



**Bharat
RASAYAN LIMITED**

1938

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Compliance Report in response to the Observations
made by CPCB & GPCB Joint Visit on dated 16-11-2021
at M/s Bharat Rasayan Ltd., Dahej

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For Bharat Rasayan Limited


Director

For M/s Bharat Rasayan Ltd.
42/4, GIDC, Dahej. Amod Road,
Tal : Vagra, Dahej- 392130



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TO,

1. NATIONAL GREEN TRIBUNAL,
WESTERN ZONE BENCH,
PUNE, MAHARASHTRA
2. THE CENTRAL POLLUTION CONTROL BOARD,
PARIVESH BHAWAN, MAHARSHI VALMIKI MARG,
EAST ARJUN NAGAR, VISHWAS NAGAR EXTENSION,
VISHWAS NAGAR, SHAHDARA, DELHI, 110032
3. THE GUJARAT POLLUTION CONTROL BOARD,
PARYAVARAN BHAVAN,
SECTOR – 10A, GANDHINAGAR 382010

SUB: COMPLIANCE REPORT OF JOINT INSPECTION BY CPCB & GPCB

You are requested to kindly Consider our Compliance Report submitted in response to the inspection remarks/Observations by CPCB & GPCB Joint Visit of M/s Bharat Rasayan Ltd. dated 16.11.2021 in reference to Hon'ble NGT order Dated 04.10.2021 in the matter OA/60/2021 (WZ).

PRELIMINARY SUBMISSIONS:

It is submitted that the industry had already provided 07 (seven) flow meters at all inlet lines & 1 (One) flow meter on final outlet line and the TOC meter provided at final outlet was functional during the visit. At the time of TOC meter visit, industry's final discharge wasn't going on outside of the premises. In that case, TOC meter is not collecting & analyzing the sample as the water was not available for sampling due to no discharge. It is also submitted that one week data report downloaded from the OCEMS site.

That it is pertinent to mention herein that the Cleaning of the pot & capillary is very precise job & required expert technician to avoid damage to the sampling assembly. We have given the annual contract for the same to M/s, Shreedhar Instruments, the authorized contractor of the Equipment supplier. That as per the supplier, due to the direct sun light on sample pot through window resulting into algae formation. As per supplier's suggestion, we have provided black glass window to avoid direct sun light.

GPCB analysis report for the treated water discharge going outside is within the prescribed permissible limit. Water accumulated outside the boundary wall was the back flow from the adjacent GIDC storm drain/leakages from GIDC drain and which is regular feature in our area. We had informed to GIDC several times though letter in this regard.

The storm water drain which is supposed to discharge rainwater from the industry during monsoon and should remain dry during other seasons.

On the day of visit, a tank was shifted earlier in the day from Plant A. Unfortunately,

some holding material (approx. 30 to 40 lit.) spilled over on the road inside the factory. Now, Our management has taken it on priority and drafted a policy for daily monitoring & cleaning of the storm water drain inside the premises of the factory. It is pertinent to mention herein that We had already blocked the storm water drain by masonry wall from all places, a gate valve is also installed on the storm water drain. So, there is no possibility of storm water flow outside the premises during off-monsoon season. We had already provided the permanent provision for collection of contaminated water from storm water drain collection tank (ETP) for further treatment. The tanks were located in plant premises which are already covered by acid proof tile lining and dyke wall are also installed.

The water accumulated was contained in dyke area & there is no possibility of waste water runoff as it is well covered by the dyke wall, however we have made provision of motor pumps for pumping out the accumulated waste water.

Since the nature of Phenol is that it solidifies if the temperature of atmosphere drops below 40.5 degree Celsius, and when tanker reported at the site the temperature in atmosphere was 25 degree Celsius. That for the purpose of unloading the material, the tanker through its coil put up to heating and the leakage on the valve was observed only when it starts melting. That it is pertinent to mention herein that at the time when tanker reported to the site the Phenol was in solid form and was not leaking. Heating was stopped when the leakage was observed & supplier was informed for the same immediately. However, to take care of such situation in future, we have ordered a Stainless Steel tray with roller to collect the leakages if any.

We are disposing low boiling stream from stripping of high COD wastewater along with process waste. However, as advised we will do the needful along with the next CCA renewal. Our actual hydraulic capacity is calculated by M/s, DDIT & they have issued adequacy certificate for the same. As far as possible, chemical handling is being done in close loop system. Drum/carboys lids are being tightened properly. General scrubbers also are provided in each plant and all the vents are connected with the general scrubbers. The entire process were carried out in close loop system. Appropriate PPEs are being used to ensure safety. The nutch filter is covered with PFFRP hood, which is connected to scrubber. We have already provided dedicated hazardous waste storage area duly covered and sealed with impervious flooring & roof top.

PRAYER:

It is most respectfully prayed to

- A. Pass an order in favour of the applicant / Petitioner to withdraw the impugned report of remarks imposed by CPCB & GPCB Joint team.
- B. Pass an order in favour of the applicant / Petitioner to withdraw the impugned Environment Compensation recommended by CPCB & GPCB Joint team.
- C. Pass an order to the concerned authorities for removal of the impugned report from the website of the NGT.

D. Pass any other order in favour of the Applicant/Petitioner in the facts and circumstances of the present case by the Authorities.

For Bharat Rasayan Limited


Director

FILED BY:

M/s Bharat Rasayan Ltd.

(Previous Name : Siris Crop Science Limited)

42/4, GIDC, Dahej. Amod Road,

Tal : Vagra, Dahej- 392130

Compliance to observations of
NGT team (CPCB & GPCB) joint visit of M/s, Bharat Rasayan Ltd. dated 16/11/2021 & Joint Report In
Reference To Hon'ble NGT Order Dated 04.10.2021 In Matter Oa 60/2021(Wz)

Sr. No.	Observation	Compliance status
2. Waste Water Management		
d)	The industry has not provided flow meter at the inlet. Based on flow reading of final discharge to GIDC drainage system, average discharge is about 60 KLD.	It is submitted that the industry had already provided 07 (seven) flow meters at all inlet lines & 1 (One) flow meter on final outlet line. Records of the same is maintained.
3. OCEMS/ PTZ/ Flowmeter provision, location of OCEMS, parameters monitored, working principle, its online connectivity to CPCB/GPCB server		
	TOC meter is provided at final outlet and was found defunct during visit. During visit, algal deposition in the capillary tubes of TOC meter was observed. As informed, online connectivity of OCEMS to GPCB and CPCB is provided.	It is submitted that the TOC meter provided at final outlet was functional during the visit. It is also submitted that at the time of TOC meter visit, industry's final discharge wasn't going on. In that case, TOC meter is not collecting & analyzing the sample as the water was not available for sampling due to no discharge. Refer letter of TOC meter supplier attached herewith as annexure-1a It is also submitted that one week data report downloaded from the OCEMS site is attached herewith as annexure-1b for your ready reference. This clearly shows that the meter was functional during the visit. That it is pertinent to mention herein that the cleaning of the pot & capillary is very precise job & required expert technician to avoid damage to the sampling assembly. We have given the annual contract for the same to M/s, Shreedhar Instruments, the authorized contractor of the Equipment supplier. That as per the supplier, due to the direct sun light on sample pot through window resulting into algae formation. A mail of supplier in this regard attached herewith as annexure-1c As per supplier's suggestion, we have provided black glass window to avoid direct sun light. Photographs are attached herewith as annexure-1d
Other Observations on overall waste water management, hazardous waste management, mode of disposal, display board etc.		

1	The industry has provided digital display board at the entry gate. During visit the industry, ETP, MEE plant was found operational.	It is submitted that the observation is noted.
2	The team has collected grab sample of wastewater from the final discharge point into GIDC drainage network. The Analysis of samples reveals that the sample collected from final discharge point found meeting the discharge standard except for TSS which slightly exceeds.	It is submitted that GPCB analysis report is within the prescribe limit. GPCB analysis report is attached as annexure-2 .
3	The team has observed accumulation of colored water near the boundary of the premises. The team has checked the location from inside of the industry and found that the portion of drain was dry and there was no discharge during visit. It was informed that the storm water drain was recently closed after monsoon.	It is submitted that Water accumulated outside the boundary wall (is) back flow from the adjacent GIDC storm drain/leakages from GIDC drain. We had informed to GIDC several times though letter in this regard. Copies of the letters with acknowledgement attached as annexure-3 .
4	The team has traced the entire storm water drain and it was found that the storm water drain has accumulated high black coloured contaminated wastewater in the portion of main storm water drain from ETP to GIDC fresh water tank inside the premises. It is worth to mention that, the storm water drain was meant for discharge of rainwater from the industry during monsoon and should remain dry during other seasons. Grab sample of wastewater was also collected and the analysis results show high organic contamination.	It is submitted that the storm water drain which is supposed to discharge rainwater from the industry during monsoon and should remain dry during other seasons. On the day of visit, a tank was shifted earlier in the day from Plant A. Unfortunately, some holding material (approx. 30 to 40 lit.) spilled over on the road inside the factory. Now, Our management has taken it on priority and drafted a policy for daily monitoring & cleaning of the storm water drain inside the premises of the factory. Photographs of the road & storm water drain is annexed herewith as Annexure-4a
5	The Analysis of sample collected from main storm water drain reveals that the sample collected high concentration of analysed parameters like COD :19065 mg/l, Phenol:105.5 mg/l, BOD: 9360 mg/l, Ammonical Nitrogen: 742 mg/l etc. Similarly high concentration of measured parameters and high alkaline wastewater was observed in another drain. No permanent provision for collection of wastewater was observed. Such condition of high contaminated wastewater into the storm water drain has potential of runoff from storm water drains outside the	It is also submitted that to avoid reoccurrence, we have introduced a check list to ensure proper removal of holding material/decontamination before handing over tank/equipment to maintenance for dismantling/movement. Copy of the Check List is annexed herewith as Annexure-4b for your reference. It is pertinent to mention herein that We have blocked the storm water drain by masonry wall from all places, a gate valve is also installed on the storm water drain. So, there is no possibility of storm water flow

	premises.	outside the premises during off-monsoon season. Photograph of the same is annexed herewith as annexure-4c
6	During visit, spillage of wastewater was observed on road area near Plant A area near main storm water drain. The pH of wastewater was checked and found acidic. No explanation/reason regarding the incidence of such spillage was provided by the industry.	It is also submitted that We have already provide the permanent provision for collection of contaminated water from storm water drain collection tank (ETP) for further treatment. Photograph of the same is annexed herewith as annexure-4d
7	Team has checked pH of accumulated wastewater in the storm water drain near plant A and was found alkaline. The team collected grab sample of wastewater from the drain and found having COD of 13,226 mg/l with pH 11.79. The analyzed parameter shows high organic contamination.	It is pertinent to mention herein that a closed loop ejector system of plant A is installed to the storm water drain. It is submitted that at the time of visit, there was leakage on ejector circulation pump from gland & approx. 5 to 10 lit. leakage alkaline water entered in storm water drain. That it is already submitted that the storm water drain was blocked by masonry wall. To avoid further reoccurrences of the same, we have replaced the pump gland with mechanical seal. It is submitted that we have cleaned the storm water drain thoroughly. Photograph of the same is annexed herewith as annexure-5
8	During visit accumulation of wastewater/material in tank farm area was observed at many locations. The accumulated wastewater/material was found acidic at some place and alkaline at some place.	It is submitted that the tanks were located in plant premises which are already covered by acid proof tile lining and dyke wall are also installed. The water accumulated was contained in dyke area & there is no possibility of waste water runoff as the dyke is concealed. However, we have made provision of motor pumps for transferring the accumulated waste water.
9	During visit, one tanker filled with phenol was observed in tank farm area. Leakage of phenol from the tanker bottom was observed. However, there was no any corrective action taken by the industry. After the observation, the industry started taking action.	It is submitted that since the nature of Phenol is that it solidifies if the temperature of atmosphere drops below 40.5 degree celcius, and when tanker reported at the site the temperature in atmosphere was 25 degree celcius. That for the purpose of unloading the material, the tanker through its coil put up to heating and the leakage on the valve was observed only when it starts melting. That it is pertinent to mention herein that at the

		<p>time when tanker reported to the site the Phenol was in solid nature and was not leaking. Heating was stopped when the leakage was observed & supplier was informed for the same immediately.</p> <p>However, to take care of such situation in future, we have ordered a Stainless Steel tray with roller to collect any leakages. Copy of the PO annexed herewith as annexure-6</p>
10	<p>Unit has provided wastewater collection tank for storage of wastewater generated from process in their all-production plant, during visit oozing of pinkish colored water near the storage tank of high COD wastewater was observed.</p>	<p>It is submitted that some material from the wastewater storage tank was overflowed, although the dyke wall is already provided to collect the overflow material the material and it was hold there only.</p>
11	<p>During visit, Effluent treatment system comprising of ETP, Stripper followed by MEE, ATFD & RO were found in operation. Separate authorization of the generation and disposal of low boiling stream from stripping of high COD wastewater were not taken by the industry.</p>	<p>It is submitted that we are disposing low boiling stream from stripping of high COD wastewater along with process waste. However, as advised we will do the needful along with the next CCA renewal.</p>
12	<p>The industry has taken temporary permission for sending 30 KLD of concentrated/High COD stream of industrial effluent to CMEE of Detox India Pvt Ltd, Ankleshwar vide GPCB letter dated 30.06.2021 for the period of six months.</p>	Noted
13	<p>The industry has installed incinerator for disposal of concentrated wastewater, however incinerator is found in not in operation. As informed, the industry has not operated the incinerator since installation and now dismantling this incinerator.</p>	Noted
14	<p>The industry has provided ETP with capacity 300 KLD against the permitted generation quantity is 715 KLD as per CCA.</p>	<p>It is submitted that our actual hydraulic capacity is calculated by M/s, DDIT & they have issued adequacy certificate for the same.</p> <p>EMS Adequacy certificate is annexed herewith as annexure-7</p>
15	<p>The industry has provided many collection tanks in the ETP area. The collection tanks were having variety of wastewater in physical appearance. Nomenclature, records and reason for such collection and</p>	<p>It is submitted that we have provided total 6 (six) number of tanks in that area. Out of these six tanks, 02 tanks are used for filter press feed, 01 tank for ATFD feed, 01 tank for decanter feed & 02 tanks for MEE-1 & 2</p>

	storage were not provided by the industry.	condensate storage. As desired proper nomenclature has been provided. Photographs of the same is annexed herewith as annexure-8
16	VOC odour was sensed around collection tanks, primary treatment section of High COD/ high TDS wastewater, production plant and tank farm area.	It is submitted that after the visit, we have checked Total VOC by our ION science meter and the reading was 4 ppm at ETP area, 3 to 6 ppm in production area & 0.0 ppm in tank farm area. VOC monitoring sheet is annexed herewith as annexure-9a However, it is proposed to provide a PP/FRP hood to cover the tank. The hood will be connected with the common scrubber provided in ETP. It is pertinent to mention herein that The PO in this regard has been already issued. Copy of the PO is annexed herewith as annexure-9b As far as possible, chemical handling is being done in close loop system. Drum/carboys lids are being tightened properly. General scrubbers also are provided in each plant and all the vents are connected with the general scrubbers.
17	The industry manufactured CMAC. As informed, acidification of high COD stream of wastewater generating from plant need to be carried out to separate residue (high organic tarry type sludge) in the collection tank. It was observed that the industry carryout such operation manually through nutch filter. The drains were when opened. Emission of VOCs and eye irritation were felt near the area. Handling of such high organic residue, addition of acid, working in such hazards condition without proper safety needs improvement. Provision of detection of concentration of VOCs and HCs may be provided with safety alarm.	It is submitted that the entire process were carried out in close loop system. Appropriate PPEs are being used to ensure safety. The nutch filter is covered with PPFRP hood, which is connected to scrubber. Photographs of the same is annexed herein as annexure-10 . It is pertinent to mention herein that the VOC meter with alarm will also be provided within a month. PO has been placed in this regard. Copy of PO is annexed herewith as annexure-11 for your ready reference.
18	During visit, Hazardous waste was found haphazardly stored inside the storage shed. The storage shed was covered however leachate collection system is not provided. As informed, present stock of about 98.529 MT of process waste/waste residue and about 3000 MT of total landfillable waste	It is submitted that We have already provided dedicated hazardous waste storage area with impervious flooring & roof top. It is pertinent to mention herein that our land fillable waste is having moisture content less than 10% so the leachate

19	<p>were stored</p> <p>In addition, drums containing HW found stored in open area inside the premises. Physical condition of some of the drums were dilated/corroded and leakage from bottom from some of drums. Even some drums were found open from top. In total storage of about 98.529 MT of various HW including drums were found stored outside the shed at various locations. Looking to the site conditions of high COD and Phenolic wastewater into the main storm water drains and mismanagement of HW has potential of soil and ground water contamination in and around the premises.</p>	<p>collection system was not required/provided. However, we will provide the leachate collection system within a month to fulfil the requirement.</p> <p>It is pertinent to mention herein that this year the hazardous waste disposal sites were closed early due to cyclone from 15th May and prolonged monsoon up to 10th September which resulted into high stock of hazardous waste at site.</p> <p>Even after this situation, we have cleared most of the stock. After the visit we have disposed total 4150 MT of landfillable waste & total 315 MT of process waste. The waste has been transferred from corroded drums to good condition drums. We will ensure to use only good condition drums for the hazardous waste storage.</p>
20	<p>As per condition of CCA, "the unit shall be required to make storage facilities to store the effluent for atleast 48 hours by providing acid proof brick lined impervious tanks/ HDPE tanks", However, the industry has provided only one storage tank of 200 KL capacity against the required capacity of 1430 KL (the permitted discharge quantity is 715 KLD).</p>	<p>It is submitted that We have installed RO plants and recycling the <u>maximum possible</u> water. Our average treated water discharge is less than 100 KLD.</p> <p>Our last three yrs. average discharge quantity is as below:</p> <p>2021-22 (upto Dec-21): 77 KLD 2020-21: 67 KLD 2019-20: 70 KLD</p> <p>However, we are planning for zero liquid discharge in near future.</p>

For Eharat Rasayan Limited

Director

To,

Date: 28.01.2022

Bharat Rasayan Limited

42/4, Amod Road

GIDC Estate Dist: Bharuch

Dahej 392130

Subject. TOC online sample analysis operating procedure.

Dear Sir,

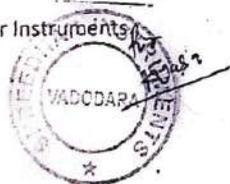
Greetings for the day.

With reference to our Shimadzu TOC 4110 Analyzer mode is On-line sampling frequency set 15 minutes hence sampling will be done continue on every 15 minutes and analyser give sample analysis results.

While effluent discharge is in stopped condition at that time analyser having no sample in sampler so results of samples will be 00. However, cycle will be continued but result will be 00 due to not available of sample in analyser sampler. when discharge starts then analyser will collect sample automatically and give result.

Thanks & Regards,

Shreedhar Instruments



OCEMS one week data report

Bharat Rasayan Limited

Plot No 42/4, Amod Road, GIDC, Dahej, Gujarat 392130

Category : Pesticides

Industry code : 24GJ057

Data Report

Duration: 11-11-2021 00:00 To 19-11-2021 23:59

Interval Time: 30 Min

Station Name		ETP_1_Outlet					
No	Date_Time	bod (mg/l)	cod (mg/l)	flow (m3/hr)	pH (pH)	toc (mg/l)	tss (mg/l)
1	11/11/2021 0:00	0	0	0	7.89	0	13.2
2	11/11/2021 0:30	0	0	0	7.9	0	13.3
3	11/11/2021 1:00	0	0	0	7.87	0	13.1
4	11/11/2021 1:30	0	0	0	7.89	0	13.3
5	11/11/2021 2:00	0	0	0	7.93	0	13.2
6	11/11/2021 2:30	0	0	0	7.9	0	13.2
7	11/11/2021 3:00	0	0	0	7.9	0	13.3
8	11/11/2021 3:30	0	0	0	7.93	0	13.2
9	11/11/2021 4:00	0	0	0	7.9	0	13.2
10	11/11/2021 4:30	0	0	0	7.9	0	13.2
11	11/11/2021 5:00	0	0	0	7.86	0	13.4
12	11/11/2021 5:30	0	0	0	7.9	0	13.4
13	11/11/2021 6:00	0	0	0	7.89	0	13.5
14	11/11/2021 6:30	0	0	0	7.89	0	13.5
15	11/11/2021 7:00	0	0	0	7.89	0	13.5
16	11/11/2021 7:30	0	0	0	7.9	0	13.5
17	11/11/2021 8:00	0	0	0	7.88	0	13.5
18	11/11/2021 8:30	0	0	0	7.9	0	13.5
19	11/11/2021 9:00	0	0	0	7.93	0	13.5
20	11/11/2021 9:30	0	0	0	7.89	0	13.6
21	11/11/2021 10:00	0	0	0	7.9	0	13.7
22	11/11/2021 10:30	0	0	0	7.9	0	13.3
23	11/11/2021 11:00	0	0	0	7.93	0	13.6
24	11/11/2021 11:30	0	0	0	7.9	0	13.7
25	11/11/2021 12:00	0	0	0	7.91	0	13.9
26	11/11/2021 12:30	0	0	10.5	7.85	0	15.1
27	11/11/2021 13:00	0	0	10.4	7.94	0	15.8
28	11/11/2021 13:30	0	0	10.3	7.93	0	16.2
29	11/11/2021 14:00	19.17	76.66	10.2	7.96	38.33	62.1
30	11/11/2021 14:30	21.54	86.14	10.2	7.98	43.07	79.9
31	11/11/2021 15:00	22.03	88.12	10.2	7.97	44.06	83.7
32	11/11/2021 15:30	24.35	97.38	10.1	7.98	48.69	86.1
33	11/11/2021 16:00	20.46	81.82	10.1	7.98	40.91	84.4

34	11/11/2021 16:30	23.88	95.52	10.1	7.97	47.76	84.3
35	11/11/2021 17:00	21.5	86	10.1	7.96	43	81.9
36	11/11/2021 17:30	21.95	87.8	10	7.92	43.9	82.2
37	11/11/2021 18:00	24.52	98.08	10	7.97	49.04	82.3
38	11/11/2021 18:30	21.89	87.56	0	7.95	43.78	80.3
39	11/11/2021 19:00	0	0	0	7.92	0	67.7
40	11/11/2021 19:30	17.76	71.04	0	7.96	35.52	59.7
41	11/11/2021 20:00	0	0	0	7.96	0	56.5
42	11/11/2021 20:30	0	0	0	7.96	0	54.2
43	11/11/2021 21:00	0	0	0	7.91	0	51.2
44	11/11/2021 21:30	0	0	0	7.94	0	50.2
45	11/11/2021 22:00	0	0	0	7.98	0	47.1
46	11/11/2021 22:30	0	0	0	7.94	0	44.8
47	11/11/2021 23:00	0	0	0	7.96	0	42.9
48	11/11/2021 23:30	0	0	0	7.93	0	41.4
49	12/11/2021 0:00	0	0	0	7.96	0	40.1
50	12/11/2021 0:30	0	0	0	7.94	0	38.3
51	12/11/2021 1:00	0	0	0	7.95	0	37.4
52	12/11/2021 1:30	0	0	0	7.99	0	36.2
53	12/11/2021 2:00	0	0	0	7.96	0	35.5
54	12/11/2021 2:30	0	0	0	8	0	34.2
55	12/11/2021 3:00	0	0	0	7.97	0	33
56	12/11/2021 3:30	0	0	0	7.93	0	32.2
57	12/11/2021 4:00	0	0	0	7.97	0	31.5
58	12/11/2021 4:30	0	0	0	7.98	0	30.5
59	12/11/2021 5:00	0	0	0	7.95	0	30.4
60	12/11/2021 5:30	0	0	0	7.97	0	29.7
61	12/11/2021 6:00	0	0	0	7.95	0	29
62	12/11/2021 6:30	0	0	0	8	0	28.2
63	12/11/2021 7:00	0	0	0	7.95	0	27.4
64	12/11/2021 7:30	0	0	0	7.96	0	27
65	12/11/2021 8:00	0	0	0	7.96	0	26.3
66	12/11/2021 8:30	0	0	0	7.91	0	25.9
67	12/11/2021 9:00	0	0	0	7.96	0	25
68	12/11/2021 9:30	0	0	0	7.97	0	24.7
69	12/11/2021 10:00	0	0	0	8	0	24.2
70	12/11/2021 10:30	0	0	0	7.95	0	23.6
71	12/11/2021 11:00	0	0	0	7.89	0	23.5
72	12/11/2021 11:30	0	0	0	7.95	0	23.2
73	12/11/2021 12:00	0	0	0	7.97	0	23
74	12/11/2021 12:30	0	0	0	7.99	0	22.8
75	12/11/2021 13:00	0	0	0	7.99	0	22.3
76	12/11/2021 13:30	0	0	0	7.99	0	22
77	12/11/2021 14:00	0	0	0	7.97	0	21.5
78	12/11/2021 14:30	0	0	0	7.97	0	21.3

79	12/11/2021 15:00	0	0	0	7.97	0	21.2
80	12/11/2021 15:30	0	0	0	7.97	0	20.6
81	12/11/2021 16:00	0	0	0	7.94	0	20.4
82	12/11/2021 16:30	0	0	0	7.98	0	20.2
83	12/11/2021 17:00	0	0	0	7.93	0	19.9
84	12/11/2021 17:30	0	0	0	7.96	0	19.9
85	12/11/2021 18:00	0	0	0	7.97	0	19.4
86	12/11/2021 18:30	0	0	0	7.95	0	19.2
87	12/11/2021 19:00	0	0	0	7.98	0	19.2
88	12/11/2021 19:30	0	0	0	7.97	0	18.8
89	12/11/2021 20:00	0	0	0	7.98	0	18.8
90	12/11/2021 20:30	0	0	0	7.96	0	18.4
91	12/11/2021 21:00	0	0	0	7.97	0	18.1
92	12/11/2021 21:30	0	0	0	7.99	0	18
93	12/11/2021 22:00	0	0	0	7.97	0	17.7
94	12/11/2021 22:30	0	0	0	7.97	0	17.5
95	12/11/2021 23:00	0	0	0	7.98	0	17.5
96	12/11/2021 23:30	0	0	0	7.96	0	17
97	13-11-2021 00:00	0	0	0	7.98	0	16.9
98	13-11-2021 00:30	0	0	0	7.98	0	17
99	13-11-2021 01:00	0	0	0	7.97	0	16.6
100	13-11-2021 01:30	0	0	0	7.96	0	16.7
101	13-11-2021 02:00	0	0	0	8	0	16.4
102	13-11-2021 02:30	0	0	0	7.93	0	16.1
103	13-11-2021 03:00	0	0	0	7.98	0	15.9
104	13-11-2021 03:30	0	0	0	8	0	15.8
105	13-11-2021 04:00	0	0	0	7.99	0	15.7
106	13-11-2021 04:30	0	0	0	7.98	0	15.4
107	13-11-2021 05:00	0	0	0	7.95	0	15.4
108	13-11-2021 05:30	0	0	0	7.99	0	15.4
109	13-11-2021 06:00	0	0	0	7.97	0	15.1
110	13-11-2021 06:30	0	0	0	7.98	0	14.9
111	13-11-2021 07:00	0	0	0	7.99	0	14.8
112	13-11-2021 07:30	0	0	0	7.97	0	14.6
113	13-11-2021 08:00	0	0	0	8	0	14.3
114	13-11-2021 08:30	0	0	0	7.97	0	14.2
115	13-11-2021 09:00	0	0	0	7.96	0	13.9
116	13-11-2021 09:30	0	0	0	7.98	0	13.9
117	13-11-2021 10:00	0	0	0	7.96	0	13.8
118	13-11-2021 10:30	0	0	0	7.99	0	13.7
119	13-11-2021 11:00	0	0	0	7.93	0	13.5
120	13-11-2021 11:30	0	0	0	7.93	0	13.4
121	13-11-2021 12:00	0	0	0	7.92	0	13.3
122	13-11-2021 12:30	0	0	0	7.98	0	13.1
123	13-11-2021 13:00	0	0	0	7.97	0	12.9

124	13-11-2021 13:30	0	0	0	7.96	0	13
125	13-11-2021 14:00	0	0	0	7.97	0	12.6
126	13-11-2021 14:30	0	0	0	7.97	0	12.5
127	13-11-2021 15:00	0	0	0	8.01	0	12.4
128	13-11-2021 15:30	0	0	0	7.99	0	12.4
129	13-11-2021 16:00	0	0	0	7.97	0	12
130	13-11-2021 16:30	0	0	0	7.97	0	11.9
131	13-11-2021 17:00	0	0	0	7.96	0	11.8
132	13-11-2021 17:30	0	0	0	7.95	0	11.9
133	13-11-2021 18:00	0	0	0	7.96	0	11.7
134	13-11-2021 18:30	0	0	0	7.96	0	11.6
135	13-11-2021 19:00	0	0	0	7.97	0	11.4
136	13-11-2021 19:30	0	0	0	7.97	0	11.3
137	13-11-2021 20:00	0	0	0	7.96	0	11.2
138	13-11-2021 20:30	0	0	0	7.98	0	11.1
139	13-11-2021 21:00	0	0	0	7.96	0	10.9
140	13-11-2021 21:30	0	0	0	7.97	0	10.9
141	13-11-2021 22:00	0	0	0	7.98	0	10.8
142	13-11-2021 22:30	0	0	0	7.95	0	10.7
143	13-11-2021 23:00	0	0	0	7.96	0	10.6
144	13-11-2021 23:30	0	0	0	7.97	0	10.5
145	14-11-2021 00:00	0	0	0	7.96	0	10.6
146	14-11-2021 00:30	0	0	0	7.95	0	10.3
147	14-11-2021 01:00	0	0	0	7.94	0	10.3
148	14-11-2021 01:30	0	0	0	7.95	0	10.1
149	14-11-2021 02:00	0	0	0	7.96	0	10
150	14-11-2021 02:30	0	0	0	7.97	0	10.2
151	14-11-2021 03:00	0	0	0	7.96	0	10
152	14-11-2021 03:30	0	0	0	7.98	0	9.9
153	14-11-2021 04:00	0	0	0	7.98	0	9.8
154	14-11-2021 04:30	0	0	0	7.95	0	9.8
155	14-11-2021 05:00	0	0	0	7.98	0	9.6
156	14-11-2021 05:30	0	0	0	7.95	0	9.5
157	14-11-2021 06:00	0	0	0	7.95	0	9.4
158	14-11-2021 06:30	0	0	0	7.95	0	9.6
159	14-11-2021 07:00	0	0	0	7.92	0	9.3
160	14-11-2021 07:30	0	0	0	7.98	0	9.2
161	14-11-2021 08:00	0	0	0	8	0	9.2
162	14-11-2021 08:30	0	0	0	8	0	9.1
163	14-11-2021 09:00	0	0	0	7.97	0	8.9
164	14-11-2021 09:30	0	0	0	7.97	0	8.9
165	14-11-2021 10:00	0	0	0	8	0	9
166	14-11-2021 10:30	0	0	0	7.94	0	9.1
167	14-11-2021 11:00	0	0	0	7.96	0	8.8
168	14-11-2021 11:30	0	0	0	7.97	0	8.7

169	14-11-2021 12:00	0	0	0	7.96	0	8.7
170	14-11-2021 12:30	0	0	0	7.97	0	8.8
171	14-11-2021 13:00	0	0	0	7.97	0	8.6
172	14-11-2021 13:30	0	0	0	7.93	0	8.5
173	14-11-2021 14:00	0	0	0	7.97	0	8.4
174	14-11-2021 14:30	0	0	0	7.94	0	8.40 (M)
175	14-11-2021 15:00	0	0	10.1	7.99	0	14.80 (M)
176	14-11-2021 15:30	0	0	10.1	8.05	0	15.10 (M)
177	14-11-2021 16:00	0	0	10.1	8.01	0	14.00 (M)
178	14-11-2021 16:30	0	0	10.1	7.97	0	14.00 (M)
179	14-11-2021 17:00	0	0	10	7.92	0	13.40 (M)
180	14-11-2021 17:30	0	0	10	7.87	0	12.80 (M)
181	14-11-2021 18:00	0	0	10	7.86	0	12.50 (M)
182	14-11-2021 18:30	0	0	10	7.86	0	12.00 (M)
183	14-11-2021 19:00	0	0	0	7.85	0	11.80 (M)
184	14-11-2021 19:30	0	0	0	7.88	0	11.60 (M)
185	14-11-2021 20:00	0	0	0	7.88	0	11.60 (M)
186	14-11-2021 20:30	0	0	0	7.92	0	11.30 (M)
187	14-11-2021 21:00	0	0	0	7.91	0	11.00 (M)
188	14-11-2021 21:30	0	0	0	7.9	0	11.00 (M)
189	14-11-2021 22:00	0	0	0	7.85	0	10.70 (M)
190	14-11-2021 22:30	0	0	0	7.87	0	10.60 (M)
191	14-11-2021 23:00	0	0	0	7.87	0	10.40 (M)
192	14-11-2021 23:30	0	0	0	7.89	0	10.30 (M)
193	15-11-2021 00:00	0	0	0	7.91	0	10.00 (M)
194	15-11-2021 00:30	0	0	0	7.92	0	9.90 (M)
195	15-11-2021 01:00	0	0	0	7.88	0	9.90 (M)
196	15-11-2021 01:30	0	0	0	7.88	0	9.90 (M)
197	15-11-2021 02:00	0	0	0	7.84	0	9.50 (M)
198	15-11-2021 02:30	0	0	0	7.89	0	9.50 (M)
199	15-11-2021 03:00	0	0	0	7.87	0	9.40 (M)
200	15-11-2021 03:30	0	0	0	7.88	0	9.30 (M)
201	15-11-2021 04:00	0	0	0	7.84	0	9.30 (M)
202	15-11-2021 04:30	0	0	0	7.89	0	9.20 (M)
203	15-11-2021 05:00	0	0	0	7.88	0	9.00 (M)
204	15-11-2021 05:30	0	0	0	7.91	0	9.10 (M)
205	15-11-2021 06:00	0	0	0	7.87	0	8.90 (M)
206	15-11-2021 06:30	0	0	0	7.91	0	8.80 (M)
207	15-11-2021 07:00	0	0	0	7.89	0	8.70 (M)
208	15-11-2021 07:30	0	0	0	7.93	0	8.60 (M)
209	15-11-2021 08:00	0	0	0	7.91	0	8.60 (M)
210	15-11-2021 08:30	0	0	0	7.91	0	8.70 (M)
211	15-11-2021 09:00	0	0	0	7.86	0	8.30 (M)
212	15-11-2021 09:30	0	0	0	7.95	0	8.40 (M)
213	15-11-2021 10:00	0	0	0	7.9	0	8.30 (M)

214	15-11-2021 10:30	0	0	0	7.9	0	8.3
215	15-11-2021 11:00	0	0	0	7.91	0	8.1
216	15-11-2021 11:30	0	0	0	7.9	0	8.2
217	15-11-2021 12:00	0	0	0	7.91	0	8.2
218	15-11-2021 12:30	0	0	0	7.86	0	8.1
219	15-11-2021 13:00	0	0	0	7.9	0	8
220	15-11-2021 13:30	0	0	0	7.89	0	7.9
221	15-11-2021 14:00	0	0	0	7.9	0	8
222	15-11-2021 14:30	0	0	0	7.9	0	7.8
223	15-11-2021 15:00	0	0	0	7.93	0	7.8
224	15-11-2021 15:30	0	0	0	7.89	0	7.8
225	15-11-2021 16:00	0	0	0	7.92	0	7.7
226	15-11-2021 16:30	0	0	0	7.92	0	7.6
227	15-11-2021 17:00	0	0	0	7.93	0	7.6
228	15-11-2021 17:30	0	0	0	7.92	0	7.6
229	15-11-2021 18:00	0	0	0	7.9	0	7.6
230	15-11-2021 18:30	0	0	0	7.93	0	7.6
231	15-11-2021 19:00	0	0	0	7.92	0	7.5
232	15-11-2021 19:30	0	0	0	7.89	0	7.6
233	15-11-2021 20:00	0	0	0	7.92	0	7.5
234	15-11-2021 20:30	0	0	0	7.92	0	7.5
235	15-11-2021 21:00	0	0	0	7.93	0	7.3
236	15-11-2021 21:30	0	0	0	7.9	0	7.3
237	15-11-2021 22:00	0	0	0	7.91	0	7.4
238	15-11-2021 22:30	0	0	0	7.88	0	7.4
239	15-11-2021 23:00	0	0	0	7.87	0	7.2
240	15-11-2021 23:30	0	0	0	7.93	0	7.3
241	16-11-2021 00:00	0	0	0	7.92	0	7.4
242	16-11-2021 00:30	0	0	0	7.88	0	7.2
243	16-11-2021 01:00	0	0	0	7.93	0	7.2
244	16-11-2021 01:30	0	0	0	7.92	0	7.3
245	16-11-2021 02:00	0	0	0	7.92	0	7.1
246	16-11-2021 02:30	0	0	0	7.91	0	7.1
247	16-11-2021 03:00	0	0	0	7.91	0	7.1
248	16-11-2021 03:30	0	0	0	7.92	0	7.1
249	16-11-2021 04:00	0	0	0	7.93	0	7.2
250	16-11-2021 04:30	0	0	0	7.92	0	7.2
251	16-11-2021 05:00	0	0	0	7.89	0	7.1
252	16-11-2021 05:30	0	0	0	7.92	0	7
253	16-11-2021 06:00	0	0	0	7.94	0	7.2
254	16-11-2021 06:30	0	0	0	7.92	0	7
255	16-11-2021 07:00	0	0	0	7.89	0	7
256	16-11-2021 07:30	0	0	0	7.9	0	7.1
257	16-11-2021 08:00	0	0	0	7.91	0	7
258	16-11-2021 08:30	0	0	0	7.92	0	6.9

259	16-11-2021 09:00	0	0	0	7.92	0	7
260	16-11-2021 09:30	0	0	0	7.91	0	7.2
261	16-11-2021 10:00	0	0	0	7.89	0	6.8
262	16-11-2021 10:30	0	0	0	7.89	0	7
263	16-11-2021 11:00	0	0	0	7.9	0	6.9
264	16-11-2021 11:30	0	0	0	7.9	0	6.8
265	16-11-2021 12:00	0	0	0	7.93	0	6.9
266	16-11-2021 12:30	0	0	0	7.89	0	6.8
267	16-11-2021 13:00	0	0	0	7.9	0	6.9
268	16-11-2021 13:30	0	0	0	7.9	0	6.9
269	16-11-2021 14:00	0	0	0	7.9	0	6.9
270	16-11-2021 14:30	0	0	0	7.88	0	6.9
271	16-11-2021 15:00	0	0	10.2	7.89	0	6.9
272	16-11-2021 15:30	0	0	0	7.9	0	6.9
273	16-11-2021 16:00	0	0	0	7.89	0	6.8
274	16-11-2021 16:30	0	0	0	7.91	0	7.4
275	16-11-2021 17:00	0	0	0	7.92	0	7.7
276	16-11-2021 17:30	0	0	0	7.9	0	7.6
277	16-11-2021 18:00	0	0	0	7.92	0	7.4
278	16-11-2021 18:30	0	0	0	7.89	0	7.4
279	16-11-2021 19:00	0	0	0	7.9	0	7.8
280	16-11-2021 19:30	0	0	0	7.84	0	7.5
281	16-11-2021 20:00	0	0	0	7.88	0	7.5
282	16-11-2021 20:30	0	0	0	7.88	0	7.5
283	16-11-2021 21:00	0	0	0	7.95	0	7.6
284	16-11-2021 21:30	0	0	0	7.93	0	7.6
285	16-11-2021 22:00	0	0	0	7.89	0	7.9
286	16-11-2021 22:30	0	0	0	7.92	0	7.7
287	16-11-2021 23:00	0	0	0	7.92	0	7.8
288	16-11-2021 23:30	0	0	0	7.89	0	7.9
289	17-11-2021 00:00	0	0	0	7.92	0	7.8
290	17-11-2021 00:30	0	0	0	7.95	0	8
291	17-11-2021 01:00	0	0	0	7.91	0	7.9
292	17-11-2021 01:30	0	0	0	7.92	0	8
293	17-11-2021 02:00	0	0	0	7.92	0	8
294	17-11-2021 02:30	0	0	0	7.89	0	8.2
295	17-11-2021 03:00	0	0	0	7.91	0	8
296	17-11-2021 03:30	0	0	0	7.92	0	8.3
297	17-11-2021 04:00	0	0	0	7.92	0	8.4
298	17-11-2021 04:30	0	0	0	7.92	0	8.4
299	17-11-2021 05:00	0	0	0	7.92	0	8.5
300	17-11-2021 05:30	0	0	0	7.92	0	8.6
301	17-11-2021 06:00	0	0	0	7.92	0	8.7
302	17-11-2021 06:30	0	0	0	7.9	0	8.6
303	17-11-2021 07:00	0	0	0	7.86	0	8.7

304	17-11-2021 07:30	0	0	0	7.92	0	8.8
305	17-11-2021 08:00	0	0	0	7.92	0	8.8
306	17-11-2021 08:30	0	0	0	7.88	0	8.9
307	17-11-2021 09:00	0	0	0	7.92	0	9
308	17-11-2021 09:30	0	0	0	7.9	0	8.9
309	17-11-2021 10:00	0	0	0	7.91	0	9.1
310	17-11-2021 10:30	0	0	0	7.87	0	9.2
311	17-11-2021 11:00	0	0	0	7.92	0	9.2
312	17-11-2021 11:30	0	0	0	7.9	0	9.4
313	17-11-2021 12:00	0	0	0	7.9	0	9.2
314	17-11-2021 12:30	0	0	0	7.88	0	9.4
315	17-11-2021 13:00	0	0	0	7.88	0	9.4
316	17-11-2021 13:30	0	0	0	7.84	0	9.4
317	17-11-2021 14:00	0	0	0	7.95	0	9.6
318	17-11-2021 14:30	0	0	0	7.9	0	9.7
319	17-11-2021 15:00	0	0	0	7.9	0	9.7
320	17-11-2021 15:30	0	0	0	7.9	0	9.8
321	17-11-2021 16:00	0	0	0	7.89	0	10.1
322	17-11-2021 16:30	0	0	0	7.89	0	9.9
323	17-11-2021 17:00	0	0	0	7.9	0	10.1
324	17-11-2021 17:30	0	0	0	7.89	0	10.3
325	17-11-2021 18:00	0	0	0	7.89	0	10.2
326	17-11-2021 18:30	0	0	0	7.87	0	10.3
327	17-11-2021 19:00	0	0	0	7.89	0	10.5
328	17-11-2021 19:30	0	0	0	7.9	0	10.5
329	17-11-2021 20:00	0	0	0	7.85	0	10.6
330	17-11-2021 20:30	0	0	0	7.89	0	10.5
331	17-11-2021 21:00	0	0	0	7.91	0	10.8
332	17-11-2021 21:30	0	0	0	7.89	0	10.9
333	17-11-2021 22:00	0	0	0	7.89	0	11
334	17-11-2021 22:30	0	0	0	7.86	0	11
335	17-11-2021 23:00	0	0	0	7.88	0	11.1
336	17-11-2021 23:30	0	0	0	7.87	0	11.3
337	18-11-2021 00:00	0	0	0	7.89	0	11.3
338	18-11-2021 00:30	0	0	0	7.88	0	11.3
339	18-11-2021 01:00	0	0	0	7.88	0	11.5
340	18-11-2021 01:30	0	0	0	7.89	0	11.7
341	18-11-2021 02:00	0	0	0	7.9	0	11.8
342	18-11-2021 02:30	0	0	0	7.9	0	11.8
343	18-11-2021 03:00	0	0	0	7.86	0	11.9
344	18-11-2021 03:30	0	0	0	7.85	0	11.9
345	18-11-2021 04:00	0	0	0	7.89	0	12.2
346	18-11-2021 04:30	0	0	0	7.89	0	12.3
347	18-11-2021 05:00	0	0	0	7.93	0	12.4
348	18-11-2021 05:30	0	0	0	7.9	0	12.5

349	18-11-2021 06:00	0	0	0	7.85	0	12.6
350	18-11-2021 06:30	0	0	0	7.89	0	12.7
351	18-11-2021 07:00	0	0	0	7.88	0	12.7
352	18-11-2021 07:30	0	0	0	7.86	0	13.2
353	18-11-2021 08:00	0	0	0	7.89	0	13
354	18-11-2021 08:30	0	0	0	7.9	0	13.1
355	18-11-2021 09:00	0	0	0	7.89	0	13.2
356	18-11-2021 09:30	0	0	0	7.81	0	13.4
357	18-11-2021 10:00	0	0	0	7.87	0	13.2
358	18-11-2021 10:30	0	0	0	7.9	0	13.2
359	18-11-2021 11:00	0	0	0	7.88	0	13.6
360	18-11-2021 11:30	0	0	0	7.86	0	13.6
361	18-11-2021 12:00	0	0	0	7.89	0	13.7
362	18-11-2021 12:30	0	0	0	7.88	0	14
363	18-11-2021 13:00	0	0	0	7.87	0	13.9
364	18-11-2021 13:30	0	0	0	7.87	0	13.9
365	18-11-2021 14:00	0	0	0	7.87	0	14.1
366	18-11-2021 14:30	0	0	0	7.87	0	14.4
367	18-11-2021 15:00	0	0	0	7.9	0	14.3
368	18-11-2021 15:30	0	0	0	7.87	0	14.5
369	18-11-2021 16:00	0	0	0	7.9	0	14.8
370	18-11-2021 16:30	0	0	0	7.9	0	14.8
371	18-11-2021 17:00	0	0	0	7.9	0	14.9
372	18-11-2021 17:30	0	0	0	7.91	0	15
373	18-11-2021 18:00	0	0	0	7.89	0	15.3
374	18-11-2021 18:30	0	0	0	7.9	0	15.2
375	18-11-2021 19:00	0	0	0	7.88	0	15.3
376	18-11-2021 19:30	0	0	0	7.93	0	15.7
377	18-11-2021 20:00	0	0	0	7.9	0	15.7
378	18-11-2021 20:30	0	0	0	7.89	0	15.9
379	18-11-2021 21:00	0	0	0	7.9	0	16.1
380	18-11-2021 21:30	0	0	0	7.91	0	16.2
381	18-11-2021 22:00	0	0	0	7.87	0	16.7
382	18-11-2021 22:30	0	0	0	7.89	0	16.4
383	18-11-2021 23:00	0	0	0	7.87	0	16.5
384	18-11-2021 23:30	0	0	0	7.9	0	16.7
385	19-11-2021 00:00	0	0	0	7.86	0	17
386	19-11-2021 00:30	0	0	0	7.9	0	17
387	19-11-2021 01:00	0	0	0	7.89	0	17.2
388	19-11-2021 01:30	0	0	0	7.89	0	17.5
389	19-11-2021 02:00	0	0	0	7.88	0	17.4
390	19-11-2021 02:30	0	0	0	7.89	0	17.8
391	19-11-2021 03:00	0	0	0	7.91	0	17.9
392	19-11-2021 03:30	0	0	0	7.89	0	18.1
393	19-11-2021 04:00	0	0	0	7.9	0	18.2

394	19-11-2021 04:30	0	0	0	7.9	0	18.4
395	19-11-2021 05:00	0	0	0	7.93	0	18.5
396	19-11-2021 05:30	0	0	0	7.91	0	18.6
397	19-11-2021 06:00	0	0	0	7.89	0	18.8
398	19-11-2021 06:30	0	0	0	7.9	0	18.9
399	19-11-2021 07:00	0	0	0	7.89	0	19.7
400	19-11-2021 07:30	0	0	0	7.91	0	19.7
401	19-11-2021 08:00	0	0	0	7.92	0	19.3
402	19-11-2021 08:30	0	0	0	7.83	0	19.5
403	19-11-2021 09:00	0	0	0	7.87	0	20.1
404	19-11-2021 09:30	0	0	0	7.91	0	19.9
405	19-11-2021 10:00	0	0	0	7.84	0	19.8
406	19-11-2021 10:30	0	0	10.2	7.86	0	19.9
407	19-11-2021 11:00	0	0	10.1	7.89	0	24.2
408	19-11-2021 11:30	17.27	69.08	10.1	7.85	34.54	25.5
409	19-11-2021 12:00	17.27	69.08	10.1	7.86	34.54	25.6
410	19-11-2021 12:30	17.27	69.08	10	7.85	34.54	24.4
411	19-11-2021 13:00	18.26	73.02	10.1	7.87	36.51	24.2
412	19-11-2021 13:30	18.71	74.84	10.2	7.91	37.42	24.2
413	19-11-2021 14:00	16.96	67.82	10.1	7.88	33.91	24.4
414	19-11-2021 14:30	17.01	68.02	10	7.87	34.01	24.6
415	19-11-2021 15:00	15.7	62.8	10	7.9	31.4	23.9
416	19-11-2021 15:30	0	0	10	7.86	0	24.7
417	19-11-2021 16:00	20.73	82.9	0	7.84	41.45	24
418	19-11-2021 16:30	0	0	0	7.9	0	21.9
419	19-11-2021 17:00	0	0	0	7.89	0	19.5
420	19-11-2021 17:30	0	0	0	7.93	0	17.8
421	19-11-2021 18:00	0	0	0	7.86	0	16.3
422	19-11-2021 18:30	0	0	0	7.94	0	14.5
423	19-11-2021 19:00	0	0	0	7.95	0	13
424	19-11-2021 19:30	0	0	0	7.95	0	11.9
425	19-11-2021 20:00	0	0	0	7.98	0	11.2
426	19-11-2021 20:30	0	0	0	7.93	0	10.6
427	19-11-2021 21:00	0	0	0	7.99	0	9.6
428	19-11-2021 21:30	0	0	0	7.99	0	9.5
429	19-11-2021 22:00	0	0	0	7.97	0	9.2
430	19-11-2021 22:30	0	0	0	7.98	0	9
431	19-11-2021 23:00	0	0	0	8	0	8.4
432	19-11-2021 23:30	0	0	0	8.02	0	8
-	Minimum	0	0	0	7.81	0	6.8
-	Maximum	24.52	98.08	10.5	8.05	49.04	86.1
-	Average	0.92	3.69	0.75	7.92	1.84	15.68
-	Alarm Count	0	0	0	0	0	0

* - Alert | M - Maintenance | S - Service | D - No Discharge | C - Calibration

Annexure-1c

Copy of E-mail of TOC meter supplier

Piyush Kumar Gajera

From: Deepak Bhavsar <deepak@shreedhargroup.com>
Sent: Friday, January 28, 2022 2:36 PM
To: Ashwin Sakhariya
Cc: Piyush Kumar Gajera; Saloni Shah
Subject: Re: Reason for Algae formation in TOC sampler

Dear Sir,

As per below mail and telephonic discussion reason for Algae formation in TOC sampler due to direct sunlight coming on Sampler from backside window, for prevent algae problem fix black film on backside window.

Thanks & Regards,
Deepak Bhavsar
Mob. 9574002608

From: Ashwin Sakhariya <ashwin.sakhariya@bharatgroup.co.in>
Sent: Friday, January 28, 2022 10:27:31 AM
To: Deepak Bhavsar <deepak@shreedhargroup.com>
Cc: Piyush Kumar Gajera <piyush.gajera@bharatgroup.co.in>; Saloni Shah <sales@shreedhargroup.com>
Subject: Reason for Algae formation in TOC sampler

Dear Sir

There is some Algae formation in TOC sampler, Why is happening and how to resolve it? Please give solution.

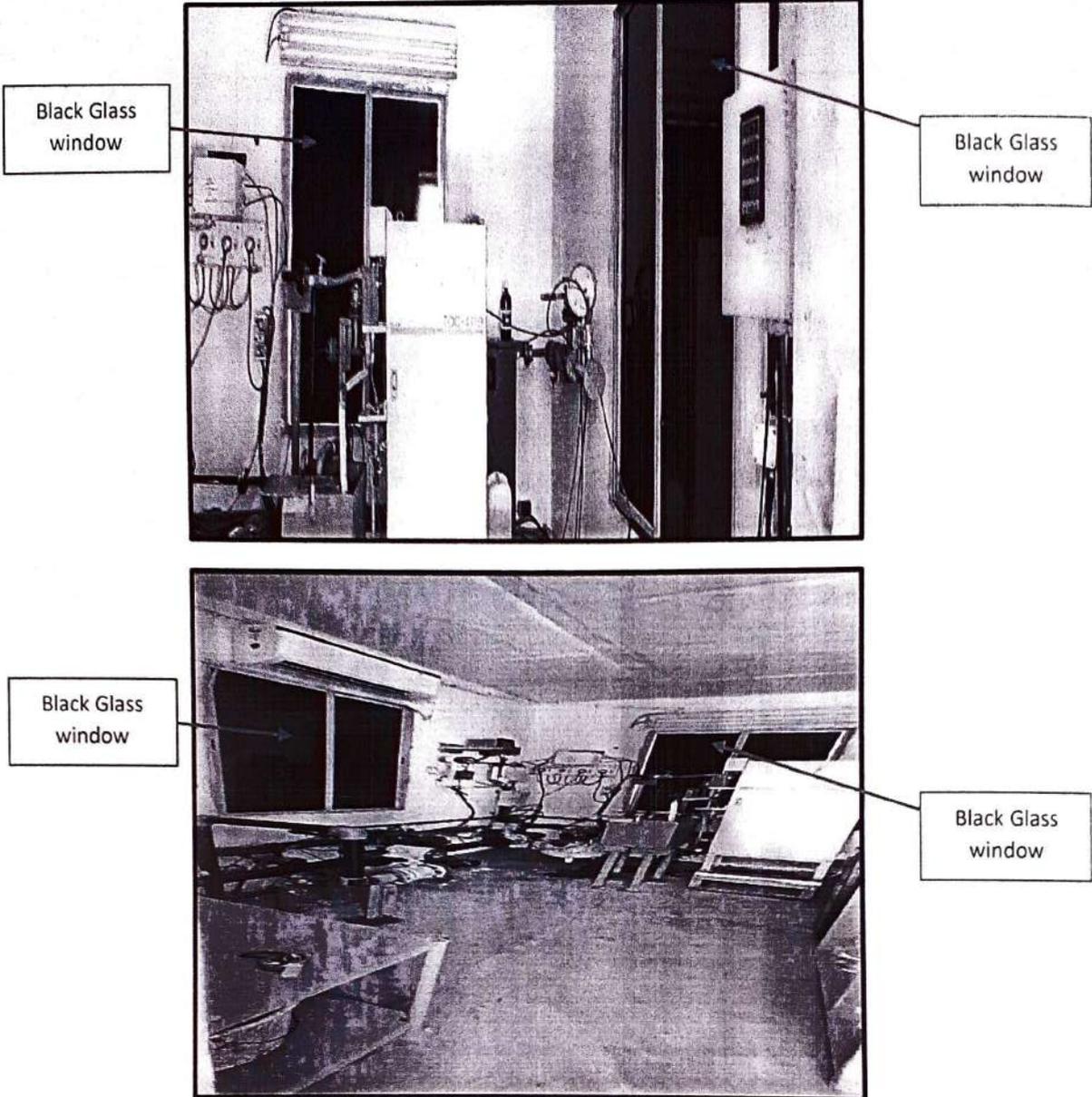
Thanks & Regards,



Ashwin Sakhariya
Engg. Dept.
Mob: 91 8980711511
ashwin.sakhariya@bharatgroup.co.in
BHARAT RASAYAN LIMITED
Plot No.42/4, Dahej Industrial Estate, G.I.D.C
www.bharatgroup.co.in

कर्म ही धर्म

Photographs of TOC meter room with black glass window



GPCB analysis report of Final treated waste water Outlet

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLEGujarat Pollution Control Board
Bharuch

C-1/119/3, GIDC Phase-2

Narmada nagar

Bharuch-392015

Tele:(0264)2246333

Sample ID:317309 - Analysis Completion:26/11/2021

Pesticides (technical) (excluding formulation) / LAB Inward : 46973

TEST REPORT

Test Report No. : 45973

Date: 26/11/2021

1. Name of the Customer : Bhavnat Rasayan Ltd.(Old Name:Siris Crop Science Limited) - 33612
2. Address : 42/4,GIDC, DAHEJ,
Amod road, Dahej-392130, Taluka : Vagra, District : Bharuch, GIDC :
3. Nature of Sample : REP-Representative/Grab, (Insp Type : OTH- Others/Higher Authority)
4. Sample Collected By : Shri Niraj Patel, DEE
5. Quantity of Sample Received : 2.5 lit
6. Code No. of the Sample : 317309
7. Date & Time of Collection & Inwarding : 16/11/2021, (1511 to 1512) & 17/11/2021
8. Date of Start & Completion of Analysis : 17/11/2021 & 26/11/2021
9. Sampling Point : Final Treated waste water outlet into GIDC drain (outside the premises) -
10. Flow Details (Remarks) : -----
11. Mode of Disposal : through GIDC u/g drain
12. Ultimate Receiving Body : finally disposed in to sewer line -Dahej Vilayat P
13. Temperature on Collection : & pH Range on pH Strip :@ 7-8 on pH strip
14. Carboys Nos for : barcode & Color & Appearance :light yellowish
15. Water Consumption & W.W.G (KLPD) : Ind :1529.000 , Dom :120.000 & Ind :867.000 , Dom :100.000

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	7.3
2	Colour	Pt Co.Sc	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	250
3	Suspended Solids	mg/l	Gravimetric method (2540 D APHA Standard Method	2 - 10000 mg/L	68
4	Ammonical Nitrogen	mg/l	1) Titrimetric method (4500 NH3 B & C APHA Stand	1 - 2000 mg/l	36.4
5	Total Kjeldahl Nitrogen	mg/l	Titrimetric method followed by preliminary distillation	1 - 5000 mg/l	46.48
6	Nitrate	mg/l	Cadmium reduction method As per Spectrophotomet	0 005 - 100 mg/l	4.3
7	Chloride	mg/l	Argentometric method. (4500 Cl ⁻ B APHA Standard	1 - 50000 mg/l	302
8	Sulphate	mg/l	APHA(23rd edi) 4500 SO4 E	2-40mg/l	218
9	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5 0- 50000 mg/l	214
10	Phenolic Compounds	mg/l	4 Amino Antipyrine method without Chloroform Extra	0 1 - 50 mg/l	0.18
11	Fluoride	mg/l	SPADHS method (4500-F-D APHA standard Methods	0 10-40 mg/l	1.6
12	Sulphide	mg/l	APHA (23rd Edi) 4500-s2-F -iodometric Method	1-500 0 mg/l	p nil
13	B.O.D (3 Days 27oC)	mg/l	3 - Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05-50000 mg/l	50

Laboratory Remarks : Approved By:399-lab_399 DI 26/11/2021

R.C.VASAVA,S.O

Note

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

*** END OF TEST REPORT ***

02/12/2021 13:14:27

01C35381-247B-4A53-A643-8A9BDA0D3852

Page 1 of 1

Copies of the letters written to GIDC



RASAYAN LIMITED

Address: Plot No. 1, Sector 10, Gandhinagar, New Delhi - 110008
 Phone: +91-11-43661111 (30 lines) • Fax: +91-11-43661100 • 41538600
 E-mail: info@bharatgroup.co.in • Website: www.bharatgroup.co.in

Date :04.05.2019

BRL/GIDC/DEE-Dra/2019/03

To,

The DEE (Drainage)

GIDC, Panchbatti,

Bharuch (Gujarat)

Subject : Intimation of GIDC Drainage pipe / chamber leakage at Dahej

Ref : Letter No.BRL/GIDC/DEE-Dra/2019 dtd.15.01.2019 & BRL/GIDC/DEE-Dra/2019/2 dtd.05.02.19

Dear Sir,

This is in continuation of above referred letters (photo copies attached for ready reference).

This is once again to bring to your kind attention that the underground pipe and chambers of GIDC drainage are leaking outside our Factory Gate.

From time to time we are informing the same to GIDC Pumping Station for necessary action. This is for your kind information and for necessary action for advising the drainage pumping station please.

Thanking you,

For, Bharat Rasayan Limited

(Authorised Signatory)

CC : Executive Engineer – GIDC

CC : RO, GPCB, Bharuch

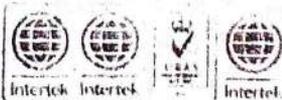
Encl : Copy of letter No. BRL/GIDC/DEE-Dra/2019 dtd 15.01 2019 & BRL/GIDC/DIL-Dra/2019/2
 dtd.05.02.19

Received By
 Date 11/5/19
 NZK

Registry Branch
 GIDC Bharuch

CIN : L24119DL1989PLC036764

Regd. Off. : 1501, Vikram Tower, Rajendra Place, New Delhi - 110008
 Ph : +91-11-43661111 (30 lines) • Fax : +91-11-43661100 • 41538600
 E-mail : info@bharatgroup.co.in • Website : www.bharatgroup.co.in



RASAYAN LIMITED

WANKES DUNDE DRN No. 474, Anand Road, GIDC, Dahaj, District, Gujarat
Gujarat 392130 Ph: +91 2642 293123, +91 2642 243100

Date: 25/11/2019

BRL/GIDC/DEE-Dra/2019/11

To,

DEE(Drainage)

GIDC

Bharuch(Gujarat)

Subject: Intimation of GIDC drainage pipe/chamber leakage at Dahej

Dear Sir,

This is to bring to your kind attention that the underground pipe/chamber of GIDC drainage is leaking outside our Company premises.

This is for your kind information and necessary action for getting it repaired please.

Regards and thanks

Yours Sincerely,

(BHARAT RASAYAN LIMITED, DAHEJ)

CC: RO, GPCB (Bharuch), Gujarat

RECEIVED
25/11/19
NZE



Bharat RASAYAN LIMITED

WORKS UNIT-II Plot No. 42/4, Amod Road, GIDC, Dahej, District Bharuch, Gujarat 392130, Ph: +91 2641 291123 +91 2642 241100

Date: 03/12/2019

BRL/GIDC/DEE-Dra/2019/12

To,

DEE(Drainage)

GIDC

Bharuch(Gujarat)

Subject: Intimation of blockage of GIDC storm water down stream drainage and back flow outside of our Company at Dahej (Plot No 42/4,Amod Road,GIDC,Dahej)

Dear Sir,

This is to bring to your kind attention that the main Nala of storm water is flowing back ward to our company's Storm water drainage and flooding the area all around right side frontage(when viewed from out side) of our Company's main gate at Dahej.This situation is resulted due to blockage on the down stream side of this NALA.

The water of the Nala is getting flooded up to our main outlet of Company's storm water drainage gutter and also along our boundary wall. Level of NALA is continuously increasing

We have noticed this situation during noon time today and would like to bring in your notice.

This is for your kind information and urgent necessary action please .

Regards

Yours Sincerely,

(BHARAT RASAYAN LIMITED,DAHEJ)

Encl: Photograph of flooding situation of water of NALA outside of our Company

CC: RO, GPCB (Bharuch),Gujarat

Cc: EE,GIDC,Bharuch

Cc:EE(D&V),GIDC,Bharuch

9/12/19
M

CIN : L24119DL1989PLC036264

Regd. Off. : 1501, Vikram Tower, Rajendra Place, New Delhi - 110008
Ph. : +91-11-43661111 (30 lines) • Fax : +91-11-43661100, 41538600
E-mail : info@bharatgroup.co.in • Website : www.bharatgroup.co.in



**Bharat
RASAYAN LIMITED**

WORKS : UNIT II, Plot No. 42/4, Amod Road, GIDC, Dahej, District Bharuch,
Gujarat 392130, Ph : +91 2641 291123, +91 2642-241100

Date: 20/02/2020

BRL/GIDC/DEE-Dra/2020/02

To,

DEE(Drainage)

GIDC, Bharuch(Gujarat)

Subject: Intimation of blockage of GIDC storm water drainage at down stream side and resulting back flow outside of our Company at Dahej (Plot No 42/4,Amod Road,GIDC,Dahej)

Reference: Our letter No. BRL/GIDC/DEE-Dra/2019/12 dated 03/12/2019 about the above subject.

Dear Sir,

This is with reference to our letter No. BRL/GIDC/DEE-Dra/2019/12 dated 03/12/2019 addressed to you about accumulation of water of GIDC storm water NALA which is seen blocked at its down stream side. We had also sent photographs along with the same letter. (copy of the letter and photographs is attached for your reference please)

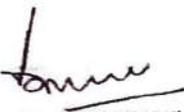
We would like again to bring it to your kind attention that this is resulting in accumulation of this NALA water back ward side and it is flooding the area all around right side (when viewed from out side) of our Company's main gate at Dahej. The situation is getting worse day by day due to this blockage on the down stream side of this NALA.

The water of the Nala is getting flooded up to our main outlet of Company's storm water drainage gutter and also along our boundary wall. Level of NALA is continuously increasing

We have noticed this situation and would like to bring it in your notice.

This is for your kind information and urgent necessary action please .

Regards

Yours Sincerely, 

(BHARAT RASAYAN LIMITED, DAHEJ)

Encl: Photograph of flooding situation of water of NALA outside of our Company and copy of our letter dated 03/12/2019

CC: RO, GPCB (Bharuch), Gujarat

CC: EE, GIDC, Bharuch (water & Drainage)

CC: EE(D&V), GIDC, Bharuch

Received Post
20/2/2020
Neb

CIN : L24119DL1989PLC036264

Regd. Off. : 1501, Vikram Tower, Rajendra Place, New Delhi - 110008
Ph : +91-11-43661111 (30 lines) • Fax : +91-11-43661100, 41538600
E-mail : info@bharatgroup.co.in • Website : www.bharatgroup.co.in



**Bharat
RASAYAN LIMITED**

WORKS UNIT II Plot No. 474, Amreli Road, D.E. Dabhi, V. Manoj, Bharuch
Gujarat 302130 Ph: +91 2641 291121, +91 2641 241100

22nd February, 2021

BRI-Dahaj/DIR/GIDC/2021/01

To,

Deputy Executive Engineer (Water supply & drainage),

G.I.D.C.

Panchbatti,

Bharuch.

Kind Attn. – Mr Parth Suthar

Subject: GIDC drainage line leakage at outside our company premises.

Dear Sir,

With reference to above subject, we would like to inform you that the GIDC drainage pipe line near our factory boundary is leaking / overflowing. Due to this reason, waste water is accumulated in nearby area as shown in attached photographs.

Hence, we request you to repair it & resolve the issue as early as possible.

Thanking you,

Yours sincerely,

For, Bharat Rasayan Limited


Ajay Gupta

Director-operations



CC to; Regional Office- GPCB, Bharuch

Enclosed- Photographs showing the scenario of our out side factory near boundary.

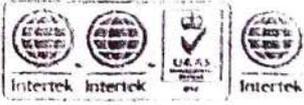


CIN : L24119DL1989PLC036264

Regd. Off. : 1501, Vikram Tower, Rajendra Place, New Delhi - 110008

Ph. : +91-11-43661111 (30 lines) • Fax : +91-11-43661100, 41538600

E-mail : info@bharatgroup.co.in • Website : www.bharatgroup.co.in



**Bharat
RASAYAN LIMITED**

AN ISO 9001:2000 CERTIFIED COMPANY
 REGD. OFF. : 1501, VIKRAM TOWER, RAJENDRA PLACE, NEW DELHI - 110008

To,

10.10.2002

Executive Engineer, GIDC

GIDC Office, 1st Floor Narmada Comm. Complex

PanchBatti, Bharuch (Gujarat)

Sub: Cleaning of Storm Water Drain on North Side of our Plant.

Dear Sir,

There is a Storm Water Drain on north side of our plant crossing Amod road and coming from GIDC Dahej-1. The capacity of this drain is less and it overflows during monsoon season. This resulted in water logging inside our plant and on road. You are requested to kindly dig it and remove debris etc. from it to take care flow during monsoon.

Hope and immediate action in a matter in view of coming monsoon season shortly.

For Bharat Rasayan Limited

(Authorised Signatory)



CIN : L24119DL1989PLC036264

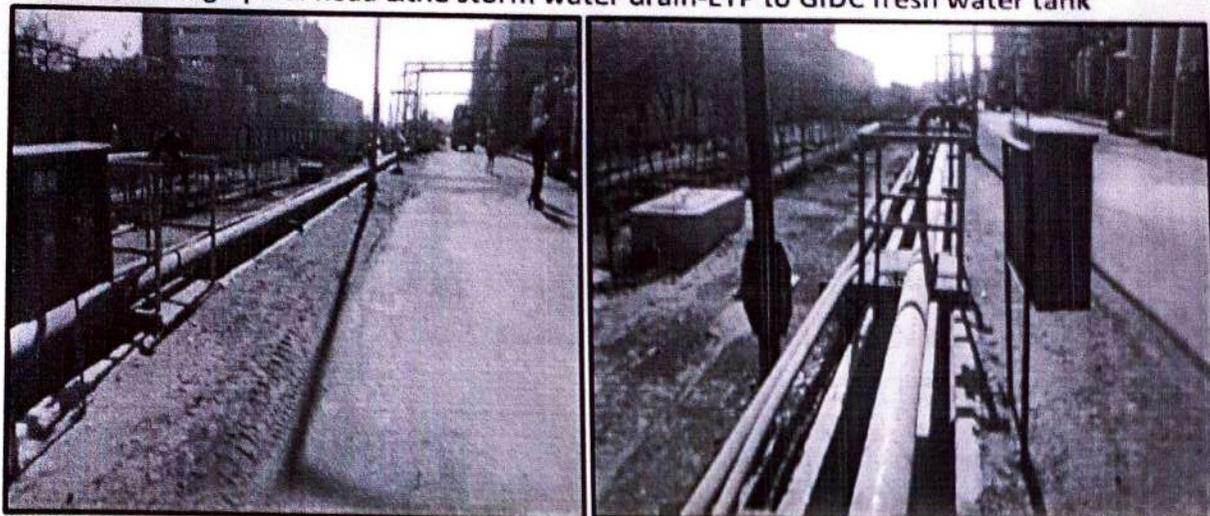
Regd. Off. : 1501, Vikram Tower, Rajendra Place, New Delhi - 110008

Ph. : +91-11-43661111 (30 lines) - Fax : +91-11-43661100-41538600

E-mail : info@bharatgroup.co.in - Website : www.bharatgroup.co.in

Annexure-4a

Photograph of Road & the storm water drain-ETP to GIDC fresh water tank



Annexure-4b

Check Chart

 BHARAT RASAYAN LIMITED						
Assurance for cleaning the line & Equipment before handover to other plant, scrap yard, maintenance						
Sr. No	Date	Plant	Check points	Remarks (Last product name, Initial PH, Source of line flushing, final PH, VOC)	Checked by	Verified by
01			What is the last product in which line and equipment used.			
02			If Equipment & pipe line are jacketed than ensure that jacket should be empty & clean.			
03			Check the initial PH			
04			Flush the line with appropriate source like water, Steam, nitrogen			
05			Check the final PH Note, PH should be Neutral			
06			After Check PH safety person will do check VOC in presence of concerned department.			

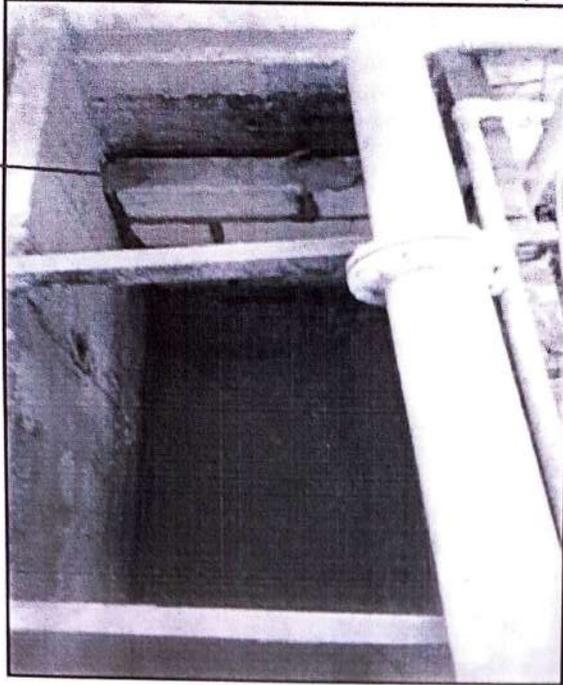
Plant Manager

Safety Person

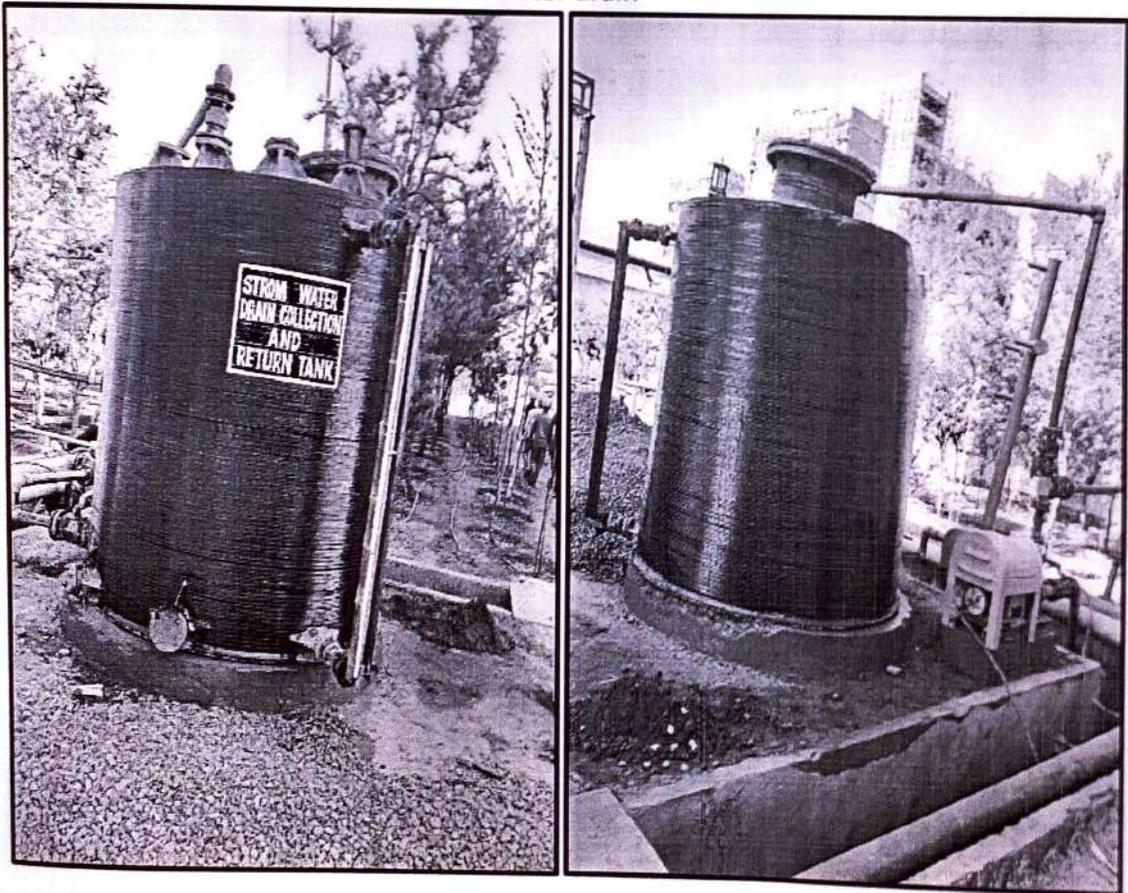
Name & Sign

Name & sign.

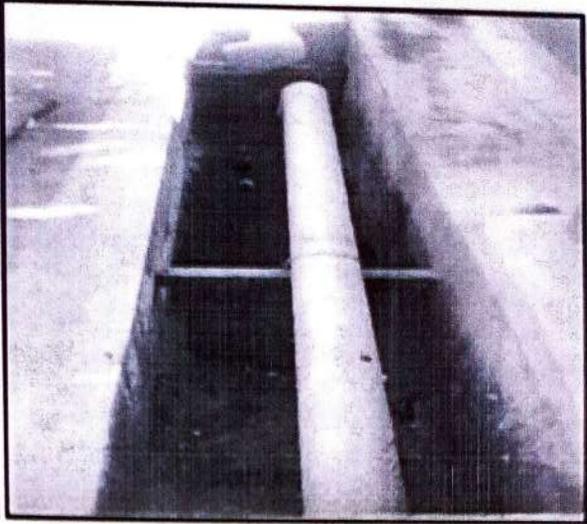
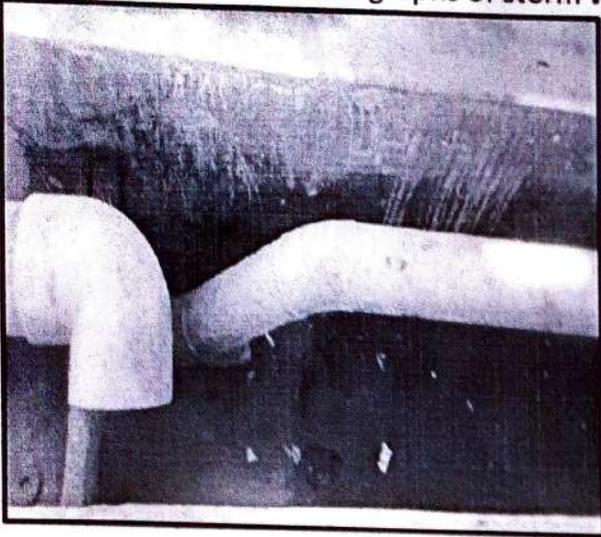
The storm water drain blocked by masonry wall



Photographs of permanent provision for collection of contaminated water from storm water drain



Photographs of storm water drain near Plant A



Copy of the PO for SS tray with trolley

PURCHASE ORDER



Regd. Office/Corp Office 1501 Vikram Tower, Rajendra Place New Delhi-110009
 Ph: 01143611111 | Fax: 01143661100 | Email: pur1_dahej@bharatgroup.com
 Website: www.bharatgroup.com | CIN Number: U24119DL1989PLC0395204
 PO Number: 1440011891/1.0 Date: 27-Jan-22

Supplier Details
 Supplier Code: (2101093)
 V&P ENGINEERS
 209/8, GIDC INDUSTRIAL ESTATE, GEB OFFICE ROAD, BHARUCH-393002
 GSTIN Number: 24AABFV4766B1ZD PAN Number: AABFV4766B

Contact Person Name: DANPAJ BHAI
 Mobile Number: 9824110691
 Email ID: vpengg@hotmail.com

Consignee Billing Address
 Bharat Rasayan Ltd.
 42/4, Amod Road, GIDC Estate, Bharuch

Consignee Delivery Address
 Bharat Rasayan Ltd
 42/4, Amod Road, GIDC Estate, Bharuch

Date: 392130, State: Gujarat Contact No
 GSTIN Number: 24AAACB4127A1ZJ PAN No: AAACB4127A

Date: 392130, State: Gujarat Contact No
 GSTIN Number: 24AAACB4127A1ZJ PAN No: AAACB4127A

Please arrange to supply of following items as per details given below

S.No	Item Code	Material Description	HSN/SAC Code	GST Rate%	Delivery Date	Units	Quantity	Rate Per Unit	Discount (%)	Value (Rs.)
1	14103743	PLATFORM TROLLEY	8484	18.00	07/02/2022	EA	1000	35000.00	15.00	29750
2	14005824	REDUCER SS 304 FIVE SIZE-530X250X300 MM	8481	18.00	07/02/2022	EA	1000	48000.00	15.00	40800
Basic Value (excluding taxes)										70,550.00

Total (in Words): Seventy Thousand Five Hundred Fifty Rupees

LD 0.5% PER WEEK, IF DELIVERY DATE EXCEED OF P.O BASIC VALUE

Packing/Forward: INCLUDED
 Freight: FOR DELIVERY AT BRL DAHEJ SITE
 Payment Terms: WITH IN 30 DAYS
 Insurance: IN SUPPLIER SCOPE

Special Instructions

- Please ensure our P.O number is written on every invoice
- Date of manufacturing of all materials should not be more than 3 months old from date of invoice
- Please ensure to minimize number of batches in one consignment
- Material to be supplied as per our approved specifications.
- E-way bill must be generated for all dispatches wherever applicable with complete and correct particulars of Part A and Part B

Amendment/Cancelled Remarks:

Remarks: REF BY QUATION NO: 450 DATED: 23-01-2022

Terms And Conditions

- Delivery Period: To strictly ensure delivery period specified in P.O. unless extended by us in writing, failing which company reserves the right to cancel the order in full/part and claim damage for breach of contract.
- Send material along with Purchase Order Copy, COA, MSDS, TREM CARD. Instruct driver for any special safety precautions
- Lorry Receipt, invoice (all original invoices), Packing slip to be sent to the delivery site along with the material.
- Material will be inspected at our delivery site and will be subject to quantity & Quality verification / approval by them.
- Rate of GST % will be applicable as above or actual at the time of dispatch
- The supplier shall be liable to indemnify in case of non-availability of ITC of GST on account of any failure or non-compliance on his part under the said law.
- Supplier will be responsible for any loss/penalty due to absence of required E-Way Bill or wrong information in E-Way Bill
- Material must be packed properly. Any loss due to breakage or damage and pilferage in transit due to faulty packing or any other reason shall be borne by the Supplier. "Motor Vehicle Act to be followed strictly as amended from time to time"
- Rejected goods must be lifted from our factory/godown premises within 7 days of the intimation or they shall be disposed off at your risk. No claim shall be entertained on this account in any case. All disputes are subject to jurisdiction of Courts in Delhi.
- Facility is provided to make payment by electronic modes.

For Bharat Rasayan Limited

Authorized Signatory

28-01-22

27/01/22

EMS Adequacy Certificate



CERTIFICATE

This is to certify that Total Pollution Load (i.e. liquid effluent, hazardous waste and an emission) of M/s Bharat Rasayan Ltd. Located at: Plot No. 42/4, Industrial Estate, GIDC, Dahej will not increase due to production of following proposed alternate product mix (as given in Table - 1) with compared to the total pollution load of existing product mix.

Table - 1

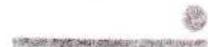
SN.	Description	Existing (MT/A)	Proposed changes (MT/A)	Total after proposed changes (MT/A)
1	4-acetyl-2-methylbenzamide (AMBAD)	25	0	25
2	Alpha Cypermethrin Technical	300	0	300
3	Bifenthrin Technical	100	0	100
4	Chlorimuron Ethyl Technical (95%)	10	0	10
5	Chlorpyrifos Methyl Technical	250	0	250
6	Clodinafop Propargyl Technical	250	0	250
7	Cypermethric acid chloride (CMAC)	1000	0	1000
8	Cypermethrin Technical	800	0	800
9	3',5'-Dichloro-2,2,2-trifluoroacetophenone (DCAP)	25	0	25
10	Diafenthiuron Technical	400	0	400
11	Difconazole Technical	100	0	100
12	Diuron Technical	900	0	900
13	Ethion Technical	700	0	700
14	Fenvalerate Technical	78	0	78
15	Fenpyroximate Technical	15	0	15
16	Fipronil Technical	60	0	60
17	Flumethic Acid	15	0	15
18	Flumethrin Technical	15	0	15
19	Imazethapyr Technical (97%)	50	0	50
20	Imibenconazole	50	0	50
21	Imiprothrin Technical	8	0	8
22	Isoprothiolin Technical (96%)	100	0	100
23	Lambda Cyhalothric Acid	350	0	350
24	Lambda Cyhalothrin Technical	600	0	600
25	Metaphenoxy Benzaldehyde	1750	0	1750
26	Metaphenoxy Benzyl Alcohol	200	0	200
27	Metofluthrin Technical	4	0	4
28	Metribuzine Technical	400	0	400
29	Metsulphuron Methyl Technical	20	0	20
30	Myclobutanil Technical	15	0	15
31	Novaluron Technical	10	0	10
32	Pendimethalin Technical	600	0	600
33	Permethrin Technical	250	0	250
34	Phenthoate Technical	400	0	400

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Page 1 of 10

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SN.	Description	Existing (MT/A)	Proposed changes (MT/A)	Total after proposed changes (MT/A)
35	Prallethrin Technical	25	0	25
36	Propargite Technical	25	0	25
37	Pyrazosulfuron Ethyl Technical (97%)	25	0	25
38	Sulfosulfuron Technical	20	0	20
39	Tebuconazole Technical (93%)	300	0	300
40	Thiamethoxam Technical	750	0	750
41	Transfluthrin Technical	60	0	60
42	Tricyclazole Technical	25	0	25
43	Pilot products	75	0	75
44	Profenofos Technical	200	-50	150
45	Propiconazole Technical	150	-50	100
46	Acetamipride Technical	100	-100	0
47	Cloquintocet Mexyl Technical (Safener Technical)	50	-50	0
48	CMNBP	25	-25	0
49	Imidachloprid Technical	400	-400	0
50	Indoxacarb Technical	20	-20	0
51	Pretilachlor Technical	100	-100	0
52	Propanil Technical	50	-50	0
53	Temephos Technical	50	-50	0
54	6-Fluoro-2-methyl indole	0	75	75
55	Fluxametamide	0	50	50
56	HPOA HCl (2-hydroxy propyloxymine hydro chloride)	0	50	50
57	Paclobutrazol	0	100	100
58	Penoxsulam	0	60	60
59	Pymetrozine	0	300	300
60	Quizalofop-p-ethy	0	100	100
61	Tolfenpyrad	0	60	60
Total		12300	-100	12200

Note: The above-mentioned product list of existing products with their capacities are as per the CCA No. AWH-90645 valid up to 11.10.2022. The total production capacity will reduce by 100 MT/A after proposed scenario. Moreover, the pesticides formulations products will also remain same after change in product mix.

We give this certificate after detailed and in-depth study of the proposal made by M/s Bharat Rasayan Ltd. and other related data. However, it is subject to automatic cancellation in case of any changes in product profile/capacity, Quality and Quantity of Effluent (Air + wastewater + Solid) and efficiency of EMS equipment with compared to as mentioned in this certificate. After our careful examinations during total pollution load studies the relevant supporting information, which we have found is as follows.



GENERAL

1. There shall not be any additional power and water requirements to manufacture proposed alternate products in place of existing products.
2. There shall be no change in Plant and Machinery to produce proposed alternate products in place of existing products.
3. Existing treatment plant, air pollution control system and hazardous waste management system are adequate for existing products as well as new product mix change.
4. The proposed product is of same chemical family i.e. insecticide, herbicide, fungicide & plant growth regulator as existing products for which industry has valid consent No AWH-90645.

WATER

1. Daily industrial Effluent generation and sewage as per the GPCB Consent Vide Consent Order No. AWH-90645 or existing Production Capacity is given in Table No. 2
- 2.

Table No. 2

No.	Usages	GPCB Consent Permissible Quantity
1.	Industrial Effluent	873 KL/day
2.	Sewage	100 KL/day

3. Daily water consumption and wastewater generation for various usages are as given in Table - 3 & 4 for existing and proposed scenario.

Table - 3 (Existing)

No.	Usages	Water Consumption (m ³ /day)	Wastewater Generation (m ³ / day)
1.	Domestic	120	100
2.	Industrial		
	Processing	567	584
	washing	222	222
	Boiler	320	32
	Cooling	230	29
	APCM	10	6
3.	Others (gardening etc.)	60	0
Total		1529	973



Table - 4 (Proposed)

No.	Usages	Water Consumption (m ³ /day)	Wastewater Generation (m ³ / day)
1.	Domestic	120	100
2.	Industrial		
	Processing	544	562
	washing	222	222
	Boiler	320	32
	Cooling	230	29
	APCM	10	6
3.	Others (gardening etc.)	60	0
	Total	1506	951

- After proposed change in product mix industry will reduce water consumption and wastewater generation by 23 and 22 cubic meters respectively.
- The effluent COD load for existing scenario is 15833 kg/day which will marginally reduce to 15345 Kg/day after proposed product mix change Please refer Annexure - I for detailed COD load calculations.

AIR

Total air emission load for the existing scenario is 584 Kg/day which will remain same even after proposed product mix change.

Please refer Annexure - II for detailed calculations of existing and proposed air emission loads.

HAZARDOUS WASTE

Please refer Annexure - III for comparative statement of other Hazardous waste generation and mode disposal for existing and proposed product mix.

(Dr. A. P. Deshmukh)
Chemical Engineer
Environmental Consultancy Cell
Date: 22-04-2021

(Dr. M.A. Patel)
Co-ordinator
Environmental Consultancy Cell

(Dr. H. M. Desai)
Vice Chancellor



ANNEXURE - I
COMPARATIVE STATEMENT OF EFFLUENT LOAD (EXISTING & PROPOSED)

Sr. No	Product Name	EXISTING SCENARIO			PROPOSED SCENARIO						
		Production (MT/A)	Effluent Quantity (m ³ /MT)	Effluent generation m ³ /d	COD load (kg/d)	COD Conc. (mg/l)	Effluent Quantity (m ³ /MT)	Effluent generation m ³ /d	COD Conc. (mg/l)	COD load (kg/d)	
1	4-acetyl-2-methylbenzamide (AMBAD)	25	55.11	3.83	9234	35.34	25	55.11	3.83	9234	35.34
2	Alpha Cypermethrin Technical	300	17.19	14.33	17635	252.62	300	17.19	14.33	17635	252.62
3	Bifenthrin Technical	100	5.90	1.64	8808	14.44	100	5.90	1.64	8808	14.44
4	Chlorimuron Ethyl Technical (95%)	10	2.46	0.07	23440	1.60	10	2.46	0.07	23440	1.60
5	Chlorpyrifos Methyl Technical	250	5.35	3.72	16016	59.50	250	5.35	3.72	16016	59.50
6	Clodinafop Propargyl Technical	250	8.48	5.89	20841	122.73	250	8.48	5.89	20841	122.73
7	Cypermethrin acid chloride (CMAC)	1000	15.18	42.17	26485	1116.78	1000	15.18	42.17	26485	1116.78
8	Cypermethrin Technical	800	7.81	17.35	26532	460.36	800	7.81	17.35	26532	460.36
9	3,5-Dichloro-2,2,2-trifluoroacetophenone (DCAP)	25	19.69	1.37	15331	20.96	25	19.69	1.37	15331	20.96
10	Diafenthiuron Technical	400	12.79	14.21	21412	304.29	400	12.79	14.21	21412	304.29
11	Difenoconazole Technical	100	3.45	0.96	17465	16.74	100	3.45	0.96	17465	16.74
12	Difuron Technical	900	4.16	10.39	20430	212.27	900	4.16	10.39	20430	212.27
13	Ethion Technical	700	18.59	36.15	21286	769.43	700	18.59	36.15	21286	769.43
14	Fenvalerate Technical	78	18.90	4.10	25296	103.59	78	18.90	4.10	25296	103.59
15	Fenpyroximate Technical	15	10.57	0.44	15336	6.75	15	10.57	0.44	15336	6.75
16	Fipronil Technical	60	7.38	1.23	19796	24.35	60	7.38	1.23	19796	24.35
17	Flumethic Acid	15	247.85	10.33	10425	107.66	15	247.85	10.33	10425	107.66
18	Flumethrin Technical	15	173.88	7.25	10251	74.27	15	173.88	7.25	10251	74.27
19	Imazethapyr Technical (97%)	50	2.40	0.33	23289	7.76	50	2.40	0.33	23289	7.76
20	Imibenzazole	50	30.81	4.28	23478	100.47	50	30.81	4.28	23478	100.47
21	Imiprothrin Technical	8	7.10	0.16	18456	2.91	8	7.10	0.16	18456	2.91
22	Isoprothiolin Technical (96%)	100	4.04	1.12	21080	23.66	100	4.04	1.12	21080	23.66
23	Lambda Cyhalothrin Acid	350	11.21	10.90	23660	246.96	350	11.21	10.90	23660	246.96
24	Lambda Cyhalothrin Technical	600	23.44	39.07	21306	832.35	600	23.44	39.07	21306	832.35
25	Metaphenoxy Benzaldehyde	1750	19.52	94.88	52400	4971.67	1750	19.52	94.88	52400	4971.67
26	Metaphenoxy Benzyl Alcohol	200	0.00	0.00	0	0.00	200	0.00	0.00	0	0.00
27	Metofluthrin Technical	4	39.73	0.44	10241	4.52	4	39.73	0.44	10241	4.52
28	Metribuzine Technical	400	36.15	40.17	15522	623.47	400	36.15	40.17	15522	623.47
29	Metsulphuron Methyl Technical	20	15.40	0.86	30430	26.03	20	15.40	0.86	30430	26.03
30	Myclobutanil Technical	15	14.68	0.61	21369	13.07	15	14.68	0.61	21369	13.07
31	Novaturon Technical	10	11.00	0.31	20863	6.28	10	11.00	0.31	20863	6.28
32	Pendimethalin Technical	600	55.70	92.83	23432	2175.27	600	55.70	92.83	23432	2175.27
33	Permethrin Technical	250	6.26	4.35	34306	149.14	250	6.26	4.35	34306	149.14



Sr. No	Product Name	EXISTING SCENARIO				PROPOSED SCENARIO					
		Production (MT/A)	Effluent Quantity (m ³ /MT)	Effluent generation m ³ /d	COD Conc. (mg/l)	COD load (Kg/d)	Production (MT/A)	Effluent Quantity (m ³ /MT)	Effluent generation m ³ /d	COD Conc. (mg/l)	COD load (Kg/d)
34	Phenothoate Technical	400	36.46	40.51	22914	21.37	400	36.46	40.51	32288	1308.02
35	Prallethin Technical	25	13.43	0.93	22914	3.59	25	13.43	0.93	22914	21.37
36	Propargite Technical	25	2.21	0.15	23364	0.00	25	0.00	0.15	23364	3.59
37	Pyrazosulfuron Ethyl Technical (97%)	25	0.00	0.00	11980	0.00	25	0.00	0.19	20440	0.00
38	Sulfosulfuron Technical	20	3.49	0.19	20940	3.96	20	3.49	0.19	20440	67.51
39	Tebuconazole Technical (93%)	300	7.70	6.42	10521	67.51	300	7.70	6.42	10521	249.18
40	Thiamethoxam Technical	750	4.67	9.73	25612	249.18	750	4.67	9.73	25612	566.67
41	Transfluthrin Technical	60	15.71	2.62	21643	5.29	60	15.71	2.62	21643	5.29
42	Tricyclazole Technical	25	3.31	0.23	29028	5.29	25	3.31	0.23	23028	5.29
43	Pilot products	75	55.11	11.48	9234	106.02	75	55.11	11.48	9234	106.02
44	Propiconazole Technical	200	24.87	13.92	21000	290.15	150	24.87	10.36	21000	217.61
45	Propiconazole Technical	150	16.24	6.77	16870	114.15	100	16.24	4.51	16870	76.10
46	Acetaminipride Technical	100	2.20	0.61	12108	7.4	0	0.00	0.00	0	0.00
47	Cloquintocet Moxyl Technical (Safener Technical)	50	2.74	0.38	24448	9.30	0	0.00	0.00	0	0.00
48	GMNBP	25	13.02	0.90	19238	17.39	0	0.00	0.00	0	0.00
49	Imidachlorpid Technical	400	13.60	15.11	23044	333.11	0	0.00	0.00	0	0.00
50	Indoxacarb Technical	20	13.52	0.75	19344	14.53	0	0.00	0.00	0	0.00
51	Pretilachlor Technical	100	17.95	4.99	22938	114.52	0	0.00	0.00	0	0.00
52	Propanil Technical	50	5.62	0.78	19300	15.06	0	0.00	0.00	0	0.00
53	Temephos Technical	50	12.90	1.79	19499	34.94	75	14.31	2.98	19675	59.24
54	6-Fluoro-2-methyl indole	0	1176.92	0.00	0	0.00	50	9.77	1.36	16523	22.42
55	Fluxametamide	0	0	0.00	0	0.00	50	3.06	0.43	16485	7.02
56	HPOA HCl (2-hydroxy propyloxymine hydro. chloride)	0	0	0.00	0	0.00	100	3.05	0.85	15679	13.14
57	Pachlobutrazol	0	0	0.00	0	0.00	60	0.00	0.00	0	0.00
58	Penoxsulam	0	0	0.00	0	0.00	300	3.22	2.68	16784	45.00
59	Pymetrozine	0	0	0.00	0	0.00	100	2.79	0.78	15290	11.82
60	Quizalofop-p-ethyl	0	0	0.00	0	0.00	60	3.19	0.53	18597	9.88
A	Tollenpyrad	0	0	0.00	0	0.00	60	Process	542	---	15171.4
B	Boiler	32	Washing	222	600	173.40	32	Boiler	222	400	173.40
C	Cooling	29	Cooling	32	600	173.40	29	Cooling	32	600	173.40
D	APCM	6	APCM	6	600	173.40	6	APCM	6	600	173.40
E	Total (A+B+C+D+E)	873	15633	873	15633	15633	873	Total (A+B+C+D+E)	873	15633	15633

It is noted that there is no increase in wastewater organic load (COD) due to change in product mix, in fact it is showing marginal reduction in proposed scenario.

ANNEXURE – II
COMPARATIVE STATEMENT OF AIR EMISSION LOAD FOR EXISTING AND PROPOSED
SCENARIO

Sr. No.	Stack Attached to	Height (M)	Diameter of stack (mm)	Stack Temp. (°C)	Velocity (m/sec.)	Gas Flow (Nm ³ /hr)	Air Pollution Control System	Air Emission		Proposed Emission Load (Kg/day)	
								Pollutant	Conc. (mg/Nm ³)		
1	Process Vent-1	15	150	36	7.1	435.21	Primary Scrubber Secondary Scrubber Ventury Scrubber with Caustic	HCl	20	0.2069	0.2089
								Cl ₂	5	0.0522	0.0522
								SO ₂	40	0.4180	0.4180
2	Process Vent-2	15	150	38	7.2	436.49	Caustic Scrubber with Blower	HBr	5	0.0522	0.0522
								Br ₂	2	0.0209	0.0209
								HCl	20	0.2105	0.2105
3	Process Vent-3	15	150	35	7.0	430.47	Primary Scrubber Secondary Scrubber Ventury Scrubber with Caustic	Cl ₂	5	0.0522	0.0522
								VOC	-	-	-
								H ₂ S	5	0.0517	0.0517
4	Process Vent-4	15	150	37	7.3	446.00	Primary Scrubber Secondary Scrubber Ventury Scrubber with Caustic	HCl	20	0.2141	0.2141
								SO ₂	40	0.4283	0.4283
5	Process Vent-5	15	150	36	7.2	441.32	Primary Scrubber Secondary Scrubber Ventury Scrubber with Caustic	HCl	20	0.2118	0.2118
								SO ₂	40	0.4258	0.4258
6	Process Vent-6	15	150	39	7.0	424.95	Primary Scrubber Secondary Scrubber Ventury Scrubber with Caustic	HCl	20	0.2040	0.2040
								SO ₂	40	0.4081	0.4081
7	Process Vent-7	15	700	85	8.0	9217.03	Blower with bag Filter	PM	150	33.1813	33.1813
								SO ₂	40	0.4258	0.4258
8	Process Vent-8	15	700	90	8.3	9430.79	Blower with bag Filter	PM	150	33.9548	33.9548
								VOC	-	-	-
9	General Stack-1	15	300	40	7.3	1700.93	Primary Scrubber with Caustic Circulation	VOC	-	-	-
								VOC	-	-	-
10	General Stack-2	15	300	42	7.4	1779.74	Primary Scrubber with Caustic Circulation	VOC	-	-	-
								VOC	-	-	-
11	General Stack-3	15	300	38	7.5	1820.96	Primary Scrubber with Caustic Circulation	VOC	-	-	-
								VOC	-	-	-
12	General Stack-4	15	300	40	7.2	1742.74	Primary Scrubber with Caustic Circulation	VOC	-	-	-
								VOC	-	-	-



Sr. No.	Stack Attached to	Height (M)	Diameter of stack (mm)	Stack Temp. (°C)	Velocity (m/sec.)	Gas Flow (Nm ³ /hr)	Air Pollution Control System	Air Emission		Existing Emission load (Kg/day)	Proposed Emission Load (Kg/day)
								Pollutant	Conc. (mg/Nm ³)		
13	General Stack-5	15	300	41	7.1	1713.09	Caustic Circulation Primary Scrubber with Blower	VOC	-		
14	General Stack-6	15	300	42	7.1	1707.65	Primary Scrubber with Caustic Circulation	HCl	20	0.8197	0.8197
15	General Stack-7	15	300	41	7.1	1713.09	Scrubber	Cl ₂	5	0.2049	0.2049
16	General Stack-8	15	300	40	7.2	1742.74	Primary Scrubber Secondary Scrubber with Caustic	DMA	-		
17	General Stack-9	15	300	42	7.2	1731.68	Primary Scrubber with Caustic	NACN	-		
18	General Stack-10	15	300	41	7.3	1761.30	Primary Scrubber with Caustic	VOC	-		
19	General Stack-11	15	300	42	7.4	1779.74	Primary Scrubber with Caustic	VOC	-		
20	Boiler (Cap: 18 MT/hr) & 12 MT/hr** for standby use	30	1000	125	8.2	17343.21	ESP	Particulate Matter	150 mg/Nm ³	62.44	62.44
21	Thermal Fluid Heater (cap: 4 lac KCl/hr) & another 4 Lac Kcal/Hr** for standby use	30	1000	130	8.3	17336.83	ESP	SO ₂	100 ppm	117.38	117.38
								NOx	50 ppm	42.66	42.66
22	DC Set-1 (cap: 750 KVA) (stand by)	11	300	115	9.1	1776.65	-	Particulate Matter	150 mg/Nm ³	6.3959	6.3959
23	DC Set-2 (cap: 750 KVA) (stand by)	11	300	118	9.2	1782.37	-	SO ₂	100 ppm	12.024	12.024
								Nox	50 ppm	4.3706	4.3706
24	DC Set-3 (cap: 730 KVA)** (stand by)	11	300	120	9.1	1754.06	-	Particulate Matter	150 mg/Nm ³	6.4165	6.4165
								SO ₂	100 ppm	12.063	12.063
								Nox	50 ppm	4.3846	4.3846
								Particulate Matter	150 mg/Nm ³	6.3146	6.3146
								SO ₂	100 ppm	11.871	11.871
								NOx	50 ppm	4.3150	4.3150
								Total		564	564

** The company has NOC for the installation of standby Boiler & Thermapack by GPCB letter outward no. 444391
There is no increase in total air pollutant emission load due to change in product mix.





ANNEXURE- III
COMPARITIVE OF SOLID/HAZARDOUS WASTE GENERATION FOR
EXISTING AND PROPOSED SCENARIO

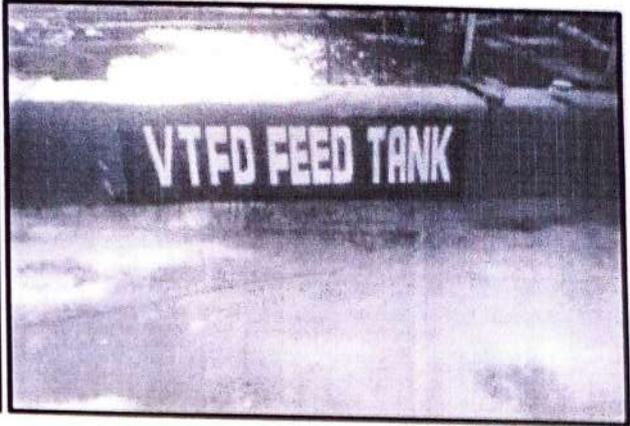
S.N.	Type of waste	Cat.	Quantity			Method of disposal
			Existing (MT/Y)	Proposed (MT/Y)	Total (MT/Y)	
1.	Used Oil	5.1	5.05	00	5.05	Collection, storage, transportation disposal by selling to registered re-processors/ reuse as lubricant within premises.
2.	Discarded Container, barrels, liners contaminate with Haz. Wastes/ chemicals	33.1	649	00	649	Collection, storage, decontamination, transportation, disposal to vendor or reuse within premises.
3.	ETP Sludge and MEE Sludge	35.3	9550	00	9550	Collection, storage, transportation disposal at TSDF of BEL.
4.	Process waste/ waste residue containing pesticides (having moisture)	29.1	2200	-134	2066	Collection, storage, transportation, disposal by incineration at ICHWMF of SEPPI-Kutch, RSIPL, Panoli & GSPL -Surat.*
5.	Date expired & off specification on residues	29.3	5.0	00	5.0	Collection, storage, transportation, disposal by incineration at ICHWMF of SEPPL-Kutch & GSPL-Surat.*
6.	Distillation residue from contaminated organic solvent	36.1	72	00	72	Collection, storage, transportation, disposal by incineration at ICHWMF of SEPPL-Kutch & GSPL-Surat.*
7.	Coal ash from boiler	...	2190	00	2190	Collection, storage, transportation, disposal by selling to Actual end user.
8.	Spent acid, Dilute sulfuric acid and Hydrochloric Acid (25% to 30% solution)	B-15	5924	-746	5178	Collection, storage, transportation, disposal by selling to Actual end user. **
9.	Ammonium sulphate solution	B-15	510	00	510	Collection, storage, transportation, disposal by selling to Actual end user. **
10.	Benzyl alcohol	B-28	6	-6	00	Collection, storage, transportation, disposal by selling to Actual end user. **
11.	Potassium chloride solution	B-10	5800	-32	5768	Collection, storage, transportation, disposal by selling to Actual end user. **
12.	Potassium chloride solids	B-10	375	-85	290	Collection, storage, transportation, disposal by selling to Actual end user. **
13.	Aq. Alum (Aqueous Aluminium Chloride solution)	B-10	9175	00	9175	Collection, storage, transportation, disposal by selling to Actual end user. **



S.N.	Type of waste	Cat.	Quantity			Method of disposal
			Existing (MT/Y)	Proposed (MT/Y)	Total (MT/Y)	
14.	Sodium bromide solution	B-10	2279	-54	2225	Collection, storage, transportation, disposal by selling to Actual end user. **
15.	Potassium bromide solution	B-10	3916	-140	3776	Collection, storage, transportation, disposal by selling to Actual end user. **
16.	Sodium sulfite solution	B-15	3349	00	3349	Collection, storage, transportation, disposal by selling to Actual end user. **
17.	Sodium sulfite solids		453	-250	203	
18.	Sodium bi sulfite (Sodium Hydrogen sulfite) solution	B-15	1018	00	1018	Collection, storage, transportation, disposal by selling to Actual end user. **
19.	Mix solvent and formaline	B-28	120	00	120	Collection, storage, transportation, disposal by selling to Actual end user. **
20.	Di-methyl amine (DMA) solution 40%	B-28	196	00	196	Collection, storage, transportation, disposal by selling to Actual end user. **
21.	Hydrobromic acid	B-10	519	-89	430	Collection, storage, transportation, disposal by selling to Actual end user. **
22.	Acetic acid	B-28	7	00	7	Collection, storage, transportation, disposal by selling to Actual end user. **
23.	Methane sulphonic acid	B-28	22	00	22	Collection, storage, transportation, disposal by selling to Actual end user. **
24.	ST Cypermethric Acid (STCMA)	B-28	59	00	59	Collection, storage, transportation, disposal by selling to Actual end user. **
25.	Used catalyst	29.5	0.3	00	0.3	Collection, storage, transportation, disposal by selling to Actual end user. **
26.	Phosphorous salt (NaH ₂ PO ₄)	C-2	129.5	00	129.5	Collection, storage, transportation, disposal by selling to Actual end user. **
Total			48528.85	-1536	46992.85	

The total solid/hazardous waste generation reduces by 1536 MT per Annum after proposed change in product mix. Hence no increase in pollution load due to solid/hazardous waste generation in proposed scenario.

Storage tanks with Nomenclature in ETP area



VOC monitoring sheet

VOC- Results manually (BRL)				
Date: 16-11-21				
Sr. NO	Location	Time	PPM	Remarks
1	Main Security Gate	20:05	0	
2	TOC Room Area	20:09	0	
3	R.M Storer	20:15	0	
4	Boiler Behained	20:22	0	
5	Plant -C Ground Floor	20:45	2	
6	Plant -C 1 Floor	20:50	3	
7	Plant -C-2 Floor	20:56	2	
8	Plant- C- terraces Floor	21:05	0	
9	Plant - A Ground Floor .	21:30	4	
10	Plant- A- 1 Floor	21:35	2	
11	Plant - A- 2 FLOOR	21:39	3	
12	Plant- A- terraces Floor	21:45	1	
13	Plant - A Ejector C/T Back site	21:27	4	
14	Plant - B Ground Floor	22:10	4	
15	Plant - B- 1/Floor	22:15	3	
16	Plant -B - 2 / Floor	22:23	2	
17	Plant- B- terraces Floor	22:30	0	
18	Plant- B- Back Side	22:35	5	
19	Explosive Tank Farm Area	23:05	0	
20	Hazared Wast Area	23:11	5	
21	ETP(MEE)	23:17	4	
22	DVP- Scrubber	23:22	6	
23	QC Lab	23:35	0	
24	Plant - B R- 325 Bottom Site	22:45	0	
25	Plant - C Ejector C/T	20:42	2	
26	plant-D G/F	00:07	5	
27	plant-D 1ST/F	00:15	2	
28	plant-D 2ND/F	00:22	3	
29	plant-D T/F	00:32	0	
30	plant-D Back side	00:40	7	
31	plant-D Frant side	00:43	5	



(Handwritten signature)

Copy of PO for FRP hood to cover waste water collection tanks

Total 2/3

PURCHASE ORDER



Bharat RASAYAN LIMITED

Regd. Office/Corp Office, 1601, Vikram Tower, Rajendra Place, New Delhi-110008
 Ph: 01143601111 | Fax: 01143601100 | Email: pur1_dahej@bharatgroup.co.in
 Website: www.bharatgroup.co.in | CIN Number: L24119DL1999PLC049264

Supplier Details Supplier Code (2100997)
 SUNTECH FIBRE EQUIPMENTS & ENG PVT L
 PLOT NO.320/3 SH NO S-8 ASIAN TRADE CENTRE/AT/CT/1 D.C.
 ANKLESHWAR-393002
 GSTIN Number 24AAZCS6646Q124 PAN Number AAZCS6646Q

PO Number: 144001659/1/0 Date: 22-Jan-22

Consignee Billing Address
 Bharat Rasayan Ltd
 42/4, Amod Road, GIDC Estate, Bharuch
 Dahej-392130, State: Gujarat
 GSTIN Number 24AAACB4127A12J

Contact Person Name
 Mobile Number: 9714744661
 Email ID: suntechengpvtltd@gmail.com
Consignee Delivery Address
 Bharat Rasayan Ltd
 42/4, Amod Road, GIDC Estate, Bharuch
 Dahej-392130, State: Gujarat
 GSTIN Number: 24AAACB4127A12J

Please arrange to supply of following items as per details given below

S.No	Item Code	Material Description	HSN/SAC Code	GST Rate%	Delivery Date	Units	Quantity	Rate Per (Unit)	Discount (%)	Value (Rs.)
1	14106230	FRP HOOD 1300 X 600 X 250 THK 3 MM	55019090	18.0	07/02/2022	EA	10.000	4850.00	40.00	29100

Total (In Words): Twenty Nine Thousand One Hundred Rupees
 LD 0.5% PER WEK, IF DELIVERY DATE EXCEED OF PO BASIC VALUE
 Basic Value (excluding taxes) 29,100.00

warranty: 18 months from the date of dispatch or 12 months from the date of installation, whichever is earlier

Packing/Forward : INCLUDED
 Freight : FOR DELIVERY AT BRL DAHEJ SITE
 Payment Terms : WITH IN 30 DAYS
 Insurance : IN SUPPLIER SCOPE

Special Instructions
 Please ensure our P.O. number is written on every invoice
 Date of manufacturing of all materials should not be more than 3 months old from date of invoice
 Please ensure to minimize number of batches in one consignment.
 Material to be supplied as per our approved specifications.
 E-way bill must be generated for all dispatches wherever applicable with complete and correct particulars of Part A and Part B

Amendment/Cancelled Remarks:
(URGENT REQUIRED)
 Remarks:
 REFRY DUTATION NO. 335 DATED 10-12-2021

Terms And Conditions

- Delivery Period: To strictly ensure delivery period specified in P.O. unless extended by us in writing, failing which company reserves the right to cancel the order in full/part and claim damage for breach of contract.
- Send material along with Purchase Order Copy, COA, MSDS, TREM CARD. Instruct driver for any special safety precautions
- Lorry Receipt, Invoice (all original invoices), Packing slip to be sent to the delivery site along with the material.
- Material will be inspected at our delivery site and will be subject to quantity & Quality verification / approval by them.
- Rate of GST % will be applicable as above or actual at the time of dispatch.
- The supplier shall be liable to indemnify in case of non-availability of ITC of GST on account of any failure or non-compliance on his part under the said law
- Supplier will be responsible for any loss/penalty due to absence of required E-Way Bill or wrong information in E-Way Bill.
- Material must be packed properly. Any loss due to breakage or damage and pilferage in transit due to faulty packing or any other reason shall be borne by the Supplier. "Motor Vehicle Act to be followed strictly as amended from time to time"
- Rejected goods must be lifted from our factory/godown premises within 7 days of the intimation or they shall be disposed off at your risk. No claim shall be entertained on this account in any case. All disputes are subject to jurisdiction of Courts in Delhi.
- Facility is provided to make payment by electronic modes.

For Bharat Rasayan Limited

 Authorized Signatory

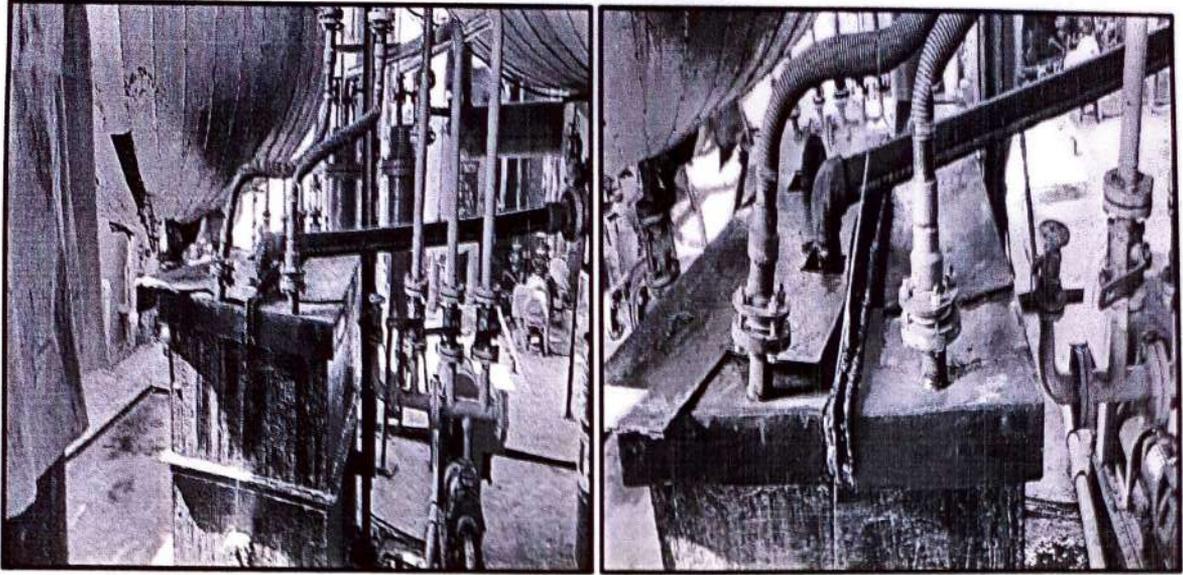
22-01-22

22/1/2022

(G-1)
(GCB Part)

22/01/22

Photographs of nutch filter covered with PFRP hood



Copy of PO for VOC meter

PURCHASE ORDER



Regd. Office/Corp. Office: 1501 Vikram Tower, Rajendra Place, New Delhi - 110001
 Ph: 01143661111 | Fax: 01143661100 | Email: purf_dahej@bharatgroup.com
 Website: www.bharatgroup.com | CIN Number: L24119DL1989PLC036264

PO Number: 1440011587/1.0 Date: 27-Jan-22

Supplier Details
 Supplier Code: (2100035)
 AMBETRONICS ENGINEERS PVT LTD
 17-B, TARUN INDUSTRIAL ESTATE, MOGRA PADA NEW NAGARDAS ROAD,
 ANDHERI (E), MUMBAI-400089

Contact Person Name
 Mobile Number: 9320619646
 Email ID: project@ambetronics.com

Consignee Billing Address
 Bharat Rasayan Ltd.
 42/4, Amod Road, GIDC Estate, Bharuch

Consignee Delivery Address
 Bharat Rasayan Ltd.
 42/4, Amod Road, GIDC Estate, Bharuch

Date: 29/1/2022, State: Gujarat Contact No:
 GSTIN Number: 24AAACB4127A1ZJ PAN No: AAACB4127A

Date: 29/1/2022, State: Gujarat Contact No:
 GSTIN Number: 24AAACB4127A1ZJ PAN No: AAACB4127A

Please arrange to supply of following items as per details given below:

S.No	Item Code	Material Description	HSN/SAC Code	GST Rate%	Delivery Date	Units	Quantity	Rate Per Unit	Discount (%)	Value (Rs.)
1	14001587	VOC METER (VOLATILE ORGANIC COMP ANALYZ)	9001	18.00	07/02/2022	EA	1.000	121250.00	0.00	121250

Total (In Words): One Lakh Twenty One Thousand Two Hundred Fifty Rupees

Basic Value (excluding taxes) 1,21,250.00

LD 0.5% PER WEEK, IF DELIVERY DATE EXCEED OF PO BASIC VALUE.

Packing/Forward : INCLUDED
 Freight : FOR DELIVERY AT BRL DAHEJ SITE

WARRANTY: 18 MONTHS FROM THE DATE OF DISPATCH OR 12 MONTHS FROM THE DATE OF INSTALLATION WHICHEVER IS EARLIER.

Payment Terms : RFF BY OFFER MAIL DATED 27-01-2022
 Insurance : IN SUPPLIER SCOPE

Special Instructions

Please ensure our P.O. number is written on every invoice.
 Date of manufacturing of all materials should not be more than 3 months old from date of invoice.
 Please ensure to minimize number of batches in one consignment.
 Material to be supplied as per our approved specifications.
 E-way bill must be generated for all dispatches wherever applicable with complete and correct particulars of Part A and Part B.

Amendment/Cancelled Remarks:

Remarks:
 PAYMENT 20% ADV. BALANCE AFTER RECEIPT OF MATERIAL

Terms And Conditions

1. Delivery Period: To strictly ensure delivery period specified in P.O. unless extended by us in writing, failing which company reserves the right to cancel the order in full/part and claim damage for breach of contract.
2. Send material along with Purchase Order Copy, COA, MSDS, TREM CARD, Insured driver for any special safety precautions.
3. Lorry Receipt, Invoice (all original Invoices), Packing slip to be sent to the delivery site along with the material.
4. Material will be inspected at our delivery site and will be subject to quantity & Quality verification / approval by them.
5. Rate of GST % will be applicable as above or actual at the time of dispatch.
6. The supplier shall be liable to indemnify in case of non-availability of ITC of GST on account of any failure or non-compliance on his part under the said law.
7. Supplier will be responsible for any loss/pensalty due to absence of required E-Way Bill or wrong information in E-Way Bill.
8. Material must be packed properly. Any loss due to leakage or damage and pilferage in transit due to faulty packing or any other reason shall be borne by the Supplier. "Motor Vehicle Act to be followed strictly as amended from time to time".
9. Rejected goods must be lifted from our factory/godown premises within 7 days of the intimation or they shall be disposed off at your risk. No claim shall be entertained on this account in any case. All disputes are subject to jurisdiction of Courts in Delhi.
10. Facility is provided to make payment by electronic modes.

For Bharat Rasayan Limited

Authorized Signatory

ANNEXURE

S.No	Item Code	Special Instruction
1	14001587	<p>DETAILS AS PER ANNEXURE</p> <p>SPECIAL NOTE</p> <p>We sought to inform you that CBIC have extended the limit of mandatory to prepare E-Invoice for those supplier/vendors whose annual turnover in the preceding financial year is 50 crore or more. Hence Vendor has to prepare the E-Invoice along with the regular tax invoice/ Creditnote/Debit Note for supplying the goods and service to BRL.</p> <p>If supplier fail to prepare the E-Invoice along with the regular Tax Invoice/Credit note/Debit Note then as per the Central goods and Service Tax rule 4B(4) and 4B(5) of the CGST Rule, Recipient will not be eligible to take the GST credit if eligible supplier have not issued the E-Invoice.</p> <p>We reserve the right to hold the payment on non-reflecting of GST Input Tax credit in respective month of GSTR 2B.</p> <p>IF SUPPLIER DISPATCH ANY MATERIAL THROUGH COURIER AND DELIVERED AT BRL GATE, MATERIAL WILL BE TREATED DELIVERED SUBJECT TO CONFIRMATION OF THE CONCERNED STORE PERSON AS PER THE PHYSICAL CONDITION OF MATERIAL. So pl. follow this rules as per applicable.</p>

A. D. D.
 27/01/22
 For Plant D,

NGT Matter OA 60/2021 (WZ)

ANNEXURE A-2

1. General Information of the Industry:		
a)	Name & Address	M/s. Bharat Rasayan Ltd.(Old Name:Siris Crop Science Limited), 42/4, GIDC, DAHEJ, Amod road, Tal: Vagra, Dahej - 392130
b)	Contact Person & Contact Numbers, Fax	Shri Ajay Gupta—7046500020
c)	Year of Establishment	2012
d)	CCA Validity	11/10/2022
e)	Operational Condition	The industry was operational during inspection
f)	Present manufacturing Products	As informed, during visit the industry was producing following products: Meta Phenoxy Benzaldehyde, Ethion Technical, Phenthoate Technical, Thiomethoxam Technical, Lambda Cyhalothrin Technical, Flumethrin technical, Metribuzine technical, Clodinafop, Pendimethaline, CMAC, Cypermethrin technical, Alpha Cypermethrin, Bifenthtin.
g)	Main Raw Materials	Monochloro acetic acid, sulphur, Ferric chloride, chlorine, Acrylonitrile, 3-chloro propionitrile, caustic lye, propargyl alcohol, thionyl chloride, dimethyl formamide etc.
2. Wastewater Management		
a)	Quantity of Fresh water consumption and its source	A. Based on past 6 months billing record Average Water consumption : 603KLD B. As per CCA <ul style="list-style-type: none"> • Industrial : 1349 KL/day • Domestic : 120 KL/day • Gardening: 60 KL/day

NGT Matter OA 60/2021 (WZ)

b)	Wastewater segregation with specification of criteria of such segregation (if any)	<ul style="list-style-type: none"> • Process stream (High COD stream) were collected at unit wise and sent to Stripper & MEE followed by VTFD. • low COD stream & condensate from MEE is treated in ETP • Treated water from ETP is further fed to RO Plants and RO permeate is reused in plant and RO reject is fed to MEE.
c)	Provision of storage of segregated stream with capacity, permanent provision of flow meter, piping etc.	Provision of flow meter was provided at final discharge line and RO permeate to utility line.
d)	Total Wastewater generation (based on wastewater stream segregation such as high COD, low COD etc.)	<p>A. Based on past 6 months flow record The industry has not provided flow meter at the inlet. Based on flow reading of final discharge to GIDC drainage system, average discharge is about 60 KLD.</p> <p>B. As per CCA</p> <ul style="list-style-type: none"> • 122KLD high COD effluent shall be sent to MEE. • 715 KLD total treated effluent shall be disposed to GIDC sewer line. • 100KLD total domestic wastewater shall be treat in STP and disposed in GIDC drain /Gardening.

NGT Matter OA 60/2021 (WZ)

	f)	On site Record keeping	The industry has provided PLC control system for operation of MEE. Records for the operation of MEE and ATFD/VTFD were shown maintained online. However records for the operation of ETP and RO plant was not maintained properly onsite. Moreover, records for the generation of high COD wastewater from various process plants were reportedly not maintained.
	g)	Provision of any intermittent storage/guard pond etc. before disposal	200KL treated effluent storage holding tank provided before disposal of effluent.
	h)	Mode of disposal of wastewater (GIDC drain, CETP, ZLD, gardening, direct)	Disposal in GIDC drainage through Pumping Station A.
	i)	Provision for flow meters at MEE feed, MEE condensate, RO etc. or any critical locations as per Consent	Flow meter is provided at final discharge point. PLC control system provided for MEE operation.
3.	OCEMS/ PTZ/ Flowmeter provision, location of OCEMS, parameters monitored, working principle, its online connectivity to CPCB/GPCB server		TOC meter is provided at final outlet and was found defunct during visit. During visit, algal deposition in the capillary tubes of TOC meter was observed. As informed, online connectivity of OCEMS to GPCB and CPCB is provided.

NGT Matter OA 60/2021 (WZ)

4.

Details of Effluent Samples collected and analysis results

Parameters	from collection tank of ETP	from main storm water drainage of unit within premises	from storm water drainage near plant a of MPBD plant	final treated waste water outlet into GIDC drain (outside the premises)	GPCB Discharge Standards as per CCA
pH	6.8	5.89	12.03	7.3	5.5-9.0
Colour	425	300	225	250	--
TSS	152	16040	268	68	100
Fluorides	1.95	3.85	0.8	1.6	15
Sulphides	6.4	72	9.12	BDL	5
Ammonical Nitrogen	210	742	14	36.4	50
Sulphate	926	4331	2507	218	--
TKN	232.4	803.6	19	46.48	50
Nitrate Nitrogen	4.41	78.86	117.9	4.3	50
BOD (3 days at 27°C)	320	4360	2295	50	100
COD	1490	19065	7463	214	250
Chlorides	708	7690	12115	302	--
Phenolic Compounds	0.47	105.5	33.58	0.18	5

Note: all values are reported in mg/l except pH and color

Third party analysis report

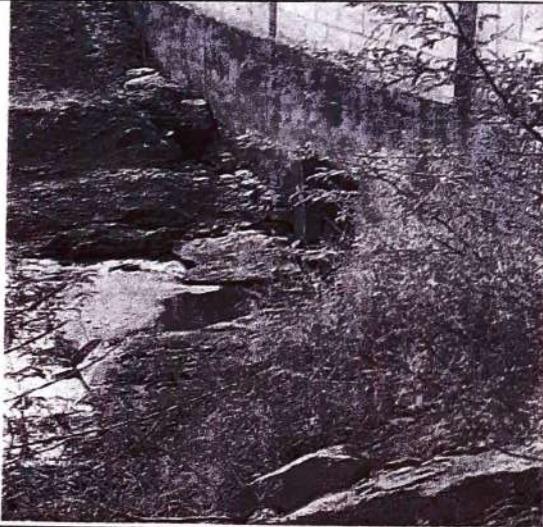
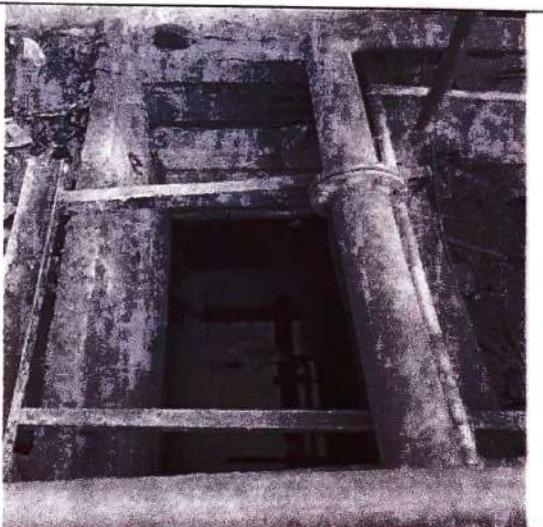
Parameters	from collection tank of ETP	from main storm water drainage of unit within premises	from storm water drainage near plant a of MPBD plant	final treated waste water outlet into GIDC drain (outside the premises)	GPCB Discharge Standards as per CCA
pH	6.88	6.20	11.79	7.09	5.5-9.0
Colour	>500	>500	350	450	--
TSS	347	>10000	1030	110	100
Fluorides	BDL	BDL	1.6	0.5	15
Sulphides	32	>50	>50	>50	5
Ammonical Nitrogen	158	195	12	38	50
Sulphate	908	6076	2294	192	--
TKN	165	205	16	45	50
Nitrate Nitrogen	7	63	88.2	22.3	50

NGT Matter OA 60/2021 (WZ)

BOD (3 days at 27°C)	250	2720	2510	35	100
COD	1307	13622	13226	146	250
Chlorides	747.5	8306	14749	272	--
Phenolic Compounds	0.8	88	73	BDL	5

The Analysis of samples reveals that the sample collected from final discharge point found meeting the discharge standard except for TSS which slightly exceeds. However, high concentration of COD :19065 mg/l, Phenol:105.5 mg/l, BOD: 9360 mg/l, Ammonical Nitrogen: 742 mg/l was found in main storm water drain. Similarly high concentration of measured parameters and high alkaline wastewater was observed in another drain.

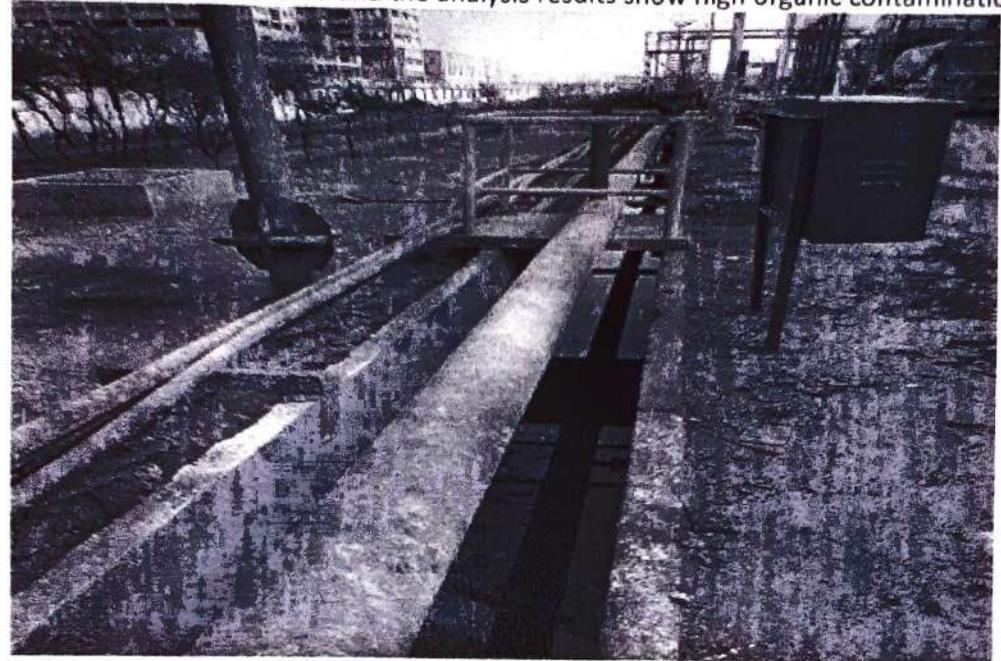
NGT Matter OA 60/2021 (WZ)

<p>5. Any bypass/ponding/accumulation of wastewater inside or outside the premises observed</p>	<ul style="list-style-type: none"> • Acidic spillage was observed on road area near Plant A. • Accumulated acidic and alkaline wastewater was found at many locations in tank farms in the premises. • Alkaline wastewater was observed in storm water drain near Plant A of MPBD plant area. • High black coloured contaminated wastewater was observed in main storm water drain.
<p>6. Closure Directions issued by GPCB in past 5 years wrt wastewater management.</p>	<p>The industry has been issued notice of directions under Section 33A of the Water (P&CP) Act, 1974 by GPCB on following dates in last 5 years: 20/10/2016, 08/10/2018 & 22/11/2018.</p>
<p>Other Observations on overall wastewater management, hazardous waste management, mode of disposal, display board etc.</p> <ul style="list-style-type: none"> • The industry has provided digital display board at the entry gate. During visit the industry, ETP, MEE plant was found operational. • The team has collected grab sample of wastewater from the final discharge point into GIDC drainage network. The Analysis of samples reveals that the sample collected from final discharge point found meeting the discharge standard except for TSS which slightly exceeds. • The team has observed accumulation of colored water near the boundary of the premises. The team has checked the location from inside of the industry and found that the portion of drain was dry and there was no discharge during visit. It was informed that the storm water drain was recently closed after monsoon. <div style="display: flex; justify-content: space-around;">   </div>	

NGT Matter OA 60/2021 (WZ)

<i>Portion of drain outside the premises where accumulated wastewater observed</i>	<i>Portion drain inside of the industry</i>
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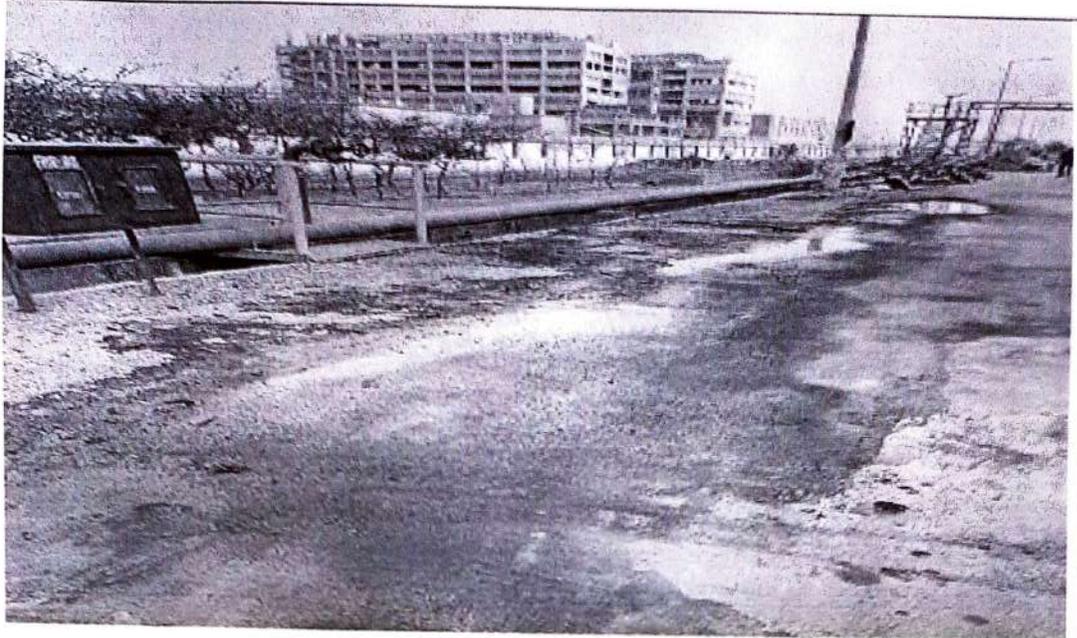
- The team has traced the entire storm water drain and it was found that the storm water drain has accumulated high black coloured contaminated wastewater in the portion of main storm water drain from ETP to GIDC fresh water tank inside the premises. It is worth to mention that, the storm water drain was meant for discharge of rainwater from the industry during monsoon and should remain dry during other seasons. Grab sample of wastewater was also collected and the analysis results show high organic contamination.



Portion of main storm water drain having COD > 19000 mg/l

- The Analysis of sample collected from main storm water drain reveals that the sample collected high concentration of analysed parameters like COD :19065 mg/l, Phenol:105.5 mg/l, BOD: 9360 mg/l, Ammonical Nitrogen: 742 mg/l etc. Similarly high concentration of measured parameters and high alkaline wastewater was observed in another drain. No permanent provision for collection of wastewater was observed. Such condition of high contaminated wastewater into the storm water drain has potential of runoff from storm water drains outside the premises.
- During visit, spillage of wastewater was observed on road area near Plant A area near main storm water drain. The pH of wastewater was checked and found acidic. No explanation/reason regarding the incidence of such spillage was provided by the industry.

NGT Matter OA 60/2021 (WZ)

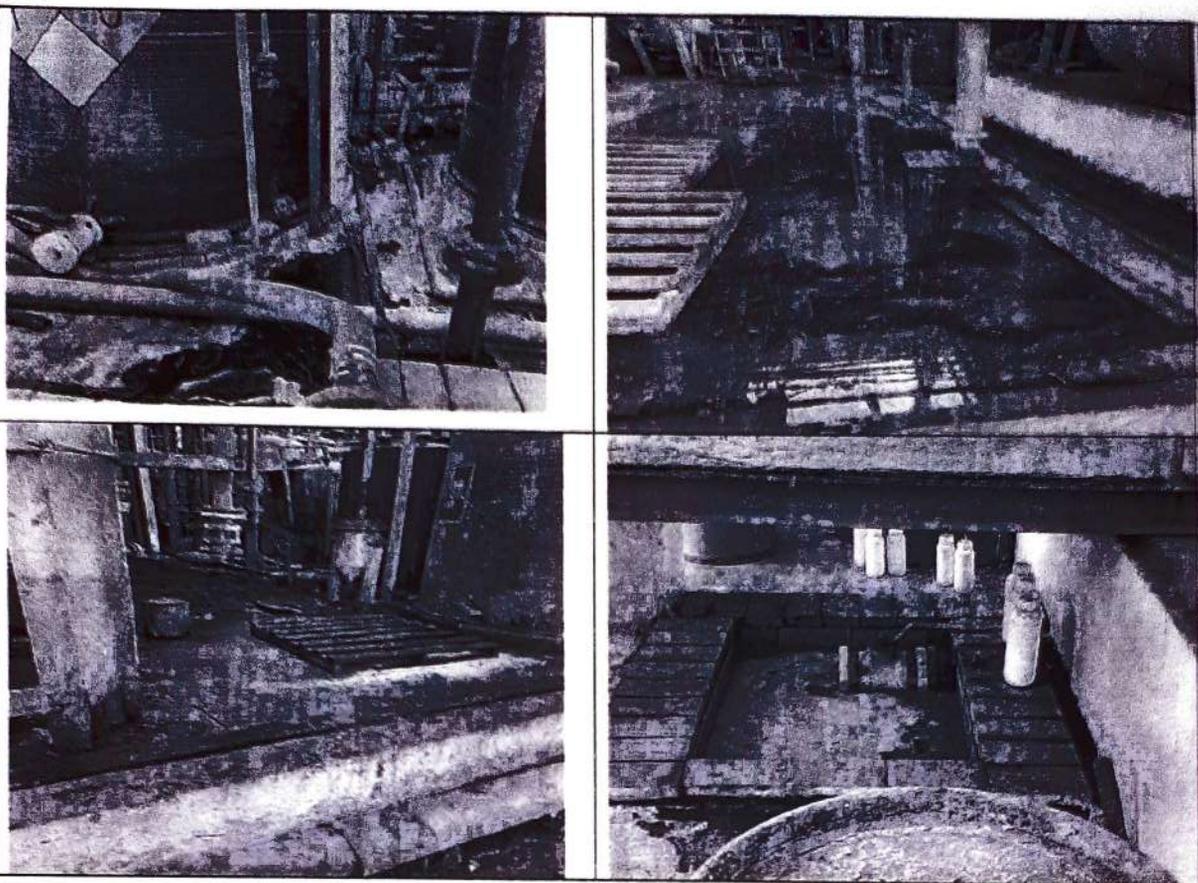


- The team has checked pH of accumulated wastewater in the storm water drain near plant A and was found alkaline. The team collected grab sample of wastewater from the drain and found having COD of 13,226 mg/l with pH 11.79. The analyzed parameter shows high organic contamination.



- During visit accumulation of wastewater/material in tank farm area was observed at many locations. The accumulated wastewater/material was found acidic at some place and alkaline at some place.

NGT Matter OA 60/2021 (WZ)

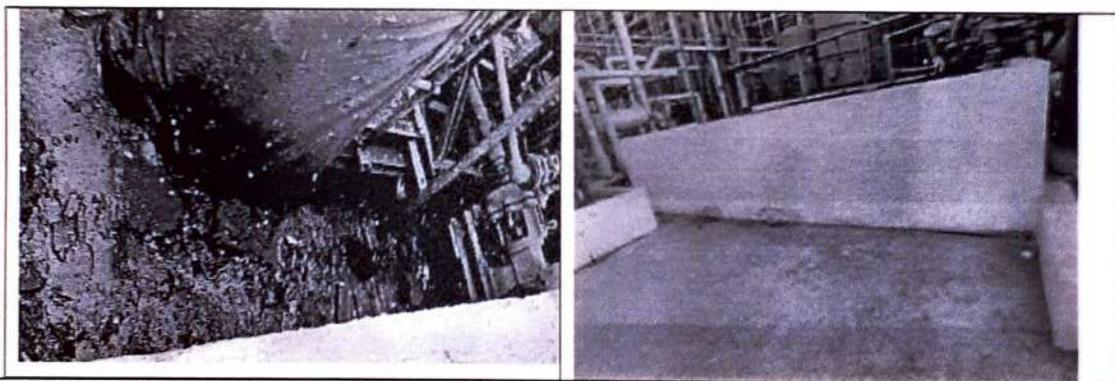


- During visit, one tanker filled with phenol was observed in tank farm area. Leakage of phenol from the tanker bottom was observed. However, there was no any corrective action taken by the industry. After the observation, the industry started taking action.

NGT Matter OA 60/2021 (WZ)



- Unit has provided wastewater collection tank for storage of wastewater generated from process in their all production plant, during visit oozing of pinkish colored water near the storage tank of high COD wastewater was observed.



NGT Matter OA 60/2021 (WZ)



- During visit, Effluent treatment system comprising of ETP, Stripper followed by MEE, ATFD & RO were found in operation. Separate authorization of the generation and disposal of low boiling stream from stripping of high COD wastewater were not taken by the industry.
- The industry has taken temporary permission for sending 30KLD of concentrated/High COD stream of industrial effluent to CMEE of Detox India Pvt Ltd, Ankleshwar vide GPCB letter dated 30.06.2021 for the period of six months.
- The industry has installed incinerator for disposal of concentrated wastewater, however incinerator is found in not in operation. As informed, the industry has not operated the incinerator since installation and now dismantling this incinerator.
- The industry has provided ETP with capacity 300KLD against the permitted generation quantity is 715 KLD as per CCA.
- The industry has provided many collection tanks in the ETP area. The collection tanks were having variety of wastewater in physical appearance. Nomenclature, records and reason for such collection and storage were not provided by the industry.
- VOC odour was sensed around collection tanks, primary treatment section of High COD/high TDS wastewater, production plant and tank farm area.
- The industry manufactured CMAC. As informed, acidification of high COD stream of wastewater generating from plant need to be carried out to separate residue (high organic tarry type sludge) in the collection tank. It was observed that the industry carry out such operation manually through nutch filter. The drains were when opened. Emission of VOCs and eye irritation were felt near the area. Handling of such high organic residue, addition of acid, working in such hazards condition without proper safety needs improvement. Provision of detection of concentration of VOCs and HCs may be provided

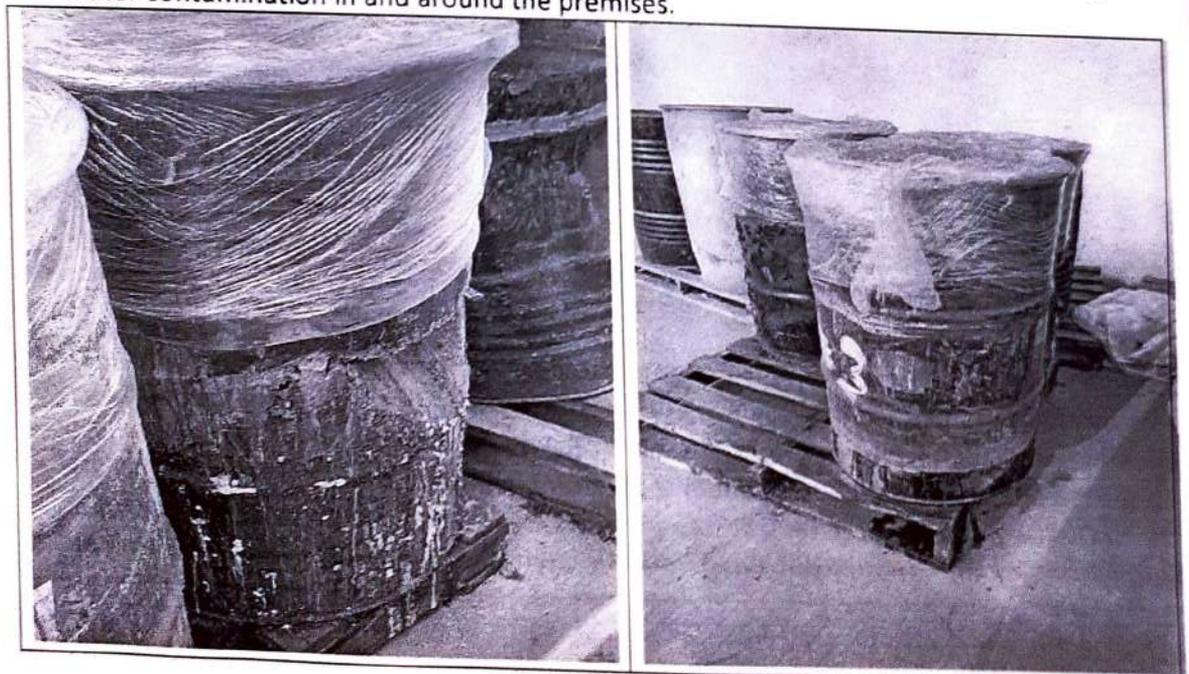
NGT Matter OA 60/2021 (WZ)

with safety alarm.

- During visit, Hazardous waste was found haphazardly stored inside the storage shed. The storage shed was covered however leachate collection system is not provided. As informed, present stock of about 98.529 MT of process waste/waste residue and about 3000 MT of total landfillable waste were stored.



- In addition, drums containing HW found stored in open area inside the premises. Physical condition of some of the drums were dilated/corroded and leakage from bottom from some of drums. Even some drums were found open from top. In total storage of about 98.529 MT of various HW including drums were found stored outside the shed at various locations. Looking to the site conditions of high COD and Phenolic wastewater into the main storm water drains and mismanagement of HW has potential of soil and ground water contamination in and around the premises.



NGT Matter OA 60/2021 (WZ)

- As per condition of CCA, "the unit shall be required to make storage facilities to store the effluent for atleast 48 hours by providing acid proof brick lined impervious tanks/ HDPE tanks", However, the industry has provided only one storage tank of 200 KL capacity against the required capacity of 1430KL (the permitted discharge quantity is 715 KLD).

Hence, it can be concluded that the industry found meeting the discharge standards except for TSS which slightly exceeds from the sample of wastewater collected from final outlet. However, high concentration of COD :19065 mg/l, Phenol:105.5 mg/l, BOD: 9360 mg/l, Ammonical Nitrogen: 742 mg/l was found in main storm water drain. Similarly high concentration of measured parameters and high alkaline wastewater was observed in another drain inside the premises. The storm water drains should be dry except during rainfall and no contaminated runoff is even allowed to discharge during rains. As no permanent arrangement is provided for the pumping of contaminated wastewater from storm water drain to ETP, the industry need to take immediate action to remove contaminated wastewater from main storm water drains, tank farm area and treat it as per the requirement. The overall mismanagement of acidic and alkaline material/wastewater, leakages of phenolic material on the approach road having slope towards the storm water drain, highly contaminated wastewater in the storm water drain shows gross negligence towards the handling and management of chemicals. Such condition of contamination in the storm water drain has potential of contaminated runoff from the premises.

The installed capacity of ETP is less than the consented wastewater generation. The industry need to provide ETP of adequate capacity as per the total wastewater generation mentioned in the CCA or amend CCA as per actual generation. The OCEMS installed found defunct during visit.

The industry found storing HW in open area, the HW storage shed provided was not having proper leachate collection and transfer to ETP facility. In total storage of about 98.529 MT of various HW including drums were found stored outside the shed at various locations. Looking to the site conditions of high COD and Phenolic wastewater into the main storm water drains and mismanagement of HW has potential of soil and ground water contamination in and around the premises. Mishandling of High COD wastewater, leakages, storage of high organic residue from CMAC plant in open etc. also resulted for VOCs which was sensed during visit. The industry also not compliance with CCA condition to make storage facilities to store the effluent for atleast 48 hours. The industry need to take adequate measures for compliance of observations and CCA conditions.

7.	Date of visit	16/11/2021
8.	Name of Visiting Officials	Amit Thakkar, Sc. D-CPCB N. D. Patel, DEE-GPCB

Bharat Rasayan Limited, Dahej**Activity carried out under CER for the period 2019 to 2021.**

We, Bharat Rasayan Limited, located at 42/4, GIDC Estate Dahej, Tal-Vagra, District-Bharuch, have done various CER activity with co-ordination with collectoroffice, Bharuch&gram Panchayat, Dahej.

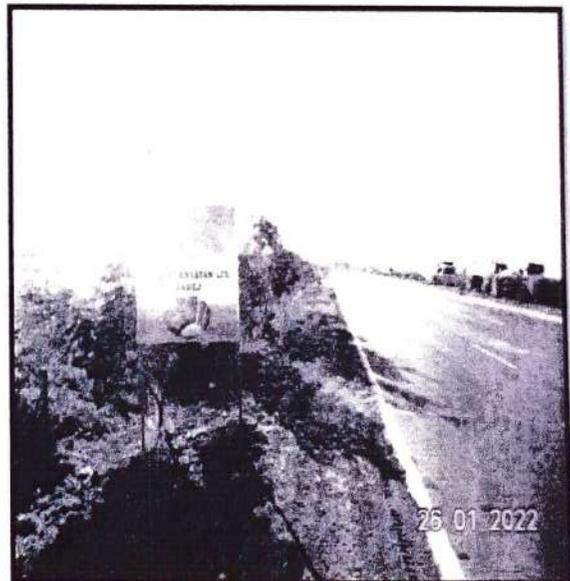
The activities carried out under CER during last three years (2019 to 2021) are as follows:

Area of activities:

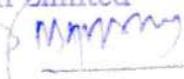
1-Environment.2-Health &fight against COVID-19 Pandemic. 3- Health. 4-Rural Development

Environment:

- Plantation & maintenance on Bharuch – Dahej State Highway covering approx. 2.00km length. (Approximate cost Rs. 3.00 Lakhs)



For Bharat Rasayan Limited

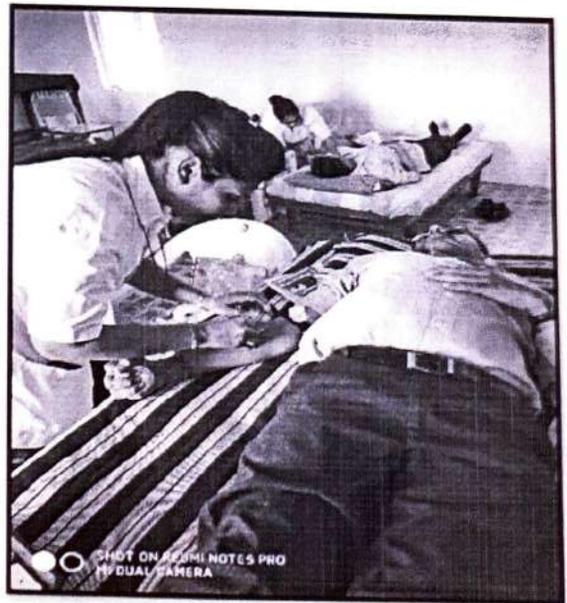
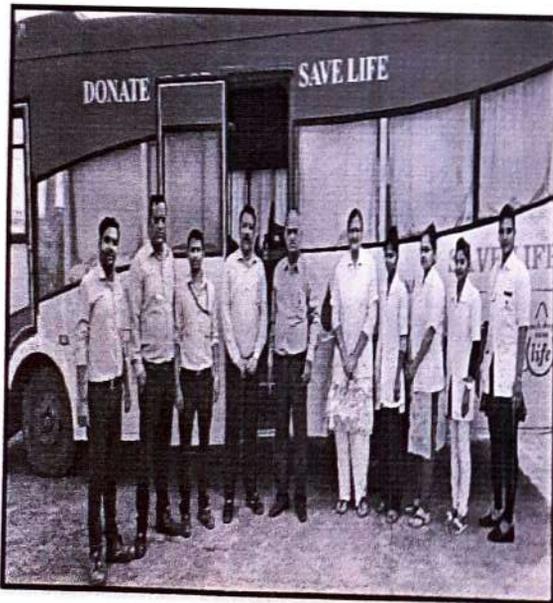

Director

- As per GPCB PIBO initiative: Distribution of dust bins. Collection of Plastic Waste from Dahej village & hand over to registered recycler. (Approx. cost 2.00 Lakhs) in co-ordination with Dahej gram panchayat.



Health & Fight against COVID-19 pandemic:

- Blood Donation camp organized at JP Chheda School at village Dahej. (Approx. cost 1.00 Lakhs)

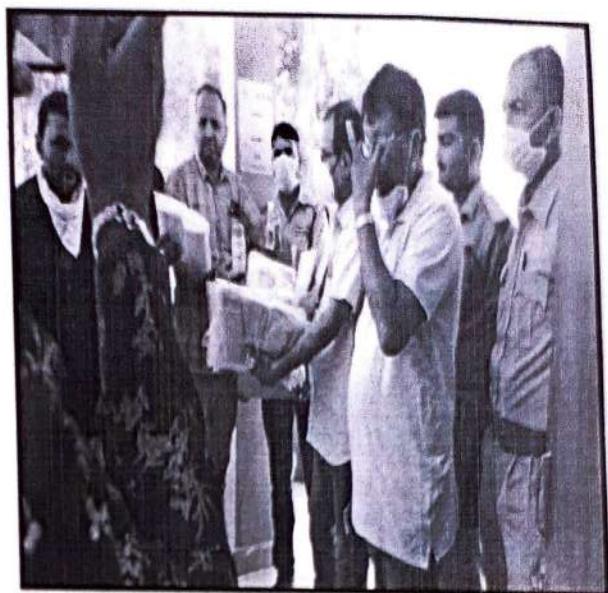
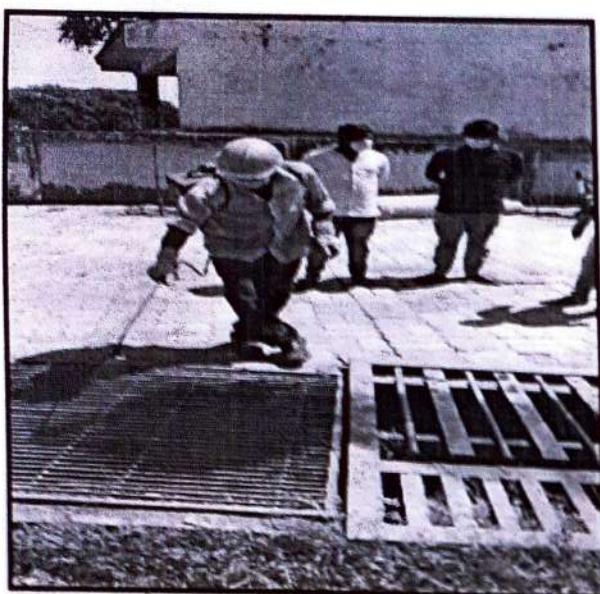


For Bharat Rasayan Limited

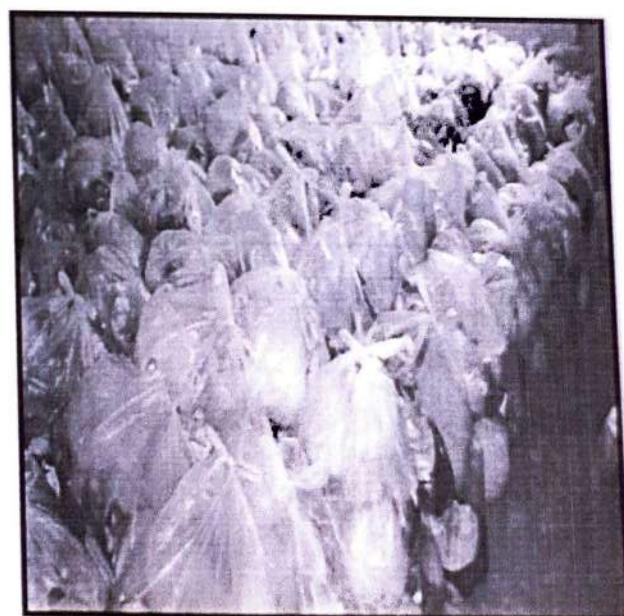
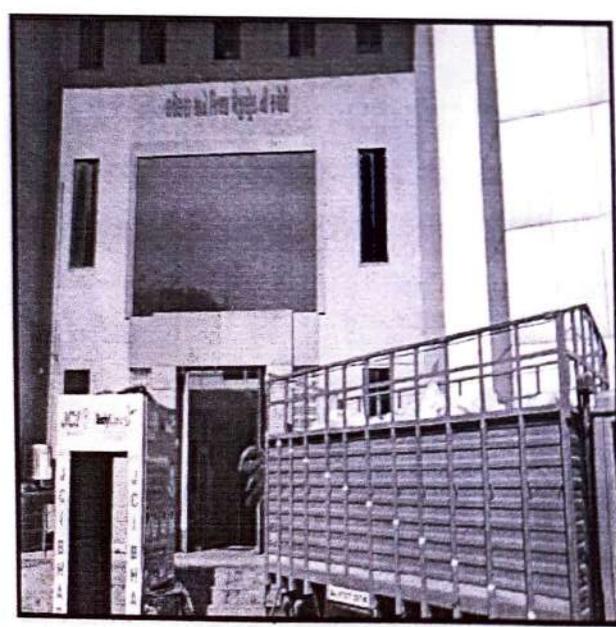
M. M. M.

Director

- Area sanitization and mask / hand sanitizer distribution at Dahej Village area during COVID period. (Approx. cost 1.00 Lakhs)



- Grocery materials handover to collector office Bharuch to support needy/poor people & migrant workers. (Approx. cost 8.00 Lakhs)



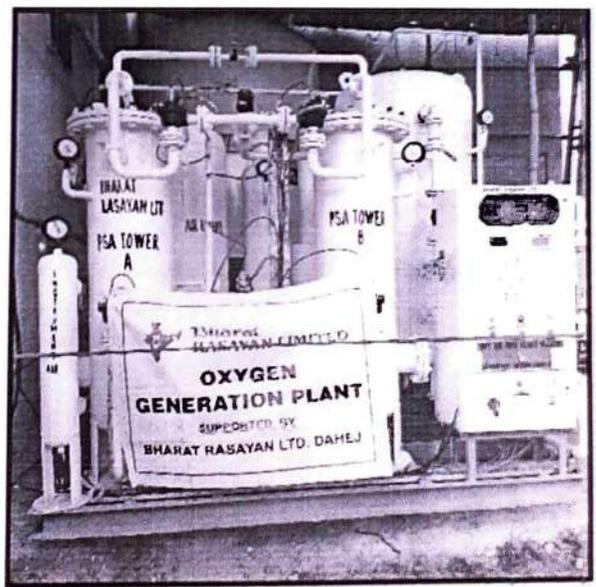
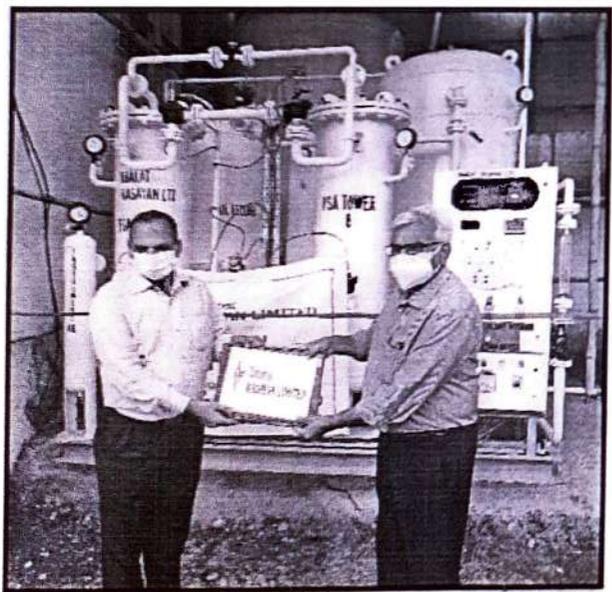
for Bharat Rasayan Limited


Director

- Grocery packets distribution to migrant workers at GIDC Dahej area through gram panchayat Dahej. (Approx. cost 1.00 Lakhs)



- As per CPCB & GPCB initiative- Nitrogen plant converted to Oxygen plant and its installation & maintenance at PHC Gadkhol, Ankleshwar. (Approx. cost 12.00 Lakhs)

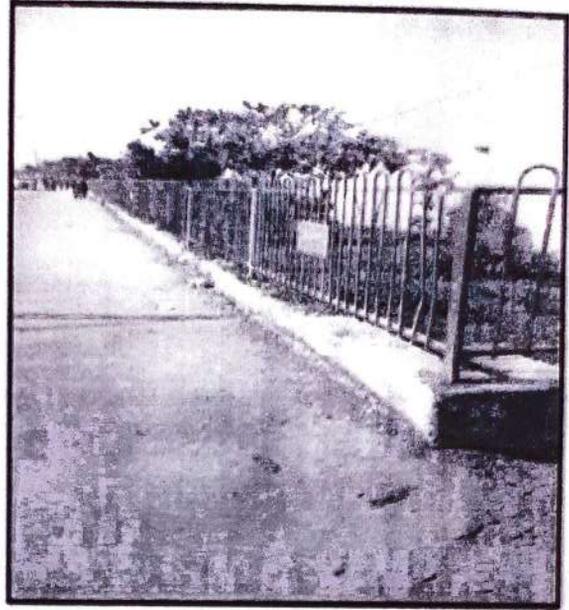
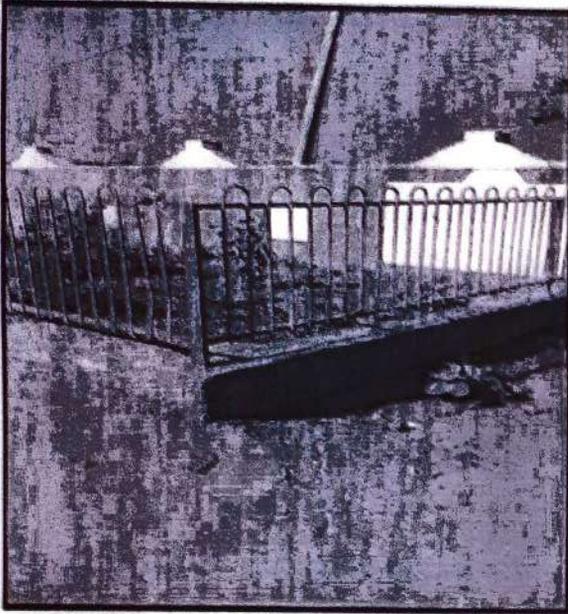


For Bharat Rasayan Limited

Director

Rural Development:

- To provide & maintenance of Footpath Railing from Dahej Entry to village Panchayat office approx. 2.0 Kms for protection of pedestrians. (Approx. cost 12.00 Lakhs)



- To support community marriages organized at the tribal belt of our area. (Approx. cost 1.50 Lakhs)

for E'harat Kasayan Limited

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Director

Proposed CER activities with estimated expenses
for next 2 Years.

Sr. No	Area	Activities	Estimated Expenses (Rs. Lacs)	Schedule
1	Environment	(i) Plantation on Dahej –Bharuch state Highway.	2 Lacs	2 Years
		(ii) To collect plastic waste and hand over to recycler with support of Gram Panchayat Dahej.	5 Lacs	1 Year
2	Rural Development	(i)To construct bund wall around main water pond of Dahej village.	10 Lacs	2 Years
		(ii) To provide Solar Lights in nearby villages.	3 Lacs	2 Years
3	Education	(i)To support School by providing Salary to teaching staff under guidance of Gram Panchayat.	5 Lacs	Regular
		(ii)Construction of Toilet block in Girls School.	5 Lacs	1 Year
4	Health	To provide 2 Ambulance to Bharat VikasParishad, NGO for operation in Rural area.	20 Lacs	1 Year
		Total	50 Lacs	

For Bharat Rasayan Limited


Director