
15	Total Phosphate	mg/l	Stannous Chloride method.(4500 – P D APHA Standa	0.01 – 500 mg/l.	24.6

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 17/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure – A 8

Inspection Report

1	**Name & Address of unit**	M/s. Diamines and Chemicals Ltd Plot No.: 13, Petrochemical Complex Area, PO: Jawaharnagar, Dist.: Vadodara-394346
2	**Date & Time of Inspection**	02/09/2022, 12:00 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Vasant B. Padhiyar, ETP Operator, Mo. 9023731173

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-92784, Valid up to 31/12/2022
6	**Products/Sector**	Synthetic organic chemical (Ethylene amine and Piperazine, N-methyl Pyprolidone, EDA Phosphate)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (2 nos) provided within premises. Unit has valid CGWA permission (up to 11/12/2023) for abstraction of ground water (412.15 KLD).
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Collection Tank → Equalization tank → Neutralization Tank (lime& alum dozing) → Flash Mixer Tank → Primary Clarifier → Aeration Tank → Sec. Clarifier → Holding Tank → Sand & Carbon Filter → Treated Effluent Tank → Discharge into VECL.
9	**ETP operational status**	• All the units of ETP are observed in operation. • Unit has provided fresh water line from borewell for PSF backwash. Hence, unit is instructed to remove that line and utilize treated effluent for backwashing. • Moreover, there is no nomenclature provided on storage tanks as well as colour coding and flow directions are not observed on pipelines within ETP hence, unit is instructed to provide the same.
10	**Is treated effluent discharge line provided above ground?**	Yes
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then**	Discharge of effluent is not observed during visit. However, sample of treated effluent is taken from final treated w/w holding cum disposal tank.

<table>
<tr><td></td><td>analysis results of the sample collected</td><td>
<table>
<tr><th>Parameters</th><th>CCA Standard</th><th>Concentration</th></tr>
<tr><td>pH</td><td>6.5 - 8.5</td><td>8.29</td></tr>
<tr><td>Colour</td><td>100</td><td>5</td></tr>
<tr><td>TDS</td><td>5000</td><td>1816</td></tr>
<tr><td>SS</td><td>100</td><td>24</td></tr>
<tr><td>Ammonical Nitrogen</td><td>50</td><td>29.79</td></tr>
<tr><td>Chloride</td><td>600</td><td>243</td></tr>
<tr><td>Sulphate</td><td>1000</td><td>990</td></tr>
<tr><td>COD</td><td>250</td><td>142</td></tr>
<tr><td>O&G</td><td>10</td><td>BDL</td></tr>
<tr><td>Phenolic Compound</td><td>1</td><td>0.13</td></tr>
<tr><td>BOD</td><td>100</td><td>31</td></tr>
</table>
Note: All values are expressed in mg/l except pH, Color –Hazen unit.
Concentration values of all analyzed parameters in treated effluent are found well within the prescribed standards.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>OCEMS is not provided.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>--</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>1526 KL</td><td>2043 KL</td><td>1819 KL</td></tr>
</table>
</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>

During inspection, @3 MT ETP sludge, @ 5 MT Insulation waste and @5 MT distillation residue is observed stored within premises.
As per XGN manifest records, unit has disposed 8.15 MT ETP sludge during the last one year (01-09-2021 to 31-08-2022).

</td></tr>
</table>

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:358233 - Analysis Completion:15/09/2022

Organic Chemicals manufacturing / LAB Inward : 44776

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 44776 **Date: 15/09/2022**

1. Name of the Customer : **Diamines And Chemicals Ltd - 21849**
2. Address : **13,PCC AREA,PO : PETROCHEMICALS -Vadodara-391346, Taluka : Vadodara, District : Vadodara, GIDC : PCC**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By : **MR. JIGNESH JAYSUKHBHAI RAIYAN**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **358233**
7. Date & Time of Collection & Inwarding : **02/09/2022 , (1230 to 1230) & 03/09/2022**
8. Date of Start & Completion of Analysis : **03/09/2022 & 15/09/2022**
9. Sampling Point : **## Final Outlet of the ETP ~ From the final treated w/w holding cum disposal tank of ETP**
10. Flow Details (Remarks)
11. Mode of Disposal : **--**
12. Ultimate Receiving Body : **VECL Channel**
13. Temperature on Collection : **Mahi River Via VECL**
14. Carboys Nos for : **30 & pH Range on pH Strip :@7-8 on pH strip**
: **barcode & Color & Appearance :colourless**
15. Water Consumption & W.W.G (KLPD) : **Ind :539.000 , Dom :50.000 & Ind :312.000 , Dom :40.000**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.29
2	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	5
3	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	1816
4	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	24
5	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	29.79
6	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	243
7	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	990
8	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	142
9	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
10	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.13
11	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	31

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 9

Inspection Report

1	**Name & Address of unit**	**Jayant Agro -Organics Ltd,** **Address:** S.no. 296,297,298,299/p,&300, Village: Dhanora, Taluka & District: Vadodara.
2	**Date & Time of Inspection**	Date: 02/09/2022 & Time: 11: 50 hrs
3	**Name Designation & contact number of industry representative**	Mr. Ashokbhai Bavadia- Head Operation +91-9979871436

4	**Operational status of unit at the time of inspection**	In operation
5	**Validity of CCA**	AWH-118243, Valid up to 30/09/2025
6	**Products/Sector**	Organic Chemicals manufacturing unit (Mfg of Sebacic Acid, Octanol (all grade), Glycerine, (All Grades) etc)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is used**	a. Water supply source: From Joint water supply scheme of GACL & GIPCL (JWSS). b. Not applicable.
8	**ETP system provided**	ETP units consist of collection tanks- Oil & Grease – Equalization cum oxidation tank - Flash Mixer – Flocculator - Primary clarifier- Aeration tank 1- Clarifier- Aeration tank 2- Clarifier- Thickner –Treated waste water collection tank - Discharged into VECL
9	**ETP operational status**	During inspection, ETP is observed in operation.
10	**Is treated effluent discharge line provided above ground?**	No (Underground pipeline)
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	Yes, one treated waste water sample is collected from the treated effluent being discharged to VECL channel. **Analysis results:**

Parameters	**CCA Standard**	**Concentration**
pH	6.5 - 8.5	7.49
Colour	100	10
TDS	5000	2830
SS	100	44
Ammonical Nitrogen	50	1.51
Chloride	600	146
Sulphate	1000	1960
COD	250	45
O&G	10	BDL (Below Detection limit)
Phenolic	1	BDL (Below

		<table><tr><td>Compound</td><td></td><td>Detection limit)</td></tr><tr><td>BOD</td><td>100</td><td>8</td></tr></table> *Note: All values are expressed in mg/l except pH, Color –Hazen unit.* The above analysis results show that concentration of Sulphate: 1960 mg/lit is higher than the prescribed CCA standard.
12	**Operational status of OCMS**	Provided. At the time of inspection, it is not working as shifting of OCEM from inside to outside of unit observed going on.
13	**Results showing in OCMS, including discharge flow rate**	--
14	**Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?**	No
15	**Is proper logbook maintained regarding operation of ETP?**	Yes, unit is maintaining daily logbook for operation of ETP.
16	**Quantity of effluent discharged into VECL in last 3 months**	As per record quantity of effluent discharged into VECL as below: June: 2999 M^3 July: 7150 M^3 Aug: 7924 M^3
17	**Is hazardous waste found stored & disposed as per Rules?**	Unit has provided one closed shed for the storage of sludge generated during effluent treatment. Unit has disposed 52.715 MT ETP waste in the last one year to 01/09/2021 to 31/08/2022. During inspection, approx 15-20 MT ETP waste storage is observed at site.

Inspection by:

Dharmesh Rana
SLA, CPCB RD Vadodara

Padaria H. C.

H. C. Padaria
AEE, GPCB- Vadodara

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:358247 - Analysis Completion:15/09/2022

Organic Chemicals manufacturing / LAB Inward : 44777

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 44777 **Date: 15/09/2022**

1. Name of the Customer	**: Jayant Agro -Organics Ltd (ISCPL division) Formerly Ihsedu Speciality**
2. Address	**Chemicals - 22233**
	: 296,297,298,299/p,&300,DHANORA,
3. Nature of Sample	**: REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By	**: Mr. Padaria henil c**
5. Quantity of Sample Received	**: 05 Litter.**
6. Code No. of the Sample	**: 358247**
7. Date & Time of Collection & Inwarding	**: 02/09/2022 , (1140 to 1140) & 03/09/2022**
8. Date of Start & Completion of Analysis	**: 03/09/2022 & 15/09/2022**
9. Sampling Point	**: ## Final Outlet of the ETP ~ From discharge point into VECL**
10. Flow Details (Remarks)	**: Yes**
11. Mode of Disposal	**: into VECL**
12. Ultimate Receiving Body	**: No generation of industrial wastewater**
13. Temperature on Collection	**: 32 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for	**: Barcode & Color & Appearance :Turbid**
	: Ind :605.000 , Dom :20.000 & Ind :272.000 , Dom :16.000
15. Water Consumption & W.W.G (KLPD)	**: 13 ,Cap No & Weight : W-1**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	32
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.49
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	10
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	2830
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	44
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	1.51
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	146
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1960
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	45
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	bdl
12	Zinc	mg/l	(3111 B APHA Standard methods 21st edi)	0.005-100mg/l	0.106
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	8

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 10

Inspection Report

1	**Name & Address of unit**	M/s.Gujarat state Fertilizer & Chemical Ltd. (Polymer unit) Plot No.: 13 PCC Area, Dist-Vadodara.			
2	**Date & Time of Inspection**	20/09/2022, 13:00 Hrs.			
3	**Name, designation & contact number of industry representative**	Mr. Abhijit D Kamat ChiefProject, MO.7574805570			
4	**Operational status of unit at the time of inspection**	Unit is not found in operation due to economical non – viability of operations.			
5	**Validity of CCA**	AWH-116911, Valid up to 30/09/2026.			
6	**Products/Sector**	Petrochemical manufacturing.			
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	River Mahi(French well)			
8	**ETP system provided**	Primary Not in operation	Secondary Not in operation	Tertiary Not in operation	ZLD No
9	**ETP operational status**	• All ETP units are found in idle condition. Unit is not in operation reportedly since 07/02/2020. The reason for shutdown is economical non –viability of operations. • Unit has also submitted letter to VECL& GPCB, RO-Vadodara on dated: 24/02/2022 intimating the stopping of overall production activity of GSFC polymer unit since 07/02/2020 for indefinite period.			
10	**Is treated effluent discharge line provided above ground?**	Yes			
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No, there is no discharge observed during visit.			
12	**Operational status of OCEMS**	Not provided			
13	**Results showing in OCEMS, including discharge flow rate**	NA			
14	**Any bypass line / unauthorized discharge /**	No bypass line is observed during visit.			

	accumulation of wastewater in premises observed?	
15	**Is proper logbook maintained regarding operation of ETP?**	----
16	**Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)**	-----
16	**Is hazardous waste found stored & disposed as per Rules?**	• During inspection, about 25 MT concentration or Evaporation residue is found stored within premises. • Unit has disposed @ 216 MT of concentration-Evaporation Residue to RSPL for co-processing in year 2020 through manifest.

Inspection by:

R.R.Badgujar
SO, GPCB RO Vadodara.

S. Pradeep Raj
Scientist-D, CPCB RD Vadodara.

Annexure – A 11

Inspection Report

1	**Name & Address of unit**	M/s. Sabic Innovative Plastics India Pvt Ltd. Plastic Avenue, PO Jawaharnagar, Vadodara-391320.
2	**Date & Time of Inspection**	06/09/2022, 14:05 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Dipak Shah, EHS Manager – Mo. 9099023136.

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-98906, Valid up to 30/09/2023.
6	**Products/Sector**	Various Engineering plastic raw materials i.e. Polycarbonate blends, PPO/PA alloys, PC/PBT alloys etc.
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (4 nos) provided within premises. Unit has valid CGWA permission (up to 30/12/2023) for abstraction of ground water (400 KLD).
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Collection Tank (03 Nos.) → Filter Press (02 Nos.) → Filtrate Collection Tank (2 nos) → Aeration Tank (2 nos) → Tube settler → Holding Tank → Sand & Carbon Filter → Treated Effluent Tank → Discharge into VECL.
9	**ETP operational status**	• All units of ETP are observed operational.
10	**Is treated effluent discharge line provided above ground?**	Yes
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No. However, the treated w/w sample has been collected after the PSF-ACF treatment.

Parameter	CCA standard	Concentration
Temp.	40	35
pH	6.5 - 8.5	8.39
Colour	100	5
TDS	5000	380
SS	100	14
Ammonical	50	BDL

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>Nitrogen</td><td></td><td></td></tr>
<tr><td>Chloride</td><td>600</td><td>97</td></tr>
<tr><td>Sulphate</td><td>1000</td><td>50</td></tr>
<tr><td>COD</td><td>250</td><td>26</td></tr>
<tr><td>O&G</td><td>10</td><td>BDL</td></tr>
<tr><td>Phenolic Compound</td><td>1</td><td>BDL</td></tr>
<tr><td>BOD</td><td>100</td><td><5 (3)</td></tr>
<tr><td colspan="3">Note: All values are expressed in mg/l except pH, Colour –Hazen unit, Temp-degree C.</td></tr>
</table>
Concentration values of all analysed parameters in treated effluent are found well within the prescribed standards.
</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Operational.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>--</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>882 KL</td><td>1176 KL</td><td>787 KL</td></tr>
</table>
Source: Received from industry during visit .
</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>

During inspection, @200 L used oil, @0.6 MT saw dust and @0.2 MT discarded liner/container observed stored within premises.
Unit has disposed 11.830 MT HW to CHWIF and 5.950 MT HW to recycler or co-processors or pre-processor during last FY 2021-22.
As per XGN manifest records, unit has disposed only 7.76 MT Chemical sludge generated from waste water treatment plant during last one year (01-09-2021 to 31-08-2022).

</td></tr>
</table>

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Kavitha B.V.
Scientist-D, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:359070 - Analysis Completion:17/09/2022

Inorganic Chemical Manufacturing, i.e. ferrous sulphate, zinc sulphate, manganese sulphate, magnesium sulphate, ferric chloride, ferrous chloride, potassium chloride etc. / LAB Inward : 44995

TEST REPORT

Test Report No. : 44995 **Date: 17/09/2022**

1. **Name of the Customer** : **Sabic Innovative Plastics India Pvt. Ltd. - 21907**
2. **Address** : **-,PLASTIC AVENUE,PO. JAWAHARNAGAR 391320 Jawahernagar-391320, Taluka : Vadodara, District : Vadodara, GIDC :**
3. **Nature of Sample** : **REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. **Sample Collected By** : **MR. JIGNESH JAYSUKHBHAI RAIYAN**
5. **Quantity of Sample Received** : **05 Litter.**
6. **Code No. of the Sample** : **359070**
7. **Date & Time of Collection & Inwarding** : **06/09/2022 , (1420 to 1420) & 07/09/2022**
8. **Date of Start & Completion of Analysis** : **07/09/2022 & 17/09/2022**
9. **Sampling Point** : **From the final treated w/w discharge into VECL channel ~**
10. **Flow Details (Remarks)** : **Yes**
11. **Mode of Disposal** : **VECL Channel**
12. **Ultimate Receiving Body** : **No generation of industrial wastewater**
13. **Temperature on Collection** : **35 & pH Range on pH Strip :@7-8 on pH strip**
14. **Carboys Nos for** : **barcode & Color & Appearance :colourless**
    : **Ind :350.000 , Dom :50.000 & Ind :175.000 , Dom :49.750**
15. **Water Consumption & W.W.G (KLPD)** : **12 ,Cap No & Weight :**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	35
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.39
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	5
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	380
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	14
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	bdl
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	97
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	50
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	26
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	<5(3)

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 17/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure – A 12

Inspection Report

1	**Name & Address of unit**	M/s. Panoli Intermediates (I) Pvt. Ltd. (Formerly Gujarat Polybutene Pvt Ltd) Plot No.: 11 &18, Petrochemical Complex Area, PO: Jawaharnagar, Dist.: Vadodara-394346
2	**Date & Time of Inspection**	02/09/2022, 11:30 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Virensingh Nirwan, Production Manager, Mo. 8000367677

4	**Operational status of unit at the time of inspection**	Unit has been not in operation since 2013. There is revamping activities observed going on.			
5	**Validity of CCA**	CCA of unit expired on 30/06/2022. Recently, Unit has obtained CTE based on TOR vide CTE no. 55800 dated 07/07/2022.			
6	**Products/Sector**	Synthetic organic chemicals [various acid chloride (50 nos, 5000 MT/month), alkyl chloride (15 nos, 1600 MT/month) and hydrogenation products (6 nos, 5000 MT/month)]			
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Fresh water is supplied by RIL from their French well at river Mahi.			
8	**ETP system provided**	**Primary**	**Secondary**	**Tertiary**	**ZLD**
9	**ETP operational status**	ETP construction is observed going on.			
10	**Is treated effluent discharge line provided above ground?**	Not verified.			
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No.			
12	**Operational status of OCEMS**	--			
13	**Results showing in OCEMS, including discharge flow rate**	--			
14	**Any bypass line / unauthorized discharge / accumulation of**	--			

	wastewater in premises observed?	
15	**Is proper logbook maintained regarding operation of ETP?**	--
16	**Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)**	--
16	**Is hazardous waste found stored & disposed as per Rules?**	No hazardous waste is observed stored within premises.

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

Annexure –A: Photographs Taken During Inspection

Old existing plant observed non-operational.	

Revamping of plant observed going on.	
ETP civil construction observed going on.	

Annexure A 13

Name of Unit: M/s Hettich India Pvt. Ltd.
PCB ID: 32775
Date of inspection: 15/09/2022

Board has issued closure direction under the Section-33(A) of the Water act-1974 vide order no. GPCB/CCA-VRD-1504(2)/ID-32775/681536 dated 26/08/2022 with immediate effect to the unit.

Now unit has applied for revocation and unit is inspected w.r.to revocation application.

- During inspection, unit is observed not in operation and no any manufacturing activity going on.
- Unit has submitted power disconnection letter issue by the MGVCL vide order no. KLY/TECH/4682 dated 14/09/2022 and as per letter power supply of unit was disconnected on 13/09/2022. During inspection, electric power supply of the unit is observed disconnected.
- Unit has one nos. of D.G sets (cap: 125 KVA) and during inspection same is observed in operation for power supply to the offices, security cabin and for chiller. During inspection, one nos. chiller on D.G set is observed in operation for cooling of Cathodic electro deposition stored in one nos. of tank (quantity: @38 KL).

Compliance to the cause of Closure order:

Sr. No.	Direction details	Inspection observations
1.	VECL had suspended membership and disconnected discharge pipeline disposal for effluent into VECL.	• During inspection, unit is observed not in operation and no any manufacturing activity going on. • VECL has reinstating membership with vide their email dated 12/09/2022 with specific conditions (along with time line) and unit has submitted copy of the same with revocation application. • During inspection, discharge pipeline for disposal of effluent into VECL is observed disconnected. Photograph of the same is attached herewith. • It is observed that unit has started activity for construction of cabin for provision of RTOM, auto sampler, IOT, 3-wa valve, flow meter etc as per VECL directions. Photograph of the same is attached herewith.
2.	Unit has provided Phycoline plant without permission of the Board and during inspection phycoline both ponds are fully filled (brim) with wastewater.	• During inspection, Phycoline plant is observed not in operation and level of effluent in phycoline pond is observed low and unit has stopped the effluent collection in to phycoline pond. It is also observed that unit has

		disconnected effluent supply line in to phycoline pond. Photographs of the same are attached herewith. • As per logbook maintained by the unit, unit has taken effluent from phycoline pond in to ETP/MEE and treated on 18/08/2022 & 19/08/2022.
3.	During inspection, continuous seepage of wastewater (yellowish colour) is observed from brick wall of phycoline pond to open land at outside of premises and analysis report of this waste water sample shows pH-8.67, COD- 347 mg/l, BOD- 44 mg/l, Total chromium- 3.86 mg/l, Hexavalent chromium- 3.86 mg/l.	• During inspection, no any seepage of w/w observed from brick wall of phycoline pond to open land at outside of premises. And level of effluent in phycoline pond is observed low and unit has stopped the effluent collection in to phycoline pond. • Unit has disconnected effluent supply line in to phycoline pond. • Surrounding area of phycoline pond is observed cleaned and paved with concrete. Photographs of the same are attached herewith.
4.	During inspection, phycoline both ponds are fully filled (brim) with waste water (yellowish colour) and analysis report of waste water sample shows pH- 8.64, COD- 233 mg/l, BOD- 27 mg/l, Total chromium- 10.40 mg/l, Hexavalent chromium- 5.57 mg/l.	
5.	Unit has provided only one flow meter on inlet line of ETP and not provided flow meter on strategic locations of effluent conveying line.	• During inspection, ETP, MEE and RO are observed not in operation. • During inspection, it is observed that unit has provided flow meters on following locations: o ETP O/L line o MEE feed line o RO I/L line o RO permeate line o DM water supply line from GIPCL • However, unit has yet not provided flow meter on all strategic locations of effluent conveying line. Hence unit has been instructed for the same.
6.	During inspection, observed that, provided RO plant was not in operation since 02/08/2022.	• During inspection, RO plant is observed not in operation as no any manufacturing activity is going on. As per logbook maintained by the unit, unit has lastly operated RO plant on 13/09/2022.
7.	During inspection found that, provided MEE was in idle condition and unit has disconnected MEE feed line and	• During inspection, MEE plant is observed not in operation as no any manufacturing activity is going on. As per logbook maintained by the

	looking to the site situation seems that unit is not operating MEE regularly & efficiently.	unit, unit has lastly operated MEE on 13/09/2022. • MEE feed line is observed connected during inspection. • Unit has raised PO for operation and maintenance of MEE by the outside agency. Unit has submitted copy of PO along with revocation application.
8.	Unit is not taking care during the monsoon to prevent the industrial waste water from flowing in to outside premises which is clearly shows lack of willingness by the industry to treat the generated effluent.	• During inspection, Phycoline plant is observed not in operation and level of effluent in phycoline pond is observed low and unit has stopped the effluent collection in to phycoline pond. It is also observed that unit has disconnected effluent supply line in to phycoline pond. • Unit has raised PO for 02 nos. of storage tanks (cap: 20 KL each) for storage of effluent in case of emergency situation. Unit has submitted copy of PO along with revocation application.

- During inspection, @45 KL w/w (stored in storage tanks as well as in phycoline pond) is observed stored within premises. Unit has been instructed to submit action plan for its treatment and disposal and to dispose it in environmentally sound manner. Unit has submitted action plan in reply to the written remarks given during inspection for treatment of effluent in absence of phycoline pond. As per action plan submitted by the unit, they will treat dilute stream in ETP and treated w/w will be discharged in to VECL and concentrated stream will be treated and disposed via MEE.
- Unit has yet not provided colour coding and indication of flow direction on effluent conveying pipeline.
- Necessary written remarks are given to the unit during inspection. Photographs taken during inspection are attached herewith.

Location Factor: Looking to the site location of the unit it is less than 10 km from the Vadodara municipal Boundary, considering same location factor may be consider as 1.25

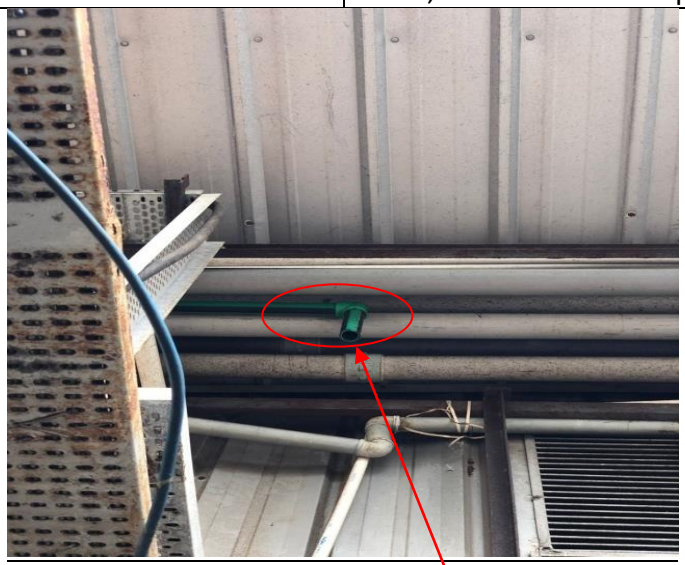
K.D Rathod
SSA

P.S Chaudhary
AEE

Photographs taken during Inspection

Discharge pipeline for disposal of effluent into VECL is observed disconnected.

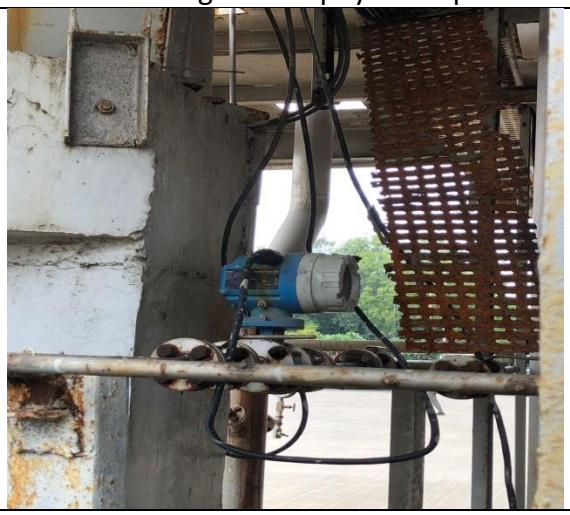
Location where unit will construct cabin for provision of RTOM, auto sampler, IOT, 3-wa valve, flow meter etc as per VECL directions



Unit has disconnected effluent supply line in to phycoline pond

Phycoline ponds

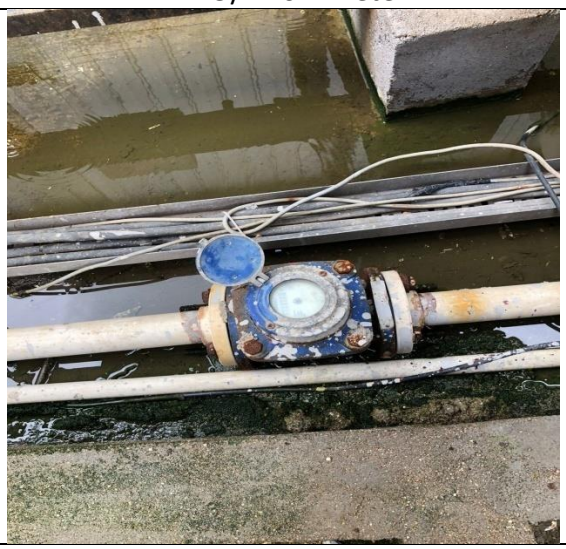
Surrounding area of phycoline pond is observed cleaned and paved with concrete



MEE feed meter

ETP O/L flow meter

RO I/L flow meter



RO permeate flow meter

Flow meter on DM water supply line

Annexure – A 14

Inspection Report

1	**Name & Address of unit**	M/s. Jayant Agro Organics Ltd. Plot no. 601-603, 624-627, B/h GACL, PCC Area, Ranoli, Vadodara.
2	**Date & Time of Inspection**	06/09/2022, 12:30 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Vinod Chauhan, Factory Manager – Mo. 9825335996.

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-118570, Valid up to 31/12/2026.
6	**Products/Sector**	Synthetic Organic Chemical (Castor oil and its derivatives)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (2 nos) provided within premises. Unit has valid CGWA permission (up to 23/12/2023) for abstraction of ground water (210 KLD).
8	**ETP system provided**	**The unit has provided ETP (2 nos) consisting of following treatment units.** **ETP-1 (Unit-1):** Reportedly for treating w/w generated from Boiler blowdown, softener reject & washing O&G separator → Equalization → Neutralization Tank → Primary settling tank → Aeration Tank 1 → Aeration Tank 2 → Sec. Clarifier → Holding Tank. **ETP-2 (Unit-2):** Reportedly for treating w/w generated from process, Boiler blowdown and washing O&G separator → Equalization → Neutralization Tank → Flash Mixer Tank → Flocculator → Primary settling tank → Aeration Tank → Sec. Clarifier → Holding Tank. From Holding tank of ETP-1 &2 → Sand & Carbon Filter → Treated Effluent Tank → Discharge into VECL.
9	**ETP operational status**	• During inspection, ETP-1 observed not in operation and ETP-2 observed in operation. • Looking to the situation of secondary treatment units of ETP-2, it seems that they are not working and need to be revamped.

<table>
<tr><td></td><td></td><td>Aeration Tank
 
Secondary Clarifier
  </td></tr>
<tr><td>10</td><td>Is treated effluent discharge line provided above ground?</td><td>Yes</td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>No, discharge was not observed at time of visit. Reportedly the discharge timing allotted by VECL is 2:00 pm to 5:00 pm. Sample was collected from the final treated effluent collection tank.

<table>
<tr><th>Parameter</th><th>CCA standard</th><th>Concentration</th></tr>
<tr><td>Temp.</td><td>40</td><td>30</td></tr>
<tr><td>pH</td><td>6.5 - 8.5</td><td>8.01</td></tr>
<tr><td>Colour</td><td>100</td><td>80</td></tr>
<tr><td>TDS</td><td>5000</td><td>4336</td></tr>
<tr><td>SS</td><td>100</td><td>70</td></tr>
<tr><td>Ammonical Nitrogen</td><td>50</td><td>0.78</td></tr>
<tr><td>Chloride</td><td>600</td><td>535</td></tr>
<tr><td>Sulphate</td><td>1000</td><td>1200</td></tr>
<tr><td>COD</td><td>250</td><td>58</td></tr>
<tr><td>O&G</td><td>10</td><td>BDL</td></tr>
</table></td></tr>
</table>

		<table><tr><td>Phenolic Compound</td><td>1</td><td>BDL</td></tr><tr><td>BOD</td><td>100</td><td>9</td></tr><tr><td>Nickel</td><td>3</td><td>0.034</td></tr><tr><td colspan="3">Note: All values are expressed in mg/l except pH, Colour –Hazen unit, Temp-degree C.</td></tr></table> Concertation Value of Sulphate in treated effluent is found exceeding the prescribed standards.
12	**Operational status of OCEMS**	Unit has not installed OCEMS.
13	**Results showing in OCEMS, including discharge flow rate**	----
14	**Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?**	No, not observed during visit.
15	**Is proper logbook maintained regarding operation of ETP?**	Yes, logbook has been maintained as observed during visit.
16	**Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)**	<table><tr><td>June'22</td><td>July'22</td><td>August'22</td></tr><tr><td>407 KL</td><td>437 KL</td><td>385 KL</td></tr></table> *Source: Received from industry during visit .*
16	**Is hazardous waste found stored & disposed as per Rules?**	• During inspection, @34 MT ETP sludge, @15.5 MT Spent catalyst, @1 MT used oil and @20 nos of discarded barrels observed stored within premises. • Unit has disposed 25.15 MT ETP sludge to TSDF site, 1.927 MT used oil to recycler, 60.05 MT spent catalyst to re-processor and 299 nos of discarded barrels to decontamination facility during last FY 2021-22. • As per XGN manifest records, unit has disposed 42.025 MT Chemical sludge generated from waste water treatment plant during last one year (01-09-2021 to 31-08-2022).

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Kavitha B.V.
Scientist-D, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:359069 - Analysis Completion:17/09/2022

Organic Chemicals manufacturing / LAB Inward : 44994

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 44994 **Date: 17/09/2022**

1. Name of the Customer : **Jayant Agro Organics Ltd - 22100**
2. Address : **601,602,603 & 624 to 627,BHD GACL,PCC AREA Ranoli-391346, Taluka : Vadodara, District : Vadodara, GIDC : PCC**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By : **MR. JIGNESH JAYSUKHBHAI RAIYAN**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **359069**
7. Date & Time of Collection & Inwarding : **06/09/2022 , (1245 to 1245) & 07/09/2022**
8. Date of Start & Completion of Analysis : **07/09/2022 & 17/09/2022**
9. Sampling Point : **From the final treated w/w holding cum disposal tank ~**
10. Flow Details (Remarks) : **--**
11. Mode of Disposal : **VECL Channel**
12. Ultimate Receiving Body : **No generation of industrial wastewater**
13. Temperature on Collection : **30 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **barcode & Color & Appearance :yellowish**
: **Ind :202.800 , Dom :7.500 & Ind :18.280 , Dom :7.500**
15. Water Consumption & W.W.G (KLPD) : **13 ,Cap No & Weight :**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.01
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	80
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	4336
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	70
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	0.78
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	535
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1200
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	58
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	Nickel	mg/l	(3111 B APHA Standard methods 21st edi)	0.02-150 mg/l	0.034
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	9

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 17/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 15

Inspection Report

1	**Name & Address of unit**	M/s Enviro Infrastructure Co Ltd Block No.612-B,Village : Umraya, Ta : Padra, Dist : Vadodara
2	**Date & Time of Inspection**	01/09/2022, 11:05 Hrs
3	**Name, designation & contact number of industry representative**	Mr. Nihar Mehta, CEO

4	**Operational status of unit at the time of inspection**	At the time of visit unit was observed in operation
5	**Validity of CCA**	AWH-92610, Valid upto 31/12/2023
6	**Products/Sector**	Common Effluent Treatment Plant
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Ground water used for domestic purpose only. Unit has valid CGWA permission upto (29/12/2023) for for ground water (40 KLD) withdrawal.
8	**ETP system provided**	CETP consists of the following treatment units : Collection Tank (04 Nos.) →Flash Mixer →Clarifoculator →Aeration tanks (50 %)/Sequential Bio Reactor (50%)→ sand filter →Holding Tank →Discharge into VECL
9	**ETP operational status**	• During visit, CETP is observed in operation. The capacity of the CETP is 4.5 MLD. As per the flow data submitted in GPCB, the actual effluent quantity received varies between 2.20 to 2.25 MLD.
10	**Is treated effluent discharge line provided above ground?**	Yes
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	Yes, Treated w/w sample collected from final outlet of CETP

Parameters	pH	SS	TDS	COD	BOD	NH_{3}-N	Phenolic compound	**Chloride**	**SO_4**
Concentration	8.06	124	10360	218	41	1.12	BDL	4374	1070
CCA Standard	6.5-8.5	100	5000	250	100	50	1	600	1000

All values are expressed in mg/l except pH.
Results of above mentioned key parameters indicate overall compliance.

<table>
<tr><td></td><td></td><td>The OCEMS provided at the final outlet of CETP showed the following readings during visit: pH 7.76 mg/lit, TOC: 62.01 mg/lit, TSS: 122.20 mg/lit, color: 108.70 (Hz).</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>OCEMS has been provided. During visit it is learnt that the unit has connected programming of 3 way valve with TOC parameter only therefore unit is instructed to connect online COD display to the online system and connect the same to the 3 way valve.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>Yes.</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No bye pass line has been observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>62291.17</td><td>85134.93</td><td>73239.61</td></tr>
</table>
Source: VECL through email on 07/10/2022.
</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>

580 Tons (Approx) of hazardous waste observed stored in the room provided for the same since the TSDF is closed due to monsoon.
About 1000 MT semi solid sludge is observed stored in a tank at the time of visit. It is informed that when the sludge drying beds were undergoing renovation in the last one year, the hazardous waste generated was stored in the tank and not disposed. A new screw press is being installed to dewater the sludge and the sludge will be passed through the same before disposal.
The unit has been instructed to start the dewatering of sludge at the earliest and begin disposal of sludge with progress report to the board every 15 days.
As per XGN manifest records, unit has disposed 517 MT Chemical sludge generated from waste water treatment plant during last one year (01-09-2021 to 31-08-2022).

</td></tr>
</table>

Inspection by:

D.C.Patel AEE, GPCB RO Vadodara	R.N. Shaikh DEE, GPCB RO Vadodara	Dr. N. Semwal Scientist-C, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:357915 - Analysis Completion:13/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44754

TEST REPORT

Test Report No. : 44754 Date: 13/09/2022

1. Name of the Customer : Enviro Infrastructure Co Ltd (Cetp) - 21878
2. Address : BLOCK NO.612-B,VILL : UMRAYA,ECP ROAD UMARAYA-391440, Taluka : Padra, District : Vadodara, GIDC : Not In
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : R.N.Shaikh,ROH
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 357915
7. Date & Time of Collection & Inwarding : 01/09/2022 , (1050 to 1050) & 02/09/2022
8. Date of Start & Completion of Analysis : 02/09/2022 & 13/09/2022
9. Sampling Point : Treated w/w sample collected from final outlet of CETP ~
10. Flow Details (Remarks) : Flow is going on
11. Mode of Disposal : into VECL Channel
12. Ultimate Receiving Body : Ultimate disposal into Estuary of River Mahi
13. Temperature on Collection : 28 & pH Range on pH Strip :Around 7-8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Light Yellowish
: Ind :56.000 , Dom :42.000 & Ind :4500.000 , Dom :2.000
15. Water Consumption & W.W.G (KLPD) : 22 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.06
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	30
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	10360
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	124
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	1.12
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	4374
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1070
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	218
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	Cyanide	mg/l	Titrimetric method. (4500 - CN? D APHA Standard M	1-10 mg/l	BDL
13	Zinc	mg/l	(3111 B APHA Standard methods 21st edi)	0.005-100mg/l	0.104
14	Total Chromium	mg/l	3111 B APHA Standard methods 21st edi)	0.02-150mg/l	bdl
15	Hexavalent Chromium	mg/l	APHA (22nd Edition) –3500 – Cr B : -2012 Colorimet	0.1 – 100 mg/l	bdl
16	Copper	mg/l	3111 B APHA Standard methods 21st edi)	0.01-150 mg/l	bdl
17	Nickel	mg/l	(3111 B APHA Standard methods 21st edi)	0.02-150 mg/l	bdl
18	Lead	mg/l	(3111 B APHA Standard methods 21st edi)	0.05-150 mg/l	0.124
19	Cadmium	mg/l	(3111 B APHA Standard methods 21st edi)	0.002-100 mg/l	BDL
20	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	41
21	Arsenic	mg/l	(3111 B APHA Standard methods 21st edi)	-	BDL
22	MERCURY	mg/l	(3111 B APHA Standard methods 21st edi)		BDL

Annexure – A 16

Inspection Report

1	**Name & Address of unit**	M/s. Huntsman International (India) P. Ltd. (formerly Baroda Textile Effect Limited) Umraya, Padra, Vadodara.
2	**Date & Time of Inspection**	06/09/2022, 16:15 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Ashish Javiya, EHS Head – Mo. 8554982513.

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-78727, valid up to 31/03/2023.
6	**Products/Sector**	Various dyes and dyes intermediates (Synthetic Organic Chemical)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (9 nos) provided within premises. Unit has applied for renewal of CGWA permission for ground water abstraction (2000 KLD). Application has been approved and fees has been paid.
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Collection Tank → Equalisation tank → Flash Mixer Tank (Chemical dosing) → Primary Clarifier → 1st Aeration Tank followed by 1st Sec. Clarifier → 2nd Aeration Tank followed by 2nd Sec. Clarifier → Holding Tank → Flash mixer (chemical dosing) → Final clarifier → Sand & Carbon Filter → Discharge into VECL.
9	**ETP operational status**	• All units observed operational. • ETP was observed not working properly as the secondary clarifier is completely filled and overflowing. Also it was observed by the visiting team that about 3000 KL of untreated effluent was stored in standby aeration tank. Reportedly the storage of untreated effluent and the improper working of secondary clarifier was due to shut down of the unit since 23/08/2022 and the unit has restarted its operations on 05/09/2022. • After the visit, the unit has submitted the details (through speed post) of production and as per submission, unit was shut down from 26/08/2022 to 31/08/2022.
10	**Is treated effluent**	Yes

<table>
<tr><td></td><td>discharge line provided above ground?</td><td></td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>Yes.
<table><tr><th rowspan="2">Parameter</th><th rowspan="2">CCA standard</th><th colspan="2">Concentration</th></tr><tr><th>After physico-chemical treatment</th><th>Final treated effluent discharge</th></tr><tr><td>Temp.</td><td>40</td><td>-</td><td>35</td></tr><tr><td>pH</td><td>6.5 - 8.5</td><td>7.97</td><td>8.16</td></tr><tr><td>Colour</td><td>100</td><td>-</td><td>5</td></tr><tr><td>TDS</td><td>5000</td><td>9040</td><td>6822</td></tr><tr><td>SS</td><td>100</td><td>88</td><td>68</td></tr><tr><td>Ammonical Nitrogen</td><td>50</td><td>42.22</td><td>42.95</td></tr><tr><td>Chloride</td><td>600</td><td>-</td><td>1750</td></tr><tr><td>Sulphate</td><td>1000</td><td>-</td><td>1600</td></tr><tr><td>COD</td><td>250</td><td>288</td><td>134</td></tr><tr><td>O&G</td><td>10</td><td>-</td><td>BDL</td></tr><tr><td>Phenolic Compound</td><td>1</td><td>-</td><td>BDL</td></tr><tr><td>BOD</td><td>100</td><td>52</td><td>25</td></tr><tr><td colspan="4">Note: All values are expressed in mg/l except pH, Colour –Hazen unit, Temp-degree C.</td></tr></table>Concertation Values of TDS, Chloride & Sulphate in treated effluent are found exceeding the prescribed standards.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Operational.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td><table><tr><td>COD</td><td>107.64 mg/l</td><td>Colour</td><td>65.14 Hazen eq.</td></tr><tr><td>BOD</td><td>37.43 mg/l</td><td>pH</td><td>7.62</td></tr><tr><td>TSS</td><td>3.73 mg/l</td><td>NH4-N</td><td>27.04 ppm</td></tr><tr><td>Flow</td><td>34.47 m3/hr</td><td>Temp.</td><td>35.6 ℃</td></tr></table></td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>25276 KL</td><td>24595 KL</td><td>26478 KL</td></tr></table>Source: Received from industry via Email on 08/09/2022.</td></tr>
</table>

16	**Is hazardous waste found stored & disposed as per Rules?**	• During inspection, @330 MT ETP sludge and @ 700 MT Process waste observed stored within premises. • Unit has disposed 4921.61 MT HW to common facility i.e. TSDF, CHWIF and 376.29 MT HW to recycler or co-processors or pre-processor during last FY 2021-22. • As per XGN manifest records, unit has disposed 1438.59 MT Chemical sludge generated from waste water treatment plant during last one year (01-09-2021 to 31-08-2022).

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Kavitha B.V.
Scientist-D, CPCB RD Vadodara.

Annexure –A: Photographs taken during Inspection

Algae blooms, sludge carry forward and overflowing of effluent from launder in secondary clarifier.	
Sludge bulking observed in the clarifier after secondary treatment	 

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:359074 - Analysis Completion:17/09/2022

Dyes and Dye- Intermediates / LAB Inward : 44997

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 44997 **Date: 17/09/2022**

1. Name of the Customer : **Huntsman International (India) P. Ltd. (formerly Baroda Textile Effect Limited) - 22289**
2. Address : **-,VILL : UMRAYA,-**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By : **MR. JIGNESH JAYSUKHBHAI RAIYAN**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **359074**
7. Date & Time of Collection & Inwarding : **06/09/2022 , (1650 to 1650) & 07/09/2022**
8. Date of Start & Completion of Analysis : **07/09/2022 & 17/09/2022**
9. Sampling Point : **Treated w/w from physicochemical treatment clarifier after secondary treatment system ~**
10. Flow Details (Remarks) : **--**
11. Mode of Disposal : **--**
12. Ultimate Receiving Body : **Vadodara Enviro Channel Ltd.(VECL)**
13. Temperature on Collection : **-- & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **barcode & Color & Appearance :Brown**
15. Water Consumption & W.W.G (KLPD) : **Ind :1669.000 , Dom :88.000 & Ind :1121.000 , Dom :66.000**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.97
2	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	9040
3	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	88
4	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	42.22
5	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	288
6	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	52

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 17/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:359072 - Analysis Completion:17/09/2022

Dyes and Dye- Intermediates / LAB Inward : 44996

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 44996 **Date: 17/09/2022**

1. Name of the Customer : **Huntsman International (India) P. Ltd. (formerly Baroda Textile Effect**
2. Address **Limited) - 22289**
: **-,VILL : UMRAYA,-**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By : **MR. JIGNESH JAYSUKHBHAI RAIYAN**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **359072**
7. Date & Time of Collection & Inwarding : **06/09/2022 , (1625 to 1625) & 07/09/2022**
8. Date of Start & Completion of Analysis : **07/09/2022 & 17/09/2022**
9. Sampling Point : **From the final treated w/w discharge into VECL channel ~**
10. Flow Details (Remarks) : **yes**
11. Mode of Disposal : **VECL Channel**
12. Ultimate Receiving Body : **Vadodara Enviro Channel Ltd.(VECL)**
13. Temperature on Collection : **35 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **barcode & Color & Appearance :colourless**
: **Ind :1669.000 , Dom :88.000 & Ind :1121.000 , Dom :66.000**
15. Water Consumption & W.W.G (KLPD) : **12 ,Cap No & Weight :**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	35
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.16
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	5
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	6822
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	68
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	42.95
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	1750
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1600
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	134
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	25

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 17/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 17

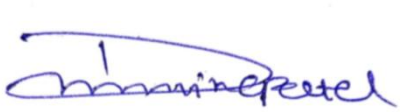
Inspection Report

1	**Name & Address of unit**	M/s Transpek Industry Ltd At& Po: Ekalbara, Tal: Padra, Dist: Vadodara
2	**Date & Time of Inspection**	15/09/2022, 14:30 Hrs
3	**Name, designation & contact number of industry representative**	Mr. Suresh Singh, Plant Head

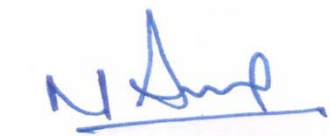
4	**Operational status of unit at the time of inspection**	At the time of visit unit was observed in operation
5	**Validity of CCA**	AWH-119740, Valid upto 31/12/2026
6	**Products/Sector**	Organic chemicals (Acid Chlorides, Sulphuric Acid, Thionyl Chloride etc)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (3 Nos) Unit has valid CGWA permission upto (25/10/2023) for ground water (856.70 KLD) withdrawal.
8	**ETP system provided**	The unit has provided ETP consisting of following treatment units. Effluent receiving tank (7 HDPE nos)- Neutralization Tank (02 nos.)→filter press feed tank (01 no) → sediment tank (01 no) → collection tank (02 no.) → Biofilter (02 nos) → polishing tank (01 no) → sedimentation tank (01 no) → secondary clarifier (01 no) → final discharge sump (01 no)→Discharge into VECL
9	**ETP operational status**	• During visit all ETP units are observed in operation. • During visit it is observed that unit is using flexible pipeline for transfer of effluent from receiving pit to filter press therefore unit is instructed to provide fixed pipeline for the same. • During visit it is observed that unit has not provided signage on effluent conveyance line and flow meter on strategic location, therefore unit is instructed to provide signage & flow meter on strategic locations since consent condition no : 4 is unable to be verified.
10	**Is treated effluent discharge line provided above ground?**	Yes

<table>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>Yes. During visit, one treated waste water sample is collected from the final discharge point into VECL.
<table>
<tr><td>Parameters</td><td>pH</td><td>SS</td><td>TDS</td><td>COD</td><td>BOD</td><td>NH_{3-N}</td><td>Phenolic compound</td><td>Chloride</td><td>SO_4</td></tr>
<tr><td>Concentration</td><td>8.14</td><td>146</td><td>14520</td><td>154</td><td>33</td><td>1.23</td><td>0.15</td><td>4374</td><td>800</td></tr>
<tr><td>CCA Standard</td><td>6.5-8.5</td><td>100</td><td>5000</td><td>250</td><td>100</td><td>50</td><td>1</td><td>600</td><td>1000</td></tr>
</table>
All values are expressed in mg/l except pH.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>OCEMS has been provided.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>Yes</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No bye pass line has been observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months</td><td>
<table>
<tr><td>Month</td><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>KL</td><td>3710.03</td><td>5904.63</td><td>4344.97</td></tr>
</table>
Source: VECL through email on 07/10/2022.</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>During visit it is observed that the unit has stored around 200 MT of spent lime sludge in closed shed.
As per XGN manifest records, unit has disposed 1552 MT Chemical sludge and 167 MT sulphur sludge generated from waste water treatment plant during the last one year (01-09-2021 to 31-08-2022)</td></tr>
</table>

Inspection by:



D.C.Patel
AEE, GPCB RO Vadodara



Dr. N. Semwal
Scientist-C, CPCB RD Vadodara

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:360110 - Analysis Completion:27/09/2022

Organic Chemicals manufacturing / LAB Inward : 45274

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 45274 Date: 27/09/2022

1. Name of the Customer : Transpek Industry Ltd - 22862
2. Address : -,Transpek Industry Limited,At & PO, VILLAGE EKALBARA, PADRA TALUKA, DISTRICT VADODARA
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : Dhruvinkumar C Patel
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 360110
7. Date & Time of Collection & Inwarding : 15/09/2022 , (1430 to 1430) & 16/09/2022
8. Date of Start & Completion of Analysis : 16/09/2022 & 27/09/2022
9. Sampling Point : Treated waste water sample collected from final outlet of ETP ~
10. Flow Details (Remarks) : Flow is going on
11. Mode of Disposal : into VECL Channel
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 28 & pH Range on pH Strip :Around 7-8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Light Yellowish
    : Ind :793.500 , Dom :47.500 & Ind :287.500 , Dom :37.500
15. Water Consumption & W.W.G (KLPD) : 12 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.14
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	10
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	14520
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	146
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	1.23
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	4374
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	800
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	154
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.15
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	33

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 27/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 18

Inspection Report

1	**Name & Address of unit**	**Sebacic India Limited,** **Address:** S.No. 452/A &B, 457,459, 460/1, 462-466, 468, Village: Umraya, Taluka: Padra, District: Vadodara.
2	**Date & Time of Inspection**	Date: 02/09/2022 & Time: 16:35 hrs
3	**Name Designation & contact number of industry representative**	No any contact person available at site.

4	**Operational status of unit at the time of inspection**	This unit is not in operation and looking to the site situation seems that the unit is not in operation since long and is found in idle condition.
5	**Validity of CCA**	AWH-92882, was expired on 31/12/2022.
6	**Products/Sector**	Organic Chemicals manufacturing unit (Mfg of Sebacic Acid)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is used**	Unit is found not in operation and no contact person is available at the site.
8	**ETP system provided**	ETP consists of primary, secondary and tertiary treatment. This unit is not in operation and looking to the site situation it seems that the unit is not in operation since long.
9	**ETP operational status**	This unit is not in operation and looking to the site situation seems that the unit is not in operation since long and is found in idle condition.
10	**Is treated effluent discharge line provided above ground?**	No (Underground)
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	This unit is not in operation and looking to the site situation seems that the unit is not in operation since long and is found in idle condition.
12	**Operational status of OCMS**	This unit is not in operation and looking to the site situation seems that the unit is not in operation since long and is found in idle condition.
13	**Results showing in OCMS, including discharge flow rate**	--
14	**Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?**	No.
15	**Is proper logbook maintained regarding operation of ETP?**	This unit is not in operation and looking to the site situation seems that the unit is not in operation since long and is found in idle condition.

16	**Quantity of effluent discharged into VECL in last 3 months**	This unit is not in operation and looking to the site situation seems that the unit is not in operation since long and is found in idle condition.
17	**Is hazardous waste found stored & disposed as per Rules?**	This unit is not in operation and looking to the site situation seems that the unit is not in operation since long and is found in idle condition.

Inspection by:

Dharmesh Rana,
SLA, CPCB RD Vadodara

Padaria H. C.

H. C. Padaria
AEE, GPCB- Vadodara

Annexure A 19

Inspection Report

1	**Name & Address of unit**	M/s Chemstar Organics (i) Limited, Plot no: 474,475,578,579,580,581,Vill: Umraya, Tal: Padra, Dist : Vadodara
2	**Date & Time of Inspection**	15/09/2022, 16:30 Hrs
3	**Name, designation & contact number of industry representative**	Mr. Chandrakant Mistry, EHS-Head

4	**Operational status of unit at the time of inspection**	At the time of visit unit was observed in operation
5	**Validity of CCA**	AWH-117446, valid upto 30/09/2025
6	**Products/Sector**	Organic chemical (Meta Phenoxy Benzaldehyde)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (1 Nos) Unit has not obtained CGWA permission
8	**ETP system provided**	The unit has provided ETP consisting of following treatment units. Collection Tank (02 Nos.) →Flash Mixer →Floculator →Primary Clarifier→Aeration Tank→Secondary Clarifier→Holding Tank→Sand →Treated Effluent sump.
9	**ETP operational status**	During visit, production plant was observed in operation, however ETP was not in operational condition. The physical condition of ETP was unsatisfactory in view of following observations: • The physical condition of ETP shows that the unit has not operated ETP since long. • Secondary clarifier was found completely out of order, Electric motor, internal piping system, launder found broken. • No records pertaining to dosing of chemicals, operation of ETP was available. • Unit has not provided flow measurement devices in the ETP. • There was no sludge stored in the Sludge drying beds and vegetation observed growing in it. Moreover, small quantity of ETP sludge stored in closed room without any lechate collection facility. • As per previous GPCB reports of 2021, the samples of ETP outlet collected on 15/07/2021 & 03/09/2021, shows very high concentration of phenolic compound viz. 24.43 mg/l and 14.88 mg/l respectively against prescribed CCA standard of 1 mg/lit. • As per CCA, Unit has to discharge the treated effluent into VECL, however it was observed that there was no connecting pipeline from ETP outlet to VECL channel, which shows that the unit has no provision for disposal of

		effluent from ETP. • Considering all above facts, it can be concluded that the effluent management system is unsatisfactory and the unit's intention to operate the ETP efficiently is doubtful. Relevant photographs taken during inspection are given at the last page of the report.
10	**Is treated effluent discharge line provided above ground?**	No.
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No
12	**Operational status of OCEMS**	Not provided
13	**Results showing in OCEMS, including discharge flow rate**	--
14	**Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?**	No bye pass line has been observed during visit.
15	**Is proper logbook maintained regarding operation of ETP?**	No, logbook has not been maintained.
16	**Quantity of effluent discharged into VECL in last 3 months**	--
16	**Is hazardous waste found stored & disposed as per Rules?**	Unit has stored small quantity ETP sludge in closed room without any lechate collection facility. As per XGN manifest records, unit has yet not disposed any Chemical sludge generated from waste water treatment plant during last one year (01-09-2021 to 31-08-2022).

Inspection by:

D.C.Patel AEE, GPCB RO Vadodara	Dr. N. Semwal Scientist-C, CPCB RD Vadodara

Photographs taken during visit

ETP unit is found idle	
Secondary aerator found mechanically non operation	
SDB found Empty	

Annexure – A 20

Inspection Report

1	**Name & Address of unit**	M/s.S.A. Pharmachem Pvt Ltd 483 B-1&2,473, Nr. Mujpur Chokdi, On ECP Canal Road, Mujpur, Ta. Padra, Dist.: Vadodara-391440.
2	**Date & Time of Inspection**	02/09/2022, 16:45 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Rishikesh Dube, Technical Head, Mo. 9377147170

4	**Operational status of unit at the time of inspection**	Not in operation.
5	**Validity of CCA**	AWH-105681, Valid up to 30/09/2024
6	**Products/Sector**	Inorganic chemical (Feed Ingredient & Supplement, Calcium Phosphate, Gypsum as byproduct, Tri-calcium Phosphate)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (2 nos) Unit has valid CGWA permission (up to 21/01/2023) for ground water withdrawal (154 KLD).
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Collection cum equalization tank (02 Nos.) → Flash Mixer Tank → Clarifier-1 → Reaction tank-1 followed by reaction tank-2 → Clarifier-2 → Holding Tank → Sand & Carbon Filter → Treated Effluent Tank → Reuse within process &/ Discharge into VECL.
9	**ETP operational status**	• All the ETP units were observed not in operation during inspection.
10	**Is treated effluent discharge line provided above ground?**	No
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No.
12	**Operational status of OCEMS**	Not provided
13	**Results showing in OCEMS, including discharge flow rate**	--

<table>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>No</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><td>June'22</td><td>July'22</td><td>August'22</td></tr><tr><td>1708.44</td><td>1265.92</td><td>580.15</td></tr></table>Source: VECL through email on 07/10/2022.</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>During inspection, approx. 500 MT gypsum observed stored within premises. Presently, unit is selling this gypsum to end used as by-product. As the unit is manufacturing DCP using spent H2SO4, generated gypsum should be handled and disposed as per HW rule provisions. Hence, unit is instructed to do the same.
During inspection, @ 1 MT ETP sludge observed stored in open within premises which will be utilized in manufacturing as informed by person contacted.
As per XGN manifest records, unit has not disposed any hazardous waste during last one year (01-09-2021 to 31-08-2022).</td></tr>
</table>

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

Annexure – A 21

Inspection Report

1	**Name & Address of unit**	M/s. Jain Farm Fresh Foods Ltd (Formerly Jain Irrigation Systems Ltd.) Padra-Jambusar Road, Village-Dhobikuva, PO Mahuvad, Padra, Vadodara.
2	**Date & Time of Inspection**	14/09/2022, 17:00Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Amit Mahajan,I/c QSE, Mo. 9428820464.

4	**Operational status of unit at the time of inspection**	In operation. Only grinding and packing of onion/garlic going on.
5	**Validity of CCA**	A-99471, Valid up to 31/03/2023.
6	**Products/Sector**	Food and food processing including fruits and vegetable processing. (Dehydrated onion/garlic/ginger/vegetables-750 MT/month)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (2 Nos) provided within premises. Unit has CGWA permission (up to17/12/2023) for abstraction of ground water (278.5 KLD).
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Parabolic Screen → Equalization tank (2 nos) →Flash Mixer Tank (2 nos)→Flocculation Tank (2 nos) → Primary Settling Tank (2 nos) → Aeration Tank (2 nos) → Sec. Clarifier (2 nos) → Holding Tank → Sand & Carbon Filter → Treated Effluent Tank → Discharge into VECL/disposed on land in nearby farm for agriculture purpose.
9	**ETP operational status**	• During inspection, all units of ETP are observed in operation.
10	**Is treated effluent discharge line provided above ground?**	No
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	• During inspection, discharge into VECL is not observed going on. However, ETP is observed operational hence one sample of treated effluent has been collected.

Parameters	CCA Standard	Concentration
pH	6.5 - 8.5	8.18
Colour	100	5
TDS	5000	2496

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>SS</td><td>100</td><td>30</td></tr>
<tr><td>Ammonical Nitrogen</td><td>50</td><td>2.41</td></tr>
<tr><td>Chloride</td><td>600</td><td>608</td></tr>
<tr><td>Sulphate</td><td>1000</td><td>308</td></tr>
<tr><td>COD</td><td>250</td><td>81</td></tr>
<tr><td>O&G</td><td>10</td><td>BDL</td></tr>
<tr><td>Sulphide</td><td>2</td><td>BDL</td></tr>
<tr><td>BOD</td><td>100</td><td>19</td></tr>
</table>
Note: All values are expressed in mg/l except pH, Color –Hazen unit.
</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Not Provided. Unit has been instructed to provide the same.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>--</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>0</td><td>0</td><td>0</td></tr>
</table>
Source: VECL email on 07.10.2022
</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• As per XGN manifest records, unit has disposed 0.25 MT used oil during last one year (01-09-2021 to 31-08-2022).</td></tr>
</table>

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:359987 - Analysis Completion:26/09/2022

Food and food processing including fruits and vegetable processing / LAB Inward : 45249

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 45249 **Date: 27/09/2022**

1. Name of the Customer : **Jain Farm Fresh Foods Ltf (Formerly Jain Irrigation Systems Ltd.) - 22080**
2. Address : **-,VILL :DHOBIKUVA,PO MAHUVAD,PADRA JAMBUSAR**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By : **MR. JIGNESH JAYSUKHBHAI RAIYAN**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **359987**
7. Date & Time of Collection & Inwarding : **14/09/2022 , (1730 to 1730) & 15/09/2022**
8. Date of Start & Completion of Analysis : **15/09/2022 & 26/09/2022**
9. Sampling Point : **## Final Outlet of the ETP ~ ----**
10. Flow Details (Remarks) : **--**
11. Mode of Disposal : **VECL Channel / On land**
12. Ultimate Receiving Body : **ECPL**
13. Temperature on Collection : **30 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **barcode & Color & Appearance :Turbid**
: **Ind :262.000 , Dom :16.500 & Ind :244.000 , Dom :16.000**
15. Water Consumption & W.W.G (KLPD) : **12 ,Cap No & Weight :**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.18
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	5
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	2496
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	30
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	2.41
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	608
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	308
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	81
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Sulphide	mg/l	APHA (23rd Edi.)4500-s2-F –iodometric Method	1-500.0 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	19

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 27/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure A 22

Inspection Report

1	**Name & Address of unit**	**Refoil Earth Pvt Ltd,** **Address: 89**, ECP Road, Village: Ekalbara, Taluka: Padra, District: Vadodara.
2	**Date & Time of Inspection**	Date: 02/09/2022 & Time: 14: 25 hrs
3	**Name Designation & contact number of industry representative**	Mr. Rajendrabhai Mishra- Supervisor +91-9879567036

4	**Operational status of unit at the time of inspection**	In operation
5	**Validity of CCA**	AWH-118954, Valid up to 31/12/2026
6	**Products/Sector**	Inorganic Chemical Manufacturing unit (Mfg of Fuller Earth, Activated Bleaching Earth, Aluminium hydroxide, Iron Oxide and flocculating/ Coagulating Chemical)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is used**	a. One Borewell for water supply. b. Unit has valid CGWA permission (up to 14/10/2023) for abstraction of ground water (76.10 KLD)
8	**ETP system provided**	ETP units consist of collection tanks- Neutralizer - filtration - sand filter - settling tanks- Treated waste collection cum holding tank - Discharged into VECL.
9	**ETP operational status**	During inspection, ETP is observed in operation.
10	**Is treated effluent discharge line provided above ground?**	Yes (Above Ground)
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No effluent discharge observed into VECL at the time of inspection; however, one treated waste sample is collected from treated w/w collection cum holding tank. **Analysis results:**

Parameters	**CCA Standard**	**Concentration**
pH	6.5 - 8.5	7.69
Colour	100	40
TDS	5000	3214
SS	100	68
Ammonical Nitrogen	50	1.01
Chloride	600	583
Sulphate	1000	986
COD	250	76
O&G	10	BDL (Below

		<table><tr><td></td><td></td><td>Detection limit)</td></tr><tr><td>Phenolic Compound</td><td>1</td><td>BDL (Below Detection limit)</td></tr><tr><td>BOD</td><td>100</td><td>12</td></tr></table> *Note: All values are expressed in mg/l except pH, Color –Hazen unit.* The above analysis results show that concentrations of all parameters are below the prescribed CCA standard.
12	**Operational status of OCMS**	Provided. It is not working at the time of inspection as shifting of OCEM from inside to outside of unit observed going on.
13	**Results showing in OCMS, including discharge flow rate**	--
14	**Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?**	No bypass line is observed during visit.
15	**Is proper logbook maintained regarding operation of ETP?**	Yes, unit is maintaining daily logbook for operation of ETP.
16	**Quantity of effluent discharged into VECL in last 3 months**	As per record quantity of effluent discharged into VECL is as given below: June: 695 M^3 July: 882 M^3 Aug: 698 M^3
17	**Is hazardous waste found stored & disposed as per Rules?**	Yes, unit has provided one closed shed for the storage of sludge generated during effluent treatment. Unit has disposed 12180.15 MT ETP waste in the last one year (01/09/2021 to 31/08/2022). Approx 100 MT ETP waste storage is observed at site.

Inspection by:

Dharmesh Rana
SLA, CPCB RD Vadodara

Padaria H. C.

H. C. Padaria
AEE, GPCB- Vadodara

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:358252 - Analysis Completion:15/09/2022

Inorganic Chemical Manufacturing, i.e. ferrous sulphate, zinc sulphate, manganese sulphate, magnesium sulphate, ferric chloride, ferrous chloride, potassium chloride etc. / LAB Inward : 44778

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 44778 Date: 15/09/2022

1. Name of the Customer : Refoil Earth Pvt Ltd - 22536
2. Address : Block No. 89,ECP Road,,-
   Ekalbara-391440, Taluka : Padra, District : Vadodara, GIDC : Not In
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : Mr. Padaria henil c
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 358252
7. Date & Time of Collection & Inwarding : 02/09/2022 , (1445 to 1145) & 03/09/2022
8. Date of Start & Completion of Analysis : 03/09/2022 & 15/09/2022
9. Sampling Point : From final Treated waste water holding Tank of ETP ~
10. Flow Details (Remarks) : –
11. Mode of Disposal : into VECL
12. Ultimate Receiving Body : Estuary of river Mahi
13. Temperature on Collection : 31 & pH Range on pH Strip :@6 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Light Brownish
    : Ind :52.600 , Dom :5.000 & Ind :43.500 , Dom :4.000
15. Water Consumption & W.W.G (KLPD) : 12 ,Cap No & Weight : W-2

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	31
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.69
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	40
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	3214
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	68
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	1.01
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	583
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	986
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	76
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	12

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure – A 23

Inspection Report

1	**Name & Address of unit**	M/s. Bodal Chemicals Ltd., Unit-VIII Plot No.: 106, 108, Ekalbara, Ta. Padra, Dist.: Vadodara-391440.
2	**Date & Time of Inspection**	02/09/2022, 14:20 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Rakesh Shah, Plant Head, Mo. 9909950804

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-98286, Valid up to 30/09/2023
6	**Products/Sector**	Synthetic organic chemical (FC Acid, DASA without Sulphonation, 6 Acetyl OAPSA, R-Salt)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (1 Nos) provided in the premises. Unit has valid CGWA permission (up to 14/10/2023) for abstraction of ground water (35 KLD).
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Collection Tank (02 Nos.) → **Neutralization Tank** (lime dozing) → **Filter Press (02 Nos.)** → **Collection Tank** → **Flash Mixer Tank** → **Primary Clarifier** → **Aeration Tank** → **Sec. Clarifier** → **Holding Tank** → **Sand & Carbon Filter** → **Treated Effluent Tank** → **Discharge into VECL.**
9	**ETP operational status**	The operational condition of ETP was highly unsatisfactory in view of following observations: ● The raw effluent collection tank was almost half filled with sludge and there was no fixed provision for removal of the sludge from the tank. Lime powder (used for neutralization) was found spread all over the area of Neutralization Tank in haphazard manner leading to air borne lime dust in the work zone area. ● The Filter Press provided after Neutralization Tank was not working properly. ● Primary Clarifier was not in operational condition. ● Operational condition of Aeration Tank was not satisfactory. The analysis result of MLSS and MLVSS in the sample collected from Aeration Tank are 300 mg/l and 81 mg/l respectively, which shows that the biomass is not being maintained

<table>
<tr><td></td><td></td><td>properly in the aeration tank.
● The tertiary treatment system i.e. Sand & Carbon Filter was not operational during the visit.
● Fresh water was observed in the treated effluent collection tank after tertiary treatment. There was no satisfactory explanation by the unit representative for the same.
● Though there was no continuous flow from secondary treatment units to tertiary treatment system i.e. Sand & Carbon Filter, however the feed tank for tertiary treatment system was filled with effluent and therefore the tertiary treatment system was made operational for short time during the visit to collect a sample from final outlet. The analysis results are as follows:
<table>
<tr><td>Parameters</td><td>CCA Standard</td><td>Concentration</td></tr>
<tr><td>pH</td><td>6.5-8.5</td><td>7.86</td></tr>
<tr><td>TSS</td><td>100</td><td>40</td></tr>
<tr><td>TDS</td><td>5000</td><td>20635</td></tr>
<tr><td>COD</td><td>250</td><td>95</td></tr>
<tr><td>BOD</td><td>100</td><td>16.2</td></tr>
<tr><td>NH3-N</td><td>50</td><td>5.7</td></tr>
<tr><td>Phenol</td><td>1</td><td>0.29</td></tr>
<tr><td>Cl</td><td>600</td><td>839</td></tr>
<tr><td>SO4</td><td>1000</td><td>2577</td></tr>
<tr><td>Colour</td><td>100</td><td>355</td></tr>
</table>
Note: All values are expressed in mg/l except pH, Color – Hazen unit.
● The analysis results show that the concentration of monitored parameters is within CCA prescribed limit except TDS, Chloride, Sulphate and Color parameters. However, it is worth mentioning that there was no continued flow in different ETP units and sample was collected by pumping the stored effluent from feed tank of tertiary system.</td></tr>
<tr><td>10</td><td>Is treated effluent discharge line provided above ground?</td><td>Yes</td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>No. However as described at para 8 above, sample of treated effluent was collected from outlet of tertiary treatment system.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Provided. However at time of inspection not working as shifting of OCEMS from inside to outside of unit</td></tr>
</table>

<table>
<tr><td></td><td></td><td>observed going on.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>--</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during inspection.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>No</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>74.6 KL</td><td>0</td><td>361.59 KL</td></tr></table>Source: VECL through email on 07/10/2022.</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• During inspection, approx. 300 MT ETP sludge observed stored in a shed.
• As per GPCB online manifest records, unit has disposed only 39.75 MT ETP sludge generated from waste water treatment plant since implementation of online manifest system.
It shows that the unit is not operating ETP efficiently.</td></tr>
</table>

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

Annexure – A: Production Details

Sr. No.	Name of product	CCA Quantity (MT/Month)	Month	Name of Product	Actual Production (MT/Month)
1	**FC acid &/or DASA (without Sulphonation) &/or 6-Acetyl OASPA**	20	Aug-22	DASA	16.080
				FC Acid	3.350
				Total	19.430
			Sept-22	DASA	15.720
				FC Acid	3.720
				Total	19.440
				Average	19.435
2	**R-salt**	5	Aug-22		0
			Sept-22		0
				Average	0

Annexure – B: Water Treatment Chemical Purchase Details

Invoice No.	Date	Hydrated Lime (kg)	Ferrous sulphate (kg)	Bocaflok (kg)
103/2022-23	01-09-2022	35000		
B7/STD0014/22-23	03-04-2022		2520	1305
304/2021-22	31-03-2022	36000		
216/2021-22	02-12-2021	35000		
180/2021-22	14-10-2021	30500		
139/2021-22	31-08-2021	30000		
B7/STD0409/21-22	23-08-2021		4370	2265

Annexure – C: Photographs Taken During Inspection.

The raw effluent collection tank was almost half filled with sludge and there was no fixed provision for removal of the sludge from the tank.	
Lime powder (used for neutralization) was found spread all over the area of Neutralization Tank in haphazard manner leading to air borne lime dust in the work zone area.	
The Filter Press provided after Neutralization Tank was not working properly. Observed choked up.	

Primary Clarifier was not in operational condition.	
Operational condition of Aeration Tank was not satisfactory. The analysis result of MLSS and MLVSS in the sample collected from Aeration Tank are 300 mg/l and 81 mg/l respectively, which shows that the biomass is not being maintained properly in the aeration tank.	 
Secondary Clarifier was not in operational condition.	

Fresh water was observed in the treated effluent collection tank after tertiary treatment. There was no satisfactory explanation by the unit representative for the same.	

Central Pollution Control Board
Regional Directorate, Vadodara

"Parivesh Bhawan,,
opp. VMC Ward Office No. 10,
Subhanpura, Vadodara, Gujarat
Ph.0265-2392831-33

ANALYSIS REPORT OF PHYSICO-CHEMICALS PARAMETERS

Reg. No.: W-20/22(80/22 to 81/22)

Date and type of sample collection: 02.09.2022, Grab.

Name of the location: M/s Bodal Chemicals Ltd, Unit-VIII, Vill- Ekalbara, Vadodara (Gujarat)

Sample collected by: Regional Directorate, CPCB, Vadodara

Location	Parameters											
	pH	Colour	TSS	TDS	COD	BOD	NH_3-N	Phenols	Cl^-	SO_4^{-2}	MLSS	MLVSS
Final outlet of ETP	7.86	355	40.0	20635	95	16.2	5.7	0.29	839	2577	--	--
Aeration tank	--	--	--	--	--	--	--	--	--	--	300	81

Note: Except pH & colour, all other results are expressed in mg/L. The colour is reported in Hazen unit.

Compiled by

26/09/2022
(B.D.Pandey)
S.S.A

Checked and Verified by

(A.K.Jha)
LAB.I/C

P. Gargava
(Prasoon Gargava)
REGIONAL DIRECTOR

Annexure A 24

Inspection Report

1	**Name & Address of unit**	**Kadillac Chemical Pvt. Ltd,** **Address: 853/854**, Village: Chokari, Taluka: Padra, District: Vadodara.
2	**Date & Time of Inspection**	Date: 01/09/2022 & Time: 15: 30 hrs
3	**Name Designation & contact number of industry representative**	Mr. Lakshak Patel- CEO +91-9909929966

4	**Operational status of unit at the time of inspection**	Unit is not in operation since last three days since plant maintenance activity is going on.
5	**Validity of CCA**	AWH-98391, Valid up to 31/12/2022
6	**Products/Sector**	Organic Chemicals manufacturing unit (Mfg of Benzaldehyde, Benzyl Chloride, Benzyl Chloride, Benzyl Benzoate, Benzyl Acetate, Sodium Benzoate)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is used**	a. Two nos of Borewells for water supply. b. Unit has valid CGWA permission (valid up to 25/03/2023) for abstraction of ground water (130 KLD)
8	**ETP system provided**	The waste water is generated from RO Reject and boiler blow down. Unit has not provided any specific ETP. Collection cum holding tanks have been provided to collect the waste water before discharge into VECL. VECL authority has disconnected the waste water discharge pipeline into VECL since unit has not provided OCEMS on effluent discharge line.
9	**ETP operational status**	Unit is not in operation since last three days since plant maintenance activity is going on.
10	**Is treated effluent discharge line provided above ground?**	No (Under Ground)
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No, VECL authority has disconnected waste water discharge pipe line into VECL since unit has not provided OCEMS on effluent discharge line. Unit is not in operation since last three days since plant maintenance activity is going on and unit has stored earlier generated w/w in collection cum holding tank of ETP, hence waste water sample is not collected.
12	**Operational status of OCMS**	Provided, at the time of inspection not working as shifting of OCEM from inside to outside of unit observed going on.

13	**Results showing in OCMS, including discharge flow rate**	--
14	**Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?**	No
15	**Is proper logbook maintained regarding operation of ETP?**	Yes, unit is maintaining daily logbook for operation of ETP.
16	**Quantity of effluent discharged into VECL in last 3 months**	As per record quantity of effluent discharged into VECL as below: June: 695 M3 July: 882 M3 Aug: 698 M3
17	**Is hazardous waste found stored & disposed as per Rules?**	--

Inspection by:

Mayank Nimbark
SLA, CPCB RD Vadodara

H. C. Padaria
AEE, GPCB- Vadodara

Annexure A 25

Inspection Report

1	**Name & Address of unit**	M/s Sterling Gelatin, Plot no: 703,ECP Road , Vill: Karakhadi, Ta : Padra, Dist : Vadodara-391450
2	**Date & Time of Inspection**	19/09/2022, 12:05 Hrs
3	**Name, designation & contact number of industry representative**	Mr. P.D.Singh, President Operation

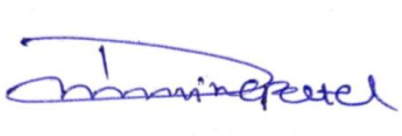
4	**Operational status of unit at the time of inspection**	At the time of visit unit was observed in operation
5	**Validity of CCA**	AWH-93892, Valid upto 31/03/2023
6	**Products/Sector**	Manufacturing Gelatine and Di Calcium phosphate
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (18 Nos) Unit has valid CGWA permission upto (26/09/2023) for ground water (5835 KLD) withdrawal
8	**ETP system provided**	The unit has provided 2 Nos of ETP consisting of following treatment units in each ETP. Equalization tank (01 Nos.) →Flash Mixer Tank→High residence solid contact clarifier →Filter press for primary sludge →Aeration Tank(3 Nos)→Secondary Clarifier →Sand Filter→Final collection sump →Discharge into VEC
9	**ETP operational status**	• During visit ETP units are observed in operation • During visit it is observed that here is high foaming near effluent conveyance line from aeration tank -1 to secondary clarifier which has spread on RCC floor on ground therefore the unit is instructed to take necessary steps for prevention of the same.
10	**Is treated effluent discharge line provided above ground?**	The pipeline at the final point into VECL is provided above ground.
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results**	Yes. During visit one treated waste water sample collected from final discharge point into VECL

Parameters	pH	SS	**TDS**	COD	BOD	NH_{3-N}	Phenolic compound	**Chloride**	**SO_4**
Concentration	7.26	40	**7944**	121	31	14	BDL	**4000**	**414**
CCA Standard	6.5-8.5	100	**5000**	250	100	50	1	**600**	**1000**

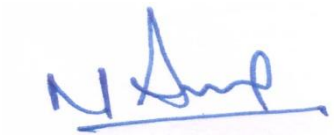
All values are expressed in mg/l except pH.

<table>
<tr><td></td><td>of the sample collected</td><td></td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>CEMS has been provided, However at the time of inspection it is not working as shifting of OCEMS from inside to the outside of unit is observed going on.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>--</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No bye pass line has been observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months</td><td><table><tr><td>Month</td><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>KL</td><td>171685.68</td><td>153069.6</td><td>188423.32</td></tr></table>Source: VECL through email on 07/10/2022.</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• During visit it is learnt that primary clarifier sludge generated from the filter press is reused in the production of Di-calcium phosphate.
• During visit it is learnt that sludge generated from the secondary clarifier is given to nearby farmers as soil conditioner and the same is not found mentioned in existing CCA, therefore unit is instructed to take necessary amendment for the same.</td></tr>
</table>

Inspection by:



D.C.Patel
AEE, GPCB RO Vadodara



Dr. N. Semwal
Scientist-C, CPCB RD Vadodara

Photographs taken during visit

High foaming near effluent conveyance line from aeration tank - 1 to secondary clarifier	
	

Annexure – A 26

Inspection Report

1	**Name & Address of unit**	M/s. Asahi Songwon Colors Ltd. 429 to 432, Dudhwada, Padra, Vadodara.
2	**Date & Time of Inspection**	14/09/2022, 15:00 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. K. K. Magar, GM, Mo. 99252 46358.

4	**Operational status of unit at the time of inspection**	In operation. Unit has 3 nos of manufacturing plants namely, CPC Plant, Alpha Blue Plant and Beta Blue Plant. During inspection, only Beta blue plant observed in operation.
5	**Validity of CCA**	AWH-107783, Valid up to 22/03/2025.
6	**Products/Sector**	Synthetic organic chemical (CPC 850 MT/month, Alpha blue 50 MT/month and Beta Blue 250 MT/month)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (7 Nos) provided within premises Unit had CGWA permission (up to24/06/2022) for abstraction of ground water (1994 KLD). Renewal of the same is under process.
8	**ETP system provided**	• During inspection, secondary treatment units and ZLD treatment units (RO, NF and MEE) are observed in operation. Primary treatment and Tertiary treatment units are observed under maintenance. • Acidic ML from CPC crude plant is treated to recover copper sludge and then mixed with acidic wash water stream from alpha plant in collection tank. Further, this wastewater is neutralized using lime and then generated gypsum is separated using filter press 1 & 2. • Acidic wash water from CPC crude plant is treated separately by dosing Na2S and then sludge is separated using filter press-7. • ML from the filter press 1, 2 & 7, Stream-3 from CPC Plant, Effluent from the Beta Blue plant and utility wastewater are collected in one collection tank. Further, it is treated in primary, secondary and tertiary treatment units. • Unit has not provided any flow meter in ETP on inlets of effluent from different plants and no records of the same are maintained. • Partial quantity of treated effluent from the tertiary treatment is fed into the RO. RO permeate is reused in plant whereas RO reject is fed into NF (Nano filtration). NF permeate is reused in plant whereas NF reject is evaporated
9	**ETP operational status**	

<table>
<tr><td></td><td></td><td>in MEE. MEE condensate is reused in plant. Unit has not provided any flow meter on RO / NF feed-condensate-reject.
• Rest of the quantity of treated effluent from the tertiary treatment is mixed with ground water RO reject and discharged into VECL.</td></tr>
<tr><td>10</td><td>Is treated effluent discharge line provided above ground?</td><td>Yes</td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>There is no effluent discharge into VECL observed during visit. The person contacted has also informed that presently they are operating only Beta Blue Plant and effluent discharged is only RO reject of raw water treatment.</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>OCEMS has been provided.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>--</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>30368 KL</td><td>33227 KL</td><td>33282 KL</td></tr></table>Source: Monthly patrak filled on XGN portal..</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• During inspection, @1000 MT ETP sludge + MEE salt and @18 MT Copper sludge is observed stored in provided storage area.
• Unit has disposed 4259.170 MT HW to TSDF site and 347.470 MT HW to recycler during last FY 2021-22.
• As per XGN manifest records, unit has disposed 4952.49 MT Chemical sludge and 390.69 MT Copper sludge generated from waste water treatment plant during last one year (01-09-2021 to 31-08-2022).</td></tr>
</table>

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

Annexure – A: Photographs taken during Inspection:

Changing of media in tertiary treatment unit (PSF) observed going on.	
Maintenance Activities in ETP plant observed going on.	

Neutralization (Primary treatment unit)observed empty during inspection.	

Annexure – A 27

Inspection Report

1	**Name & Address of unit**	M/s. Sterling Bio Tech (Formerly Torrent Gujarat Bio Tech Ltd.) SH 06, Vadodara-Jambusar State Highway, Masar, Padra, Vadodara.
2	**Date & Time of Inspection**	14/09/2022, 11:10 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Vishnu Gupta, VP Operation, Mo. 9327955968

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-120168, Valid up to 31/12/2026.
6	**Products/Sector**	Synthetic organic chemical (Pharmaceuticals API)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (1 Nos) provided within premises. Unit has valid CGWA permission (up to03/09/2023) for abstraction of ground water (1202.25 KLD).
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Collection Tank cum equalization → Neutralization Tank → Intermediate holding tank (2 nos) → Aeration Tank-1→ Sec. Clarifier-1 → Aeration Tank-2 → Sec. Clarifier-2 → Chlorination → Sand & Carbon Filter → Treated Effluent Tank → Discharge into VECL.
9	**ETP operational status**	• All the units observed in operation. • Unit has provided two nos intermediate storage tanks (each 100 KL) after primary treatment (neutralization) for sludge removal instead of primary settling unit.
10	**Is treated effluent discharge line provided above ground?**	Yes
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	Yes. Sample of treated effluent from VECL discharge line is collected during the inspection.

Parameter	CCA standard	Concentration
Temp.	40	30
pH	6.5 - 8.5	7.69
Colour	100	5
TDS	5000	3372
SS	100	36
Ammonical Nitrogen	50	2.18

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>Chloride</td><td>600</td><td>875</td></tr>
<tr><td>Sulphate</td><td>1000</td><td>300</td></tr>
<tr><td>COD</td><td>250</td><td>162</td></tr>
<tr><td>O&G</td><td>10</td><td>BDL</td></tr>
<tr><td>Phenolic Compound</td><td>1</td><td>BDL</td></tr>
<tr><td>BOD</td><td>100</td><td>34</td></tr>
<tr><td colspan="3">Note: All values are expressed in mg/l except pH, Colour –Hazen unit, Temp-degree C.</td></tr>
</table>
</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Provided.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>
<table>
<tr><td>Flow</td><td>15.96 m3/hr</td><td>Colour</td><td>71.70 Hazen eq.</td></tr>
<tr><td>COD</td><td>169.93 mg/l</td><td>pH</td><td>7.31</td></tr>
<tr><td>BOD</td><td>55.55 mg/l</td><td>NH4-N</td><td>2.51 ppm</td></tr>
<tr><td>TSS</td><td>13.25 mg/l</td><td>Temp.</td><td>30.7 ‘C</td></tr>
</table>
</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>10585 KL</td><td>10900 KL</td><td>9878 KL</td></tr>
</table>
Source: Received from the unit.
</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>

Unit has provided one shed for the storage of sludge generated during effluent treatment.
During inspection, @3 KL used oil, @15 MT ETP sludge, @1300 MT waste-biomass sludge, @6 MT distillation residue and @3 MT spent silica is observed stored in provided storage area.
Unit has disposed 105.915 MT ETP Sludge to TSDF site, 5.72 MT Used oil& 27.06 MT Discarded Containers to recycler, 9.865 MT Process Biomass to Co-processor, 5.485 MT Distillation residue to CHWIF during the last FY 2021-22.
As per XGN manifest records, unit has disposed 143.255 MT Chemical sludge generated from waste water treatment plant during the last one year (01-09-2021 to 31-08-2022).

</td></tr>
</table>

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:359986 - Analysis Completion:26/09/2022

Pharmaceuticals / LAB Inward : 45248

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

TEST REPORT

Test Report No. : 45248 **Date: 27/09/2022**

1. Name of the Customer	**: Sterling Bio Tech(Formerly Torrent Gujarat Bio Tech Ltd.) - 21524**
2. Address	**: S.H.NO:6,Vadodara-Jambusar State Highway,VILL: MASAR,- -sh 06 , masar road-391421, Taluka : Padra, District : Vadodara, GIDC :**
3. Nature of Sample	**: REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By	**: MR. JIGNESH JAYSUKHBHAI RAIYAN**
5. Quantity of Sample Received	**: 05 Litter.**
6. Code No. of the Sample	**: 359986**
7. Date & Time of Collection & Inwarding	**: 14/09/2022 , (1115 to 1115) & 15/09/2022**
8. Date of Start & Completion of Analysis	**: 15/09/2022 & 26/09/2022**
9. Sampling Point	**: ## Final Outlet of the ETP ~ From the final treated w/w discharge line into VECL channel**
10. Flow Details (Remarks)	
11. Mode of Disposal	**: yes**
12. Ultimate Receiving Body	**: VECL Channel**
13. Temperature on Collection	**: V E C L - -VADODARA**
14. Carboys Nos for	**: 30 & pH Range on pH Strip :@7-8 on pH strip**
	: barcode & Color & Appearance :Turbid
15. Water Consumption & W.W.G (KLPD)	**: Ind :1073.800 , Dom :127.250 & Ind :348.530 , Dom :51.250**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.69
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	5
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	3372
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	36
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	2.18
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	875
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	300
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	162
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	34

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 27/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

Annexure – A 28

Inspection Report

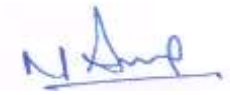
1	**Name & Address of unit**	M/s. Kiri Industries Limited formerly Kiri Dyes & Chemicals Ltd.(Unit-V) 552/A,566,567,569,570,571, Dudhwada, Padra, Vadodara.
2	**Date & Time of Inspection**	14/09/2022, 13:40 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Bhaskarbhai Joshi, Plant Head,Mo. 96876 81202.

4	**Operational status of unit at the time of inspection**	In operation. Unit has 3 nos of manufacturing plant namely, Sulphuric acid plant, CSA plant and TC plant. During inspection, sulphuric acid plant observed in operation. ***Though the board has issued Directions under Section 31-A of Air Act-1981 w.e.t. 15 days on 30/08/2022, the unit is observed in operation during inspection on 14/09/2022.***
5	**Validity of CCA**	AWH-105456, Valid up to 30/09/2024.
6	**Products/Sector**	Inorganic chemicals (Sulphuric acid, Oleum, Liq. SO3, Thionyl Chloride, Chlorosulphonic acid etc.)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (2 Nos) provided within premises. Unit has CGWA permission (up to03/09/2023) for abstraction of ground water (1437.50 KLD).
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** Collection Tank cum Neutralization Tank (02 Nos.) (dosing of Caustic Lye) → Settling tank (1 nos) → Treated Effluent Holding Tank → Discharge into VECL.
9	**ETP operational status**	• During inspection, ETP is not observed in operation. All tanks provided are observed to be acid proof brick lined. • Unit has informed that they are using caustic lye for neutralization.
10	**Is treated effluent discharge line provided above ground?**	No.
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the**	No.

<table>
<tr><td></td><td>sample collected</td><td></td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>OCEMS is provided.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>--</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>64.78 KL</td><td>0 KL</td><td>459.29 KL</td></tr></table>Source: VECL email on 07.10.2022.</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• During inspection, no stock of hazardous waste is observed stored within premises.
• As per annual return filed, unit has not disposed any hazardous waste during last FY 2021-22.
• As per XGN manifest records, unit has not disposed any hazardous waste during last one year (01-09-2021 to 31-08-2022).</td></tr>
</table>

Inspection by:

J. J. Raiyani
AEE, GPCB RO Vadodara.



Dr. N. Semwal
Scientist-C, CPCB RD Vadodara.

Annexure – A: Photographs taken during Inspection

ETP provided with acid proof brick lined tanks.	
Though the board has issued direction under section 31-A of Air Act-1981 w.e.t. 15 days on 30/08/2022, unit observed in operation during inspection on 14/09/2022.	

Annexure A 29

Inspection Report

1	**Name & Address of unit**	M/s Tml Industries Limited. (Unit :II), Plot no : 1896-A,1902,1903, ECP Road, Vill: Karakhadi, Tal: Padra, Dist : Vadodara.
2	**Date & Time of Inspection**	19/09/2022, 14:30 Hrs
3	**Name, designation & contact number of industry representative**	Mr.Dixit Patel, Sr.Manager

4	**Operational status of unit at the time of inspection**	At the time of visit unit was observed in operation
5	**Validity of CCA**	AWH-110131, Valid upto 31/12/2024
6	**Products/Sector**	Organic Chemicals (Acid Chloride, Fexofenadine Derivatives, etc)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (1 Nos) Unit has valid CGWA permission upto (05/03/2024) for ground water (164 KLD) withdrawal
8	**ETP system provided**	The unit has provided ETP consisting of following treatment units. Collection tank (02Nos)→ Neutralization tank (lime dosing) → Filter press → Aeration tank (2 Nos) →Holding storage tank → Biolfilter → sand & carbon Filter → Treated effluent Tank → Discharge into VECL.
9	**ETP operational status**	• During visit ETP units are observed in operation • During visit it is observed that the effluent conveyance lines provided in the ETP are without any demarcation as multiple HDPE pipes are provided in ETP therefore unit is instructed to provided signage on effluent conveyance line.
10	**Is treated effluent discharge line provided above ground?**	Yes
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No, Sample is not available since sufficient quantity of waste water is not observed in the final holding tank.
12	**Operational status of OCEMS**	OCEMS has been provided, However at the time of inspection it is not working as shifting of OCEMS from inside to outside of unit observed going on.
13	**Results showing in OCEMS, including discharge flow rate**	--
14	**Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?**	No bye pass line has been observed during visit.

<table>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes, logbook has been maintained as observed during visit.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>728.12</td><td>317.55</td><td>743.71</td></tr></table>Source: VECL through email on 07/10/2022.</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>During visit around 10 MT of ETP waste is observed stored in closed shed.
During visit it is observed that unit has not provided leachate collection facility with pumping arrangement in hazardous waste storage area therefore unit is instructed to provide the same.
As per XGN manifest records, unit has disposed 20.695 MT Chemical sludge generated from waste water treatment plant during the last one year (01-09-2021 to 31-08-2022).</td></tr>
</table>

Inspection by:

D.C.Patel
AEE, GPCB RO Vadodara

Dr. N. Semwal
Scientist-C, CPCB RD Vadodara

Photographs taken during inspection:

Hazardous waste storage area without lechate collection facility	

Annexure A 30

Inspection Report

1	**Name & Address of unit**	M/s. Sterling SEZ and Infrastructure Ltd. Plot no. 938/1 and 190, Vill: Sarod and Valipore, Tal: Jambusar, Dist: Bharuch.
2	**Date & Time of Inspection**	20/09/2022, 14:20 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Hitesh Parmar, Operator Mr. Prashant Trivedi, DGM, Mo. 97237 07578

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-102781, valid up to 23/02/2024.
6	**Products/Sector**	Industrial estates/Parks/Complexes/Areas/Export processing zones/SEZs M/s Sterling SEZ and Infrastructure Ltd is only Collecting treated effluent of M/s PI Industries ltd (located in Sterling SEZ) and disposing the same to VECL lagoon at J-point, Sarod vide dedicated pipeline.
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Narmada Canal through Sterling SEZ and Tankers
8	**ETP system provided**	M/s Sterling SEZ and Infrastructure Ltd has no full fledged CETP at present and is only Collecting treated effluent of M/s PI Industries ltd (located in Sterling SEZ) and disposing the same to VECL lagoon at J-point, Sarod vide dedicated pipeline.
9	**ETP operational status**	N.A as it is only conveying treated effluent.
10	**Is treated effluent discharge line provided above ground?**	No
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	Yes, Sample is collected and the analysis results are as follows:

Parameter	CCA standard	Concentration
Temperature	40 ^{0}C	30 ^{0}C
pH	6.5 to 8.5	7.23
TDS	5000 mg/l	2910 mg/l
SS	100 mg/l	32 mg/l
Ammonical Nitrogen	50 mg/l	11.2 mg/l

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>Chloride</td><td>600 mg/l</td><td>1212 mg/l</td></tr>
<tr><td>Sulphates</td><td>1000 mg/l</td><td>437 mg/l</td></tr>
<tr><td>COD</td><td>250 mg/l</td><td>103 mg/l</td></tr>
<tr><td>Oil & grease</td><td>10 mg/l</td><td>BDL</td></tr>
<tr><td>Phenolic compound</td><td>1 mg/l</td><td><0.1 mg/l</td></tr>
<tr><td>Sulphides</td><td>2 mg/l</td><td>p.nil</td></tr>
<tr><td>BOD</td><td>100 mg/l</td><td>23 mg/l</td></tr>
<tr><td>Colour</td><td>100 units (pt. co. scale)</td><td>30 units (pt. co. scale)</td></tr>
</table>
Concentration Value of Chloride in treated effluent is found exceeding the prescribed standards.
</td></tr>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Operational</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>Totalizer- 189529.73 m3, COD: 131.88 mg/l, BOD: 31.66 mg/l, TSS: 18.5 mg/l, pH: 7.45, NH4-N: 1.59 mg/l</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No, not observed during visit.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>There is no logbook maintained by the SEZ.</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td>
<table>
<tr><td>June’22</td><td>July’22</td><td>August’22</td></tr>
<tr><td>13102.22 m3</td><td>11886.42 m3</td><td>16080.53 m3</td></tr>
</table>
Source: Received from VECL via Email on 07/10/2022

Note: Currently only M/s PI Industries Ltd is sending their treated effluent to the collection sump of Sterling SEZ and Infrastructure Ltd from where it is transferred/conveyed to VECL lagoon at J-point, Sarod.
</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>N.A</td></tr>
</table>

Inspection by:

P. S. Chaudhary	A. H. Vasava	Dr. N. Semwal
AEE, GPCB RO Vadodara	AEE, GPCB RO Bharuch	Scientist-C, CPCB RD Vadodara

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:360740 - Analysis Completion:01/10/2022

Industrial estates/ parks / complexes/ areas/ export processing zones/ SEZs/ Biotech parks/ leather complex- [If covered under EIA Notification] / LAB inward : 48979

Gujarat Pollution Control Board
Bharuch
C-1/119/3, GIDC Phase-2
Narmadanagar
Bharuch-392015
Tele:(0264)2246333

TC-7844

Accreditation Standards & NABL Certificate Details : TC-7844 / -- / -- / Validity: 29/12/2023

TEST REPORT

Test Report No. : 48979 **Date: 01/10/2022**

1. Name of the Customer	: Sterling Sez And Infrastructure Ltd. - 27438
2. Address	: 938/1 and 190 of Village :Sarod and Village :Valipore respec,--,Village :Sarod and Village :Valipore respec
3. Nature of Sample	: REP-Representative/Grab. (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By	: MR. AJAYBHAI HARSHADBHAI VASAV
5. Quantity of Sample Received	: 5 lit
6. Code No. of the Sample	: 360740
7. Date & Time of Collection & Inwarding	: 20/09/2022 , (1430 to 1430) & 21/09/2022
8. Date of Start & Completion of Analysis	: 21/09/2022 & 01/10/2022
9. Sampling Point	: From Collection Sump of Sterling SEZ --
10. Flow Details (Remarks)	: ---
11. Mode of Disposal	: VECL Guard Pond
12. Ultimate Receiving Body	: No generation of industrial wastewater
13. Temperature on Collection	: 30 & pH Range on pH Strip :About 7-8 on pH strip
14. Carboys Nos for	: Barcode & Color & Appearance :Yellowish
15. Water Consumption & W.W.G (KLPD)	: Ind :35750.000 , Dom :41850.000 & Ind :21450.000 , Dom :32337.500
16. Parameter	: 13 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) ; 1984;(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 -H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As pe	7.23
3	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C A-PHA Standard Method	10 – 200000 mg/l.	2910
4	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 - 10000 mg/L	32
5	Ammonical Nitrogen	mg/l	1) Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2800 mg/l.	11.2
6	Chloride	mg/l	Argentometric method. (4500 Cl- B APHA Standard M	1 - 50000 mg/l	1212
7	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	437
8	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	103
9	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B 01 – 1000 mg/l		BDL
10	Phenolic Compounds	mg/l	4 Amino Antipyrine method without Chloroform Extra	0.1 – 50 mg/l	< 0.1
11	Sulphide	mg/l	APHA (23rd Ed.)4500-s2-F –Iodometric Method	1.500.0 mg/l	p.d.l
12	B.O.D (3 Days 27oC)	mg/l	3 - Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed 09	50000 mg/l	23

Laboratory Remarks : Approved By:399 lab 388 Dt.: 01/10/2022

R.C.VASAVA,S.O

Note :
1. The results relate only to the items sampled and tested.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. The report shall not be reproduced except in full or part without approval of the laboratory.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std. Methods for Water and Waste Water- 23rd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582,Part-2:2001; Reaffirmed 2007.

*** END OF TEST REPORT ***

Annexure A 31

Inspection Report

1	**Name & Address of unit**	M/s. PI Industries Ltd., Plot No.: SPM-28 & 29/1, Sterling SEZ and Infrastructure ltd, At & PO: Sarod, Ta: Jambusar, Dist.: Bharuch.
2	**Date & Time of Inspection**	20/09/2022, 14:45 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Parimal Patel, Sr. Manager, Mo. 63572 42071

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-95771 and subsequent amendment, Valid up to 04/02/2023.
6	**Products/Sector**	Pesticides (Technical) (CPFK, CNZ, AE473, IBCZ, MY-71, MY-100, PFD, TLF, PCM, Octopussy etc)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Narmada Canal through Sterling SEZ and Tankers
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units for low COD effluent.** Collection Tank (01 Nos.)/Buffer tank →**Equalization cum Neutralization Tank** (02 Nos.) (lime dozing) → **Flash Mixer Tank → Primary Settling tank → 1st stage Aeration Tank → 1st Stage Clarifier → 2nd Stage Aeration tank→ 2nd Stage Clarifier → Intermediate holding tank → Sand & Carbon Filter → Treated Effluent Tank → Discharge into Common SEZ Sump→ Final Discharge into VECL** **Note:** M/s PI Industries Ltd. Plot No. SPM-29, Sterling SEZ, Sterling SEZ and Infrastructure ltd, At & PO: Sarod, Tal: Jambusar, Dist: Bharuch is located adjacent to this unit and is sending their effluent to this unit for further treatment and disposal. So, the common ETP for both the units i.e. M/s PI Industries Ltd, SPM-28 & 29/1 and 29 is located on Plot no. SPM-28 & 29/1. The High COD effluent is partially sent to the inhouse MEE system, the concentrate of which goes to the ATFD. The unit also has permission to send effluent to common MEE facility, cement plant for co-processing and to the incineration facility also. As per records submitted by the industry, about 37981.37 MT of high COD effluent has been sent to the common MEE system without manifest in the last one year i.e. from 01/09/2021 to

<table>
<tr><td></td><td></td><td>31/08/2022. Similarly, about 14762.53 MT of high COD effluent has been sent to the cement industry for co-processing and 329.95 MT of high COD (toxic industrial effluent) effluent has been sent to the common incineration facility with manifest system in the last one year i.e. from 01/09/2021 to 31/08/2022.</td></tr>
<tr><td>9</td><td>ETP operational status</td><td>● The operational condition of ETP was unsatisfactory in view of the following observations:
● There was no fixed provision for removal of sludge from the collection tank/buffer tank. There is more than one inlet in to the collection tank/Buffer tank of ETP but flow meters are not provided on all inlets for quantification of effluent.
● There was no proper identification (colour coding) of all the individual pipelines in the ETP.
● Operational condition of Primary Clarifier and secondary clarifier was not satisfactory since the baffle wall of the clarifier is damaged at the bottom, hence, there is no overflow into the launder and the water level in the clarifier and the launder is at the same level submerging the baffle wall completely.
● Though there was no continuous discharge observed from final treated w/w holding cum disposal tank of ETP to common sump of Sterling SEZ during the visit, one treated w/w sample collected from final treated w/w holding cum disposal tank of ETP.
● Photographs taken during inspection are attached herewith.</td></tr>
<tr><td>10</td><td>Is treated effluent discharge line provided above ground?</td><td>No</td></tr>
<tr><td>11</td><td>Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected</td><td>No. However as described at para 9 above, sample of treated effluent was collected from final treated w/w holding cum disposal tank of ETP. The analysis results are as follows:
<table>
<tr><th>Parameter</th><th>CCA standard</th><th>Concentration</th></tr>
<tr><td>Temperature</td><td>40 ^{0}C</td><td>30 ^{0}C</td></tr>
<tr><td>pH</td><td>6.5 to 8.5</td><td>7.51</td></tr>
<tr><td>TDS</td><td>5000 mg/l</td><td>3798 mg/l</td></tr>
<tr><td>SS</td><td>100 mg/l</td><td>30 mg/l</td></tr>
<tr><td>Ammonical Nitrogen</td><td>50 mg/l</td><td>4.48 mg/l</td></tr>
<tr><td>Chloride</td><td>600 mg/l</td><td>1413 mg/l</td></tr>
<tr><td>Sulphates</td><td>1000 mg/l</td><td>683 mg/l</td></tr>
<tr><td>COD</td><td>250 mg/l</td><td>221 mg/l</td></tr>
<tr><td>Oil & grease</td><td>10 mg/l</td><td>0.8 mg/l</td></tr>
<tr><td>Phenolic compound</td><td>1 mg/l</td><td>BDL</td></tr>
<tr><td>Sulphides</td><td>2 mg/l</td><td>p.nil</td></tr>
<tr><td>BOD</td><td>100 mg/l</td><td>48 mg/l</td></tr>
<tr><td>Colour</td><td>100 units (pt. co. scale)</td><td>20 units (pt. co. scale</td></tr>
</table>
Concentration Value of Chloride in treated effluent is found exceeding the prescribed standards.</td></tr>
</table>

<table>
<tr><td>12</td><td>Operational status of OCEMS</td><td>Provided.</td></tr>
<tr><td>13</td><td>Results showing in OCEMS, including discharge flow rate</td><td>The OCEMS provided at Sterling SEZ sump showing readings during inspection as follows:
Totalizer- 189529.73 m3, COD: 131.88 mg/l, BOD: 31.66 mg/l, TSS: 18.5 mg/l, pH: 7.45, NH4-N: 1.59 mg/l</td></tr>
<tr><td>14</td><td>Any bypass line / unauthorized discharge / accumulation of wastewater in premises observed?</td><td>No.</td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>Yes</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>13102.22 m3</td><td>11886.42 m3</td><td>16080.53 m3</td></tr></table>Source: Received from VECL via Email on 07/10/2022</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>● Unit has provided one shed for the storage of sludge generated during effluent treatment.
● During inspection, about 3.5 MT ETP sludge was stored within premises.
● As per XGN manifest records, unit has disposed 593.19 MT Chemical sludge and 1722.75 MT MEE Salt during last one year (01-09-2021 to 31-08-2022).</td></tr>
</table>

Inspection by:

P. S. Chaudhary	A. H. Vasava	Dr. N. Semwal
AEE, GPCB RO Vadodara	AEE, GPCB RO Bharuch	Scientist-C, CPCB RD Vadodara

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID: 360742 - Analysis Completion 01/10/2022

Pesticides (technical) (excluding formulation) / LAB inward : 48980

Gujarat Pollution Control Board
Bharuch
C-1/119/3, GIDC Phase-2
Narmadanagar
Bharuch-392015
Tele:(02642)246333

TC-7844

Accreditation Standards & NABL Certificate Details : TC-7844 / --/--/ Validity: 29/12/2023

TEST REPORT

Test Report No. : 48980 Date: 01/10/2022

1. Name of the Customer	: PI Industries Limited - 28087
2. Address	: Plot no: SPM-28,29/1,Sterling SEZ,At & PO Sarod Sarod-392180, Taluka : Jambusar, District : Bharuch, GIDC : Not In
3. Nature of Sample	: RLP-Representative/Grab. (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By	: MR. AJAYBHAI HARSHADBHAI VASAV
5. Quantity of Sample Received	: 5 lit
6. Code No. of the Sample	: 360742
7. Date & Time of Collection & Inwarding	: 20/09/2022 , (1535 to 1535) & 21/09/2022
8. Date of Start & Completion of Analysis	: 21/09/2022 & 01/10/2022
9. Sampling Point	: Final treated waste water holding tank of ETP -
10. Flow Details (Remarks)	: ---
11. Mode of Disposal	: SEZ sump
12. Ultimate Receiving Body	: Sea discharge through VECL discharge system
13. Temperature on Collection	: 30 & pH Range on pH Strip :About 7-8 on pH strip
14. Carboys Nos for	: Barcode & Color & Appearance :Yellowish
15. Water Consumption & W.W.G (KLPD)	: Ind :2607.000 , Dom :60.000 & Ind :1235.000 , Dom :50.000
16. Parameter	: 13 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part 9) 1984(Reaffirmed 2006)	Ambient oC - 80 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd ed.2012	1 - 14 pH value As on	7.51
3	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	5788
4	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	30
5	Ammonical Nitrogen	mg/l	1) Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/L	4.48
6	Chloride	mg/l	Argentometric method. (4500 Cl- B APHA Standard M	1 - 50000 mg/l	1413
7	Sulphate	mg/l	API IV(23rd ed) 4500 SO4 E	2-40mg/l	583
8	Chemical Oxygen Demand	mg/l	API A (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	221
9	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	0.6
10	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
11	Sulphide	mg/l	API IV (23rd Ed.)4500-s2-F – Iodometric Method	1-500.0 mg/l	0.04
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD Test. (IS 3025 (Part 44) 1993 Reaffirmed 05	50-250 mg/l	48

Laboratory Remarks : Approved By:399-lab_339 Dt.: 01/10/2022

R.C.VASAVA,S.O

Note :

1. The results relate only to the items sampled and tested.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. The report shall not be reproduced except in full or part without approval of the laboratory.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std Methods for Water and Waste Water- 23rd Edition by APHA.
8. Bioassay test (for toxicity) -IS 6582:Part-2:2001; Reaffirmed 2007.

*** END OF TEST REPORT ***

Photographs taken during Inspection

Operational condition of Primary Clarifier and secondary clarifier was not satisfactory

Annexure A 32
Inspection Report

1	**Name & Address of unit**	M/s. TML industries Ltd Plot no. 33-P, 34-P, 35, 37, 39, At & Po: Piludra, Tal: Jambusar, Dist: Bharuch.
2	**Date & Time of Inspection**	20/09/2022, 11:35 Hrs.
3	**Name, designation & contact number of industry representative**	Mr. Dixit Patel, Sr. Manager– Mo. 9898508393

4	**Operational status of unit at the time of inspection**	In operation.
5	**Validity of CCA**	AWH-88278 and subsequent amendments valid up to 18/07/2022. Unit has applied for CCA-Renewal, which is under process.
6	**Products/Sector**	Organic Chemicals manufacturing (TCAC, Sodium salt of trichloro pyridinol, Chloropyriphos, Triclopyr, Triclopyr Ethyl Ester, Triclopyr Methyl Ester, Vinyl Laurate, ChloroSulphonic Acid)
7	**a. Source of Water Supply** **b. Status of CGWA permission, if GW is being used**	Borewell (1 nos.) provided in the premises Unit has valid CGWA permission (up to 06/12/2023) for abstraction of ground water (582 KLD).
8	**ETP system provided**	**The unit has provided ETP consisting of following treatment units.** **Neutralization Tank** (lime dozing) **→ Filter Press (01 Nos.) → Primary Settling tank → Equalization tank → Filter press (01 Nos.) → Aeration Tank (01 Nos.) → Bio filter plant collection tank → Bio filter plant→ Sand-Gravel & Carbon bed → Collection tank → Aeration Tank (01 Nos.) → Collection tank→ Treated Effluent Tank (02 nos.) → Discharged into VECL**
9	**ETP operational status**	● During inspection, unit was in operation. The operational condition of ETP was unsatisfactory in view of following observations: ● The raw effluent neutralization tank (underground tank) was almost empty and there was no fixed provision for removal of the sludge from the tank. ● The pipeline from neutralization tank to filter press for transferring the effluent was found disconnected. ● The primary settling tank was almost empty and there was no fixed provision for removal of the sludge from the tank. ● There are many PVC/HDPE pipelines observed lying in the ETP

		area without proper identification and clear intended purpose. ● It is observed that different units of ETP are situated sporadically in the premises leading to long transfer pipelines, which are mostly underground. ● The bio filter plant provided after primary and secondary treatment units was observed non-operational. The effluent coming out from the bio filter plant was observed acidic (@ 4-5 on pH strip), whereas the effluent from the inlet of ETP was made alkaline by adding lime. It indicates that either channelization of the effluent in the ETP is not proper or some acidic stream of the effluent is entering the bio Filter unit of ETP directly. ● There was no continuous flow from secondary treatment units to bio filter plant and tertiary treatment system i.e. Sand & Carbon Filter. 02 nos. of final treated waste water holding cum disposal tank of ETP were found empty. And therefore sample of treated w/w could not be collected. ● Highly alkaline unaccounted waste water was observed flowing in an open kutchcha drain in the ETP area, which is finally terminating in an underground tank. There was no provision for treatment of the same. ● Proper nomenclature and flow diagram not observed on different units and effluent conveying pipelines in ETP area. ● Photographs taken during inspection are attached herewith.
10	**Is treated effluent discharge line provided above ground?**	No
11	**Is treated effluent discharge observed into VECL at the time of inspection, if yes then analysis results of the sample collected**	No
12	**Operational status of OCEMS**	OCEMS installed but connectivity to VECL is pending
13	**Results showing in OCEMS, including discharge flow rate**	--
14	**Any bypass line / unauthorized discharge / accumulation of wastewater in premises**	● Highly alkaline unaccounted waste water was observed flowing in an open kutchcha drain in the ETP area, which is finally terminating in an underground tank. There was no provision for treatment of the same.

<table>
<tr><td></td><td>observed?</td><td></td></tr>
<tr><td>15</td><td>Is proper logbook maintained regarding operation of ETP?</td><td>No</td></tr>
<tr><td>16</td><td>Quantity of effluent discharged into VECL in last 3 months (to be verified from flow meter record)</td><td><table><tr><td>June’22</td><td>July’22</td><td>August’22</td></tr><tr><td>2863.52 m3</td><td>3702.13 m3</td><td>2957.07 m3</td></tr></table>Source: Received from VECL via Email on 07/10/2022</td></tr>
<tr><td>16</td><td>Is hazardous waste found stored & disposed as per Rules?</td><td>• Storage of hazardous waste was not satisfactory. Approximately 30-35 MT Solid and semi solid sludge (Hazardous waste) was found stored under a shed in haphazard manner and some sludge also found stored in open area behind the shed.
• As per XGN manifest records, unit has disposed 716.44 MT Chemical sludge to common facility i.e. TSDF during last one year (01-09-2021 to 31-08-2022).</td></tr>
</table>

Inspection by:

P. S. Chaudhary	A. H. Vasava	Dr. N. Semwal
AEE, GPCB RO Vadodara	AEE, GPCB RO Bharuch	Scientist-C, CPCB RD Vadodara

Photographs taken during Inspection

Highly alkaline unaccounted waste water was observed flowing in an open kutchcha drain in the ETP area, which is finally terminating in an underground tank

There are many PVC/HDPE pipelines observed lying in the ETP area without proper identification and purpose

Non-operational Bio filter plant

Sand-gravel & Carbon filter bed

Hazardous waste stored in haphazard manner

Annexure-B

LIST OF VECL MEMBER INDUSTRIES VISITED WITH REFERENCE TO HON'BLE NGT ORDER O.A. 276/2022

Sr. No.	Name of Member Industries	Zone wise industry location	Date of Inspection (w.r.t. Hon. NGT order O.A. No. 276/2022)
1	Indian Oil Corporation Ltd. (IOCL)	1	19/09/2022
2	GSFC Ltd.	1	20/09/2022
3	Reliance Industries Ltd.	1	16/09/2022
4	CETP of Nandesari Industries Association	1	01/09/2022
5	Gujarat Alkalis and Chemicals Ltd. (GACL division and Cyanide division)	1	16/09/2022
6	Gujarat Industries Power Company Ltd.	1	20/09/2022
7	INEOS Styrolution India Limited	1	06/09/2022
8	Diamines and Chemicals Ltd. (DACL)	1	02/09/2022
9	Jayant Agro-Organic Ltd.-ISCPL Division	1	02/09/2022
10	GSFC (Polymers Unit)	1	20/09/2022
11	Sabic Innovative Plastics Ltd.	1	06/09/2022
12	Panoli Intermediate India Pvt.Ltd.	1	02/09/2022
13	Hettich India Pvt. Ltd.	1	15/09/2022 (by GPCB for compliance reporting for Directions issued by the Board)
14	Jayant Agro-Organic Ltd.	1	06/09/2022
15	CETP of Enviro Infrastructure Co. Ltd. (EICL)	2	01/09/2022
16	Huntsman International	2	06/09/2022
17	Transpek Industry Ltd.	2	15/09/2022
18	Sebacic India Limited	2	02/09/2022
19	Chemstar Organic	2	15/09/2022
20	S.A. Pharmachem Pvt. Ltd.	2	02/09/2022
21	Jain Farm Fresh Foods Ltd.	2	14/09/2022
22	Refoil Earth Pvt. Ltd.	2	02/09/2022
23	Bodal Chemicals Ltd. (Unit - VIII)	2	02/09/2022
24	Kadillac Chemicals Pvt. Ltd.	3	01/09/2022
25	Sterling Gelatin	3	19/09/2022
26	Asahi Songwon Colours Ltd.	3	14/09/2022
27	Sterling Biotech Ltd.	3	14/09/2022
28	Kiri Dyes and Chemicals Ltd. (Unit - V)	3	14/09/2022

29	TML Industries Ltd. (Karkhadi)	3	19/09/2022
30	Sterling SEZ	In Bharuch district	20/09/2022
31	P.I. Industries Ltd.		20/09/2022
32	TML Industries Ltd. (Piludra)		20/09/2022
33	Lonsen Kiri chemicals Ind Ltd	3	Since, It has been removed from VECL membership and there is no outlet in VECL channel since long, not covered under Joint inspection.
34	Loxim Industries Ltd.	2	Not covered, as reported in earlier Joint Committee Report
35	Mayur Dye Chem. Intermediate Ltd.	3	
36	Kiri Dyes and Chemicals Ltd. (Unit - III)	3	
37	Bodal Chemicals Ltd. (Unit - VII)	3	

Annexure- C

Analysis result of Auto Samplers installed by GPCB in Zone 3 (All samples collected & analysed by GPCB)

VECL Channel (flow direction)

Date	Shift no	Autosampler no -7	Autosampler no -1	Autosampler no -2	Autosampler no -3	Autosampler no -4	Autosampler no -5	Autosampler no -6
		Down stream of Zone-3 (At Vedach Pumping Station)	Downstream of Bodal Unit VII	Upstream of Bodal Unit VII	Downstream of Kiri Ind Unit III	Upstream of Kiri Ind Unit III	Down stream of Mayur Dye Chem	Upastream of Mayur Dye chem
		COD (Mg/lit)						
27-08-2022	A	This auto sampler has been installed & commissioned in the last week of September 2022	351	274	284	NA	191	193
	B		237	233	230	235	221	220
	C		363	359	371	259	233	231
28-08-2022	A		249	262	292	309	302	276
	B		298	319	312	311	258	246
	C		444	361	392	214	199	202
29-08-2022	A		354	255	236	NA	249	255
	B		286	271	273	247	236	251
	C		270	251	235	186	186	157
30-08-2022	A		210	221	211	244	236	237
	B		305	324	312	277	276	275
	C		285	326	320	242	249	266
31-08-2022	A		224	212	212	208	209	222
	B		307	313	337	261	266	265
	C		265	252	248	211	229	217
01-09-2022	A		210	311	324	277	270	264
	B		281	289	293	254	275	270
	C		223	298	297	221	227	233
02-09-2022	A		188	261	284	245	231	238
	B		249	250	251	251	245	261
	C		320	314	317	248	247	240
03-09-2022	A		218	279	289	236	240	225
	B		179	181	185	182	175	183
	C		214	258	243	184	181	181
04-09-2022	A		773	274	251	174	192	188
	B		244	230	220	216	224	224
	C		285	265	276	224	228	227
05-09-2022	A		196	218	232	188	189	195
	B		253	260	266	251	262	261
	C		281	275	259	221	200	219
06-09-2022	A		170	NA	208	186	200	212
	B		199	NA	211	183	188	181
	C		220	241	250	206	215	208
07-09-2022	A		196	185	192	191	194	182
	B		243	241	242	205	218	197
	C		133	130	122	117	116	116
08-09-2022	A		178	254	254	214	199	228
	B		232	240	241	182	184	177
	C		277	222	233	181	192	0
09-09-2022	A		176	250	239	201	207	214
	B		232	211	224	207	205	200
	C		205	221	216	185	174	188
10-09-2022	A		225	191	192	181	190	184
	B		214	223	237	239	203	199
	C		193	221	247	220	210	215
11-09-2022	A		232	309	228	241	308	199
	B		237	267	239	220	232	213
	C		311	327	313	314	304	323
12-09-2022	A		291	322	298	300	303	186
	B		256	273	277	263	240	265
	C		236	252	263	228	219	210

Date	Shift no	Autosampler no -7	Autosampler no -1	Autosampler no -2	Autosampler no -3	Autosampler no -4	Autosampler no -5	Autosampler no -6
		Down stream of Zone-3 (At Vedach Pumping Station)	Downstream of Bodal Unit VII	Upstream of Bodal Unit VII	Downstream of Kiri Ind Unit III	Upstream of Kiri Ind Unit III	Down stream of Mayur Dye Chem	Upastream of Mayur Dye chem
13-09-2022	A		240	260	274	228	232	237
	B		221	222	212	217	234	271
	C		253	206	245	204	188	202
14-09-2022	A		235	211	205	189	196	208
	B		210	227	192	202	240	212
	C		NA	248	240	187	250	198
15-09-2022	A		NA	239	236	205	152	160
	B		NA	168	166	134	140	135
	C		195	193	223	186	188	195
16-09-2022	A		191	184	185	143	147	161
	B		197	197	178	153	164	162
	C		170	154	164	230	170	167
17-09-2022	A		235	163	173	201	173	184
	B		193	176	174	183	179	215
	C		161	152	151	184	156	163
18-09-2022	A		298	257	234	254	216	231
	B		195	192	184	175	172	160
	C		147	151	150	155	158	141
19-09-2022	A		168	149	167	168	174	179
	B		193	186	189	197	204	208
	C		203	287	168	189	219	NA
20-09-2022	A		276	280	253	265	254	NA
	B		143	146	166	170	167	182
	C		171	166	181	180	179	163
21-09-2022	A		154	162	160	156	161	156
	B		178	172	176	160	177	173
	C	313	163	156	170	193	181	178
22-09-2022	A	198	249	242	236	259	261	243
	B	325	203	200	194	175	196	209
	C	254	184	175	188	181	202	183
23-09-2022	A	199	190	NA	192	207	199	184
	B	278	185	183	170	196	169	168
	C	240	202	194	206	208	200	216
24-09-2022	A	267	250	254	265	282	275	283
	B	338	210	202	204	188	205	208
	C	195	188	178	183	192	219	218
25-09-2022	A	209	193	285	195	206	216	221
	B	260	253	227	233	251	221	439
	C	302	221	247	232	256	227	241
26-09-2022	A	226	181	224	195	226	221	217
	B	218	224	215	214	217	204	203
	C	341	192	187	203	187	177	189
27-09-2022	A	223	236	247	243	244	243	224
	B	285	222	225	226	230	201	260
	C	296	226	238	223	221	228	223
28-09-2022	A	198	201	202	196	197	188	183
	B	237	199	208	189	194	201	221
	C	N.A	205	162	209	174	208	185
29-09-2022	A	171	198		204	244	206	195
	B		207		205	162	220	209
	C		172	163	176	177	208	181
30-09-2022	A	227	174		159	150	151	167
	B		182		163	188	170	177
	C		192	197	186	191	203	181
01-10-2022	A	235	176	184	166	183	188	
	B		157	191	197	182	179	
	C		203	199	196	216	220	178
02-10-2022	A	218	185	189	197	191	198	152
	B		151	147	153	163	191	186

Date	Shift no	Autosampler no -7	Autosampler no -1	Autosampler no -2	Autosampler no -3	Autosampler no -4	Autosampler no -5	Autosampler no -6
		Down stream of Zone-3 (At Vedach Pumping Station)	Downstream of Bodal Unit VII	Upstream of Bodal Unit VII	Downstream of Kiri Ind Unit III	Upstream of Kiri Ind Unit III	Down stream of Mayur Dye Chem	Upastream of Mayur Dye chem
	C		168	173	163	170	172	183
03-10-2022	A	210	168	166	197	155	163	151
	B		182	183	175	159	132	144
	C		168	170	169	183	202	198
04-10-2022	A	191	190	197	176	188	201	181
	B		184	198	295	387	232	184
	C		372	299	259	183	171	302
05-10-2022	A	228	200	250	205	167	220	223
	B		239	197	262	221	217	213
	C		189	217	172	204	270	213
06-10-2022	A	204	372	268	186	182	178	208
	B		195	230	185	346	218	197
	C		192	151	236	203	213	180
07-10-2022	A	178	210	152	172	232	178	149
	B		158	227	252	207	248	189
	C		169	165	169	140	129	128
08-10-2022	A	158	175	184	187	184	160	183
	B		206	189	140	143	197	246
	C		160	225	178	223	156	172
09-10-2022	A	226	194	154	184	134	221	202
	B		294	221	208	331	261	254
	C		246	235	155	226	291	183
10-10-2022	A	174	259	282	237	336	142	244
	B		221	205	234	236	299	378
	C		218	232	198	192	192	207
11-10-2022	A	229	209	202		236		223
	B		204	207		194		235
	C		176	147	173	137	194	173
12-10-2022	A	171	298	269		267	164	214
	B		237	NA		253	238	195
	C		229	171	195	150	206	200
13-10-2022	A	216	246	242	254	267	172	239
	B		234	223	197	156	177	365
	C		267	192	174	153	223	NA
Average		**234.4**	**225.9**	**224.0**	**219.9**	**210.1**	**208.0**	**208.3**

Note: **pH,Ammonical Nitrogen, COD and TDS are analyzed for each sample, however considering the significance and looking to the Analysis results only COD results are analyzed as above to know the organic pollutant load being imparted by the industries.**

NA in above sheet indicate sample not avilable

Photgraphs of auto sampler:

Central Pollution Control Board
Regional Directorate, Vadodara

ANNEXURE- D

''Parivesh Bhawan,,
opp. VMC Ward Office No. 10,
Subhanpura, Vadodara, Gujarat
Ph.0265-2392831-33

ANALYSIS REPORT OF PHYSICO-CHEMICALS PARAMETERS

Reg. No.: W-19/22(78/22 to 79/22)

Date and type of sample collection: 01.09.2022, Grab.

Name of the location: VECL, Vadodara (Gujarat)

Sample collected by: Regional Directorate, CPCB, Vadodara

Location	Parameters												
	pH	Colour	TSS	TDS	COD	BOD	NH_3-N	Phenols	Cl^-	SO_4^{-2}	S^{-2}	CN^-	O&G
Final discharge point of VECL at J-Point	7.71	563	273	14823	314	52.4	12.2	0.38	6506	1125	BDL	0.23	4.1
Old open channel of VECL in d/s Vedach pumping station	7.56	657	312	15084	385	59.3	12.9	0.59	7355	1093	--	--	--

Note: Except pH & colour, all other results are expressed in mg/L. The colour is reported in Hazen unit. * **BDL**-Below Detectable Limit

Compiled by

26/9/2022

(B.D.Pandey)
S.S.A

Checked and Verified by

(A.K.Jha)
LAB.I/C

(Prasoon Gargava)
REGIONAL DIRECTOR

Central Pollution Control Board
Regional Directorate, Vadodara

"Parivesh Bhawan,,
opp. VMC Ward Office No. 10,
Subhanpura, Vadodara, Gujarat
Ph.0265-2392831-33

ANALYSIS REPORT OF HEAVY METALS

Reg. No.: W-19/22(78/22)

Date and type of sample collection: 01.09.2022, Grab.

Name of the location: VECL, Vadodara (Gujarat)

Sample collected by: Regional Directorate, CPCB, Vadodara

Location	Parameters								
	Cu	Cr	Cd	Pb	Ni	Zn	Fe	Mn	As(µg/L)
Final discharge point of VECL at J-Point	0.19	BDL	BDL	BDL	0.10	0.19	1.80	0.30	21.89

Note: Except As. all results are expressed in mg/L. As reported in **µg/L.**

***BDL**-Below Detectable Limit

Compiled by

26/9/2022
(B.D.Pandey)
S.S.A

Checked & verified by

(A.K.Jha)
LAB.I/C

(Prasoon Gargava)
REGIONAL DIRECTOR

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Annexure E & F

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:355353 - Analysis Completion:03/08/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44309

TEST REPORT

Test Report No. : 44309 **Date: 03/08/2022**

1. Name of the Customer : Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875
2. Address : ,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In
3. Nature of Sample : REP-Representative/Grab, (Insp Type : ROU-Routine Visit)
4. Sample Collected By : S.I. Katudia
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 355353
7. Date & Time of Collection & Inwarding : 26/07/2022 , (1615 to 1615) & 27/07/2022
8. Date of Start & Completion of Analysis : 27/07/2022 & 03/08/2022
9. Sampling Point : From VECL J Point ~
10. Flow Details (Remarks) : -
11. Mode of Disposal : Estury of river Mahi
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 28 & pH Range on pH Strip :@7 to 8 on ph strip
14. Carboys Nos for : Barcode & Color & Appearance :Yellow
    : Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000
15. Water Consumption & W.W.G (KLPD) : 12 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.65
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	80
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	7446
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	28
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	22.40
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	2492
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	910
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	142
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	30

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 03/08/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:357064 - Analysis Completion:30/08/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44523

TEST REPORT

Test Report No. : 44523 **Date: 30/08/2022**

1. Name of the Customer : Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875
2. Address : ,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In
3. Nature of Sample : REP-Representative/Grab, (Insp Type : ROU-Routine Visit)
4. Sample Collected By : R.N.Shaikh,ROH
5. Quantity of Sample Received : 5 lit
6. Code No. of the Sample : 357064
7. Date & Time of Collection & Inwarding : 18/08/2022 , (1140 to 1140) & 20/08/2022
8. Date of Start & Completion of Analysis : 20/08/2022 & 30/08/2022
9. Sampling Point : From VECL J-point, Sarod ~ From VECL J-point, Sarod
10. Flow Details (Remarks) : --
11. Mode of Disposal : Estury of River Mahi
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 29 & pH Range on pH Strip :@7-8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Brownish
    : Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000
15. Water Consumption & W.W.G (KLPD) : 12 ,Cap No & Weight : --

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	29
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.85
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	600
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	9322
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	60
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	11.7
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	5103
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1620
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	322
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	bdl
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	70

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 30/08/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:358287 - Analysis Completion:15/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44797

TEST REPORT

Test Report No. : 44797 **Date: 15/09/2022**

1. Name of the Customer : **Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875**
2. Address : **,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : ROU-Routine Visit)**
4. Sample Collected By : **MR. PRATIKKUMAR SUDHIRBHAI CHA**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **358287**
7. Date & Time of Collection & Inwarding : **02/09/2022 , (0925 to 0925) & 03/09/2022**
8. Date of Start & Completion of Analysis : **03/09/2022 & 15/09/2022**
9. Sampling Point : **From VECL J Point at Sarod ~ From VECL J-Point at Sarod**
10. Flow Details (Remarks) : **--**
11. Mode of Disposal : **Estuary of River Mahi**
12. Ultimate Receiving Body : **No generation of industrial wastewater**
13. Temperature on Collection : **28 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **Barcode & Color & Appearance :Brownish**
: **Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000**
15. Water Consumption & W.W.G (KLPD) : **12 ,Cap No & Weight : --**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.74
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	60
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	7118
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	40
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	8.40
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	5054
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1400
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	401
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.26
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	78

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:358301 - Analysis Completion:15/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44807

TEST REPORT

Test Report No. : 44807 **Date: 15/09/2022**

1. Name of the Customer : **Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875**
2. Address : **,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : ROU-Routine Visit)**
4. Sample Collected By : **MR. PRATIKKUMAR SUDHIRBHAI CHA**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **358301**
7. Date & Time of Collection & Inwarding : **02/09/2022 , (1325 to 1325) & 03/09/2022**
8. Date of Start & Completion of Analysis : **03/09/2022 & 15/09/2022**
9. Sampling Point : **From Dhanora mix of VECL ~ From Dhanora mix of VECL**
10. Flow Details (Remarks) : **Yes**
11. Mode of Disposal : **Estuary of River Mahi**
12. Ultimate Receiving Body : **No generation of industrial wastewater**
13. Temperature on Collection : **28 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **Barcode & Color & Appearance :Turbid**
: **Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000**
15. Water Consumption & W.W.G (KLPD) : **12 ,Cap No & Weight : --**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.59
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	5
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	19128
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	134
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	1.06
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	10206
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1520
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	219
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	44

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:358296 - Analysis Completion:15/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44802

TEST REPORT

Test Report No. : 44802 **Date: 15/09/2022**

1. Name of the Customer : **Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875**
2. Address : **,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : ROU-Routine Visit)**
4. Sample Collected By : **MR. PRATIKKUMAR SUDHIRBHAI CHA**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **358296**
7. Date & Time of Collection & Inwarding : **02/09/2022 , (1145 to 1145) & 03/09/2022**
8. Date of Start & Completion of Analysis : **03/09/2022 & 15/09/2022**
9. Sampling Point : **from VECL after S.A. Pharma chem ~ From VECL channel after S.A Pharma Chem**
10. Flow Details (Remarks) : **Yes**
11. Mode of Disposal : **Estuary of River Mahi**
12. Ultimate Receiving Body : **No generation of industrial wastewater**
13. Temperature on Collection : **28 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **Barcode & Color & Appearance :Light Brownish**
15. Water Consumption & W.W.G (KLPD) : **Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.25
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	40
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	11422
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	60
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	10.02
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	6026
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	430
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	183
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	36

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:358295 - Analysis Completion:15/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44801

TEST REPORT

Test Report No. : 44801 **Date: 15/09/2022**

1. Name of the Customer : Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875
2. Address : ,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In
3. Nature of Sample : REP-Representative/Grab, (Insp Type : ROU-Routine Visit)
4. Sample Collected By : MR. PRATIKKUMAR SUDHIRBHAI CHA
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 358295
7. Date & Time of Collection & Inwarding : 02/09/2022 , (1110 to 1110) & 03/09/2022
8. Date of Start & Completion of Analysis : 03/09/2022 & 15/09/2022
9. Sampling Point : From VECL channel Opp. Alembic Ltd. ~ From VECL channel Opp. Alembic Ltd
10. Flow Details (Remarks) : Yes
11. Mode of Disposal : Estuary of River Mahi
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 28 & pH Range on pH Strip :@7-8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Light Brownish
15. Water Consumption & W.W.G (KLPD) : Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.83
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	40
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	11316
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	42
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	13.55
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	6026
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	480
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	186
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	36

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:358293 - Analysis Completion:15/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44800

TEST REPORT

Test Report No. : 44800 **Date: 15/09/2022**

1. Name of the Customer : Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875
2. Address : ,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In
3. Nature of Sample : REP-Representative/Grab, (Insp Type : ROU-Routine Visit)
4. Sample Collected By : MR. PRATIKKUMAR SUDHIRBHAI CHA
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 358293
7. Date & Time of Collection & Inwarding : 02/09/2022 , (1050 to 1050) & 03/09/2022
8. Date of Start & Completion of Analysis : 03/09/2022 & 15/09/2022
9. Sampling Point : From VECL after Bodal Chemical Ltd (unit 7) Dudhwada ~ From VECL channel after Bodal Chemical Ltd (
10. Flow Details (Remarks)
11. Mode of Disposal : Yes
12. Ultimate Receiving Body : Estuary of River Mahi
13. Temperature on Collection : No generation of industrial wastewater
14. Carboys Nos for : 28 & pH Range on pH Strip :@7-8 on pH strip
    : Barcode & Color & Appearance :Brownish
15. Water Consumption & W.W.G (KLPD) : Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.83
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	80
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	11890
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	54
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	14.84
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	5978
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	580
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	208
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	34

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:358289 - Analysis Completion:15/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44798

TEST REPORT

Test Report No. : 44798 **Date: 15/09/2022**

1. Name of the Customer : Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875
2. Address : ,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In
3. Nature of Sample : REP-Representative/Grab, (Insp Type : ROU-Routine Visit)
4. Sample Collected By : MR. PRATIKKUMAR SUDHIRBHAI CHA
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 358289
7. Date & Time of Collection & Inwarding : 02/09/2022 , (1015 to 1015) & 03/09/2022
8. Date of Start & Completion of Analysis : 03/09/2022 & 15/09/2022
9. Sampling Point : From Vedach pumping station. ~ From Vedach pumping station of VECL
10. Flow Details (Remarks) : Yes
11. Mode of Disposal : Estuary of River Mahi
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 28 & pH Range on pH Strip :@7-8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Brownish
15. Water Consumption & W.W.G (KLPD) : Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.75
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	80
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	11212
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	44
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	14.22
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	6026
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	640
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	259
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	52

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:358287 - Analysis Completion:15/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44797

TEST REPORT

Test Report No. : 44797 **Date: 15/09/2022**

1. Name of the Customer : **Vadodara Enviro Channel Ltd -VECL , (formerly ECP) - 21875**
2. Address : **,VILL : DHANORA,(PO) PETROFILS Dhanora-391350, Taluka : Vadodara, District : Vadodara, GIDC : Not In**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : ROU-Routine Visit)**
4. Sample Collected By : **MR. PRATIKKUMAR SUDHIRBHAI CHA**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **358287**
7. Date & Time of Collection & Inwarding : **02/09/2022 , (0925 to 0925) & 03/09/2022**
8. Date of Start & Completion of Analysis : **03/09/2022 & 15/09/2022**
9. Sampling Point : **From VECL J Point at Sarod ~ From VECL J-Point at Sarod**
10. Flow Details (Remarks) : **--**
11. Mode of Disposal : **Estuary of River Mahi**
12. Ultimate Receiving Body : **No generation of industrial wastewater**
13. Temperature on Collection : **28 & pH Range on pH Strip :@7-8 on pH strip**
14. Carboys Nos for : **Barcode & Color & Appearance :Brownish**
: **Ind :36.000 , Dom :75.000 & Ind :145000.000 , Dom :6.000**
15. Water Consumption & W.W.G (KLPD) : **12 ,Cap No & Weight : --**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	7.74
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	60
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	7118
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	40
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	8.40
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	5054
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1400
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	401
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.26
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	78

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 15/09/2022

B.M.PARMAR,SO

Note :
1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR Annexure G
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:357927 - Analysis Completion:13/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44757

TEST REPORT

Test Report No. : 44757 **Date: 13/09/2022**

1. Name of the Customer : Nandesari Industrial Association (Cetp) - 22336
2. Address : 153/A, ,CETP,-
   Nandesari-391340, Taluka : Vadodara, District : Vadodara, GIDC :
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)
4. Sample Collected By : R.N.Shaikh,ROH
5. Quantity of Sample Received : 05 Litter.
6. Code No. of the Sample : 357927
7. Date & Time of Collection & Inwarding : 01/09/2022 , (1515 to 1515) & 02/09/2022
8. Date of Start & Completion of Analysis : 02/09/2022 & 13/09/2022
9. Sampling Point : Treated w/w sample collected from final outlet of CETP -NIA ~
10. Flow Details (Remarks) : Flow is going on
11. Mode of Disposal : into VECL Channel
12. Ultimate Receiving Body : Estuary of River Mahi via VECL Channel
13. Temperature on Collection : 30 & pH Range on pH Strip :Around 8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Turbid
    : Ind :121.000 , Dom :24.000 & Ind :12000.000 , Dom :12.000
15. Water Consumption & W.W.G (KLPD) : 22 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.15
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	10
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	19986
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	90
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	0.73
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	10206
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	4210
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	239
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	Cyanide	mg/l	Titrimetric method. (4500 - CN? D APHA Standard Me	1-10 mg/l	BDL
13	Zinc	mg/l	(3111 B APHA Standard methods 21st edi)	0.005-100mg/l	0.177
14	Total Chromium	mg/l	3111 B APHA Standard methods 21st edi)	0.02-150mg/l	bdl
15	Hexavalent Chromium	mg/l	APHA (22nd Edition) –3500 – Cr B : -2012 Colorimet	0.1 – 100 mg/l	bdl
16	Copper	mg/l	3111 B APHA Standard methods 21st edi)	0.01-150 mg/l	bdl
17	Nickel	mg/l	(3111 B APHA Standard methods 21st edi)	0.02-150 mg/l	bdl
18	Lead	mg/l	(3111 B APHA Standard methods 21st edi)	0.05-150 mg/l	0.131
19	Cadmium	mg/l	(3111 B APHA Standard methods 21st edi)	0.002-100 mg/l	BDL
20	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	49
21	Arsenic	mg/l	(3111 B APHA Standard methods 21st edi)	-	BDL
22	MERCURY	mg/l	(3111 B APHA Standard methods 21st edi)		BDL

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 13/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Annexure H

Gujarat Pollution Control Board
Vadodara
GERI Compound
Race Course Road
Vadodara - 390007
Tele:0265-2354850

Sample ID:357915 - Analysis Completion:13/09/2022

Common treatment and disposal facilities(CETP, TSDF, Ewaste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary landfill site) / LAB Inward : 44754

TEST REPORT

Test Report No. : 44754 **Date: 13/09/2022**

1. Name of the Customer : **Enviro Infrastructure Co Ltd (Cetp) - 21878**
2. Address : **BLOCK NO.612-B,VILL : UMRAYA,ECP ROAD UMARAYA-391440, Taluka : Padra, District : Vadodara, GIDC : Not In**
3. Nature of Sample : **REP-Representative/Grab, (Insp Type : OTH-Others/Higher Authority)**
4. Sample Collected By : **R.N.Shaikh,ROH**
5. Quantity of Sample Received : **05 Litter.**
6. Code No. of the Sample : **357915**
7. Date & Time of Collection & Inwarding : **01/09/2022 , (1050 to 1050) & 02/09/2022**
8. Date of Start & Completion of Analysis : **02/09/2022 & 13/09/2022**
9. Sampling Point : **Treated w/w sample collected from final outlet of CETP ~**
10. Flow Details (Remarks) : **Flow is going on**
11. Mode of Disposal : **into VECL Channel**
12. Ultimate Receiving Body : **Ultimate disposal into Estuary of River Mahi**
13. Temperature on Collection : **28 & pH Range on pH Strip :Around 7-8 on pH strip**
14. Carboys Nos for : **Barcode & Color & Appearance :Light Yellowish**
: **Ind :56.000 , Dom :42.000 & Ind :4500.000 , Dom :2.000**
15. Water Consumption & W.W.G (KLPD) : **22 ,Cap No & Weight :**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2012	1 – 14 pH value As or	8.06
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	30
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	10360
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	124
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standar	1 - 2000 mg/l.	1.12
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	4374
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	1070
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2(	5.0- 50000 mg/l	218
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	BDL
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	BDL
12	Cyanide	mg/l	Titrimetric method. (4500 - CN? D APHA Standard Me	1-10 mg/l	BDL
13	Zinc	mg/l	(3111 B APHA Standard methods 21st edi)	0.005-100mg/l	0.104
14	Total Chromium	mg/l	3111 B APHA Standard methods 21st edi)	0.02-150mg/l	bdl
15	Hexavalent Chromium	mg/l	APHA (22nd Edition) –3500 – Cr B : -2012 Colorimet	0.1 – 100 mg/l	bdl
16	Copper	mg/l	3111 B APHA Standard methods 21st edi)	0.01-150 mg/l	bdl
17	Nickel	mg/l	(3111 B APHA Standard methods 21st edi)	0.02-150 mg/l	bdl
18	Lead	mg/l	(3111 B APHA Standard methods 21st edi)	0.05-150 mg/l	0.124
19	Cadmium	mg/l	(3111 B APHA Standard methods 21st edi)	0.002-100 mg/l	BDL
20	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	41
21	Arsenic	mg/l	(3111 B APHA Standard methods 21st edi)	-	BDL
22	MERCURY	mg/l	(3111 B APHA Standard methods 21st edi)		BDL

Laboratory Remarks : APPROVED. By:327-r.o_327 Dt.: 13/09/2022

B.M.PARMAR,SO

Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
3. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
5. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.