



o/c

BEIL INFRASTRUCTURE LIMITED
(formerly known as Bharuch Enviro Infrastructure Limited)
Unit - Dahej

Ref: BEIL/DHJ/2023-24/22

Date: 26.06.2023
PCB ID # 40137

The Member Secretary
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector - 10 / A
Gandhinagar - 382 043

Dear Sir,

Sub: Environmental Statement for the year 2022-23

We are forwarding herewith Environmental Statement for our TSD Facility (Centralized Secured Landfill Facility) situated at BEIL, Plot No D-43 G.I.D.C, Dahej, Ta: Vagra, Dist. Bharuch for the period of year 2022-23

We are forwarding copy of the Manifest regarding collection and disposal of waste from our member industries to GPCB Bharuch on a regular basis.

We have received following CTE & CCA Amendment from GPCB during the last year

1. CCA Amendment vide consent no. AWH 120147 for Fuel Change.
2. CCA Amendment vide consent no. AWH 120145 for Cell 6.
3. CCA Amendment vide consent no. AWH 120793 for Incinerator.
4. CTE Amendment vide consent no. CTE-124682 for MEE + SPD + ETP.

Also, we would like to bring your kind attention that our laboratory has been accredited by NABL & approved by MoEF&CC. We also have implemented ISO 14001:2015 & ISO 45001:2018 certification for Environmental Management system and Occupational Health and safety standards.

We have installed Common Incinerator and commissioned the same during this year.

We hope that the above is in order.

Thanking you
Yours faithfully
For, BEIL Infrastructure Ltd

[Signature]
Authorized Signatory

CC:

1. Regional Office
Gujarat Pollution Control Board, Bharuch.
2. Unit Head- Hazardous waste cell
Gujarat Pollution Control Board, Gandhinagar.

[Signature]
28/06/23
Gujarat Pollution Control Board
Head Office
Sector No.-10-A,
Gandhinagar-382010

CIN NO. U45300GJ1997PLC032696

Works Office : Plot No. D-43, Dahej Amod Road, GIDC Estate, Dahej, T. Vagra - 392 130, Dist. Bharuch (Gujarat)
Phone : (02641) 291129, E-mail : mistryrg@beil.co.in
Regd. Office : Plot No. 9701-16, GIDC Estate, Post Box No. 82, Ankleshwar 393 002, Dist. : Bharuch (Gujarat)
Phones (02646) 253135, 225228 Fax : (02642) 222849 E-mail : datwadibd@beil.co.in



o/c

BEIL INFRASTRUCTURE LIMITED
(formerly known as Bharuch Enviro Infrastructure Limited)
Unit - Dahej

Ref: BEIL/DHJ/2023-24/22

Date: 26.06.2023
PCB ID # 40137

The Member Secretary
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector - 10 / A
Gandhinagar - 382 043

Dear Sir,

Sub: Environmental Statement for the year 2022-23

We are forwarding herewith Environmental Statement for our TSDF Facility (Centralized Secured Landfill Facility) situated at BEIL, Plot No D-43 G.I.D.C, Dahej, Ta: Vagra. Dist. Bharuch for the period of year 2022-23

We are forwarding copy of the Manifest regarding collection and disposal of waste from our member industries to GPCB Bharuch on a regular basis.

We have received following CTE & CCA Amendment from GPCB during the last year

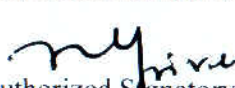
1. CCA Amendment vide consent no. AWH 120147 for Fuel Change.
2. CCA Amendment vide consent no. AWH 120145 for Cell 6.
3. CCA Amendment vide consent no. AWH 120793 for Incinerator.
4. CTE Amendment vide consent no. CTE-124682 for MEE + SPD + ETP.

Also, we would like to bring your kind attention that our laboratory has been accredited by NABL & approved by MoEF&CC. We also have implemented ISO 14001:2015 & ISO 45001:2018 certification for Environmental Management system and Occupational Health and safety standards.

We have installed Common Incinerator and commissioned the same during this year.

We hope that the above is in order.

Thanking you
Yours faithfully
For, BEIL Infrastructure Ltd


Authorized Signatory

CC:

1. **Regional Office**
Gujarat Pollution Control Board, Bharuch.
2. **Unit Head- Hazardous waste cell**
Gujarat Pollution Control Board, Gandhinagar.


28/06/23
Gujarat Pollution Control Board
Head Office
Sector No.-10-A,
Gandhinagar-382010


26/6/23
Post Received
Gujarat Pollution Control Board
BHARUCH

ENVIRONMENTAL STATEMENT

Environmental Statement for the financial year ending 31st March 2023

PART - A

01	Name and address of the owner / occupier of the industry / operation or process	Director – Mr. Ashok Panjwani Operator – Mr. B.D. Dalwadi																					
		BEIL Infrastructure Ltd Plot # D-43, GIDC, Dahej, Ta : Vagra Dist : Bharuch																					
02	Industry Category	Primary – STC Code																					
		Secondary–SIC Code																					
03	Production capacity	<table border="1"> <thead> <tr> <th colspan="3">Units</th> </tr> <tr> <th>N o.</th> <th>Product</th> <th>Capacity</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Secured landfill site</td> <td>1,65,400 MT Cell-1 (Closed) 3,12,960 MT Cell 2& 5 (Partially Closed) 1,65,689 MT Cell-3 (Operation) 1,75,385 MT Cell-4 (Operation) 2,61,312 MT Cell-6 (Operation)</td> </tr> <tr> <td>2.</td> <td>Multiple Effect Evaporator (MEE)</td> <td>200 KLD</td> </tr> <tr> <td>3.</td> <td>De-Contaminated & De-toxified packing material (drum, carboy, liners etc.)</td> <td>2,10,240 Nos/Year</td> </tr> <tr> <td>4.</td> <td>De-contaminated & Detoxification of tankers</td> <td>36,000 Nos/Yr</td> </tr> <tr> <td>5.</td> <td>Incineration Facility</td> <td>12 Million Kcal/Hr</td> </tr> </tbody> </table> <p>It is a TSDF Facility (Common Secured Landfill Facility)</p>	Units			N o.	Product	Capacity	1.	Secured landfill site	1,65,400 MT Cell-1 (Closed) 3,12,960 MT Cell 2& 5 (Partially Closed) 1,65,689 MT Cell-3 (Operation) 1,75,385 MT Cell-4 (Operation) 2,61,312 MT Cell-6 (Operation)	2.	Multiple Effect Evaporator (MEE)	200 KLD	3.	De-Contaminated & De-toxified packing material (drum, carboy, liners etc.)	2,10,240 Nos/Year	4.	De-contaminated & Detoxification of tankers	36,000 Nos/Yr	5.	Incineration Facility	12 Million Kcal/Hr
Units																							
N o.	Product	Capacity																					
1.	Secured landfill site	1,65,400 MT Cell-1 (Closed) 3,12,960 MT Cell 2& 5 (Partially Closed) 1,65,689 MT Cell-3 (Operation) 1,75,385 MT Cell-4 (Operation) 2,61,312 MT Cell-6 (Operation)																					
2.	Multiple Effect Evaporator (MEE)	200 KLD																					
3.	De-Contaminated & De-toxified packing material (drum, carboy, liners etc.)	2,10,240 Nos/Year																					
4.	De-contaminated & Detoxification of tankers	36,000 Nos/Yr																					
5.	Incineration Facility	12 Million Kcal/Hr																					
04	Year of establishment	2015																					
05	Date of the last Environmental Statement submitted	22.06.2022																					

PART – B

Water and Raw material Consumption

01. Water consumption m³/day

01	Water Consumption		141.56 m ³ /day	
02	Process		16.57 m ³ /day	
03	Domestic		106.42 m ³ /day	
04	Biodegradable		18.56 m ³ /day	
Sr. No.	Name of Products (*)		Process Water Consumption per unit of product output	
	Sr. No.	Facility	Actual Qty. during the year 2022-23	
			During the previous financial year	During the current financial year
	1.	Secured landfill site	2,27,519.720 MT (received)	Note: There is no manufacturing activity as this is a TSDF Facility
	2.	MEE	46,779 MT	
	3.	De-Contaminated & Disposal system	73,822 Nos.	
	4.	De-contaminated & Detoxification of tankers	--	
5.	Incineration	3,072.43 MT (Incinerate)		
(*) Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw material used.				

02 Raw Material Consumption

Sr. No.	Name of Products (*)	Consumption of raw material (in Kgs)	
		During the previous financial year	During the current financial year
1.	(Common secured Landfill Facility & Common Incinerator Facility)	Fly Ash: 1,01,94,000 Cement: 95,43,000	Fly Ash: 61,98,490 Cement: 85,12,900 Lime: 7,09,514 Caustic: 2,80,440

It is a TSDF Facility (Common Secured Landfill & Incineration Facility)

PART - C

Pollution discharged to environment / unit of output
(Parameters as specified in the Consent issued)

Sr. No.	Pollution	Quantity of pollutants discharged (Mass/day)	Concentrations of pollutants in discharges (mass / volume)	Percentage of variation from prescribed Standards with reasons	
A	Water	BEIL, Dahej is ZLD unit, the leachate generated is being treated in MEE and MEE condensate is treated in ETP (MAP+ RO). The permeate is used within the premises.			
B	Air	Incinerator stack			
		PM	6.82 Kg/day	47.97 mg/m ³	-4.06%
		HCl	11.46 Kg/day	8.03 mg/m ³	-83.94%
		SO ₂	46.67 Kg/day	32.68 mg/m ³	-83.66%
		NO _x (NO and NO ₂)	119.82 Kg/day	83.89 mg/m ³	-79.02%
		CO	6.82 Kg/day	47.97 mg/m ³	-4.06%
		Spray dryer stack			
		PM	23.58 Kg/day	51.97 mg/m ³	-65.35%
		Stabilization scrubber stack			
		PM	1.90 Kg/day	6.24 mg/m ³	-95.84%
		HCL	-	Not detectable	-
		*Detection Limit: PM : 10 mg/Nm ³ , HCl :0.2 mg/Nm ³ , Cl ₂ :0.2 mg/Nm ³			
		Drum Decontamination scrubber stack: PM, HCL & Cl ₂ were below detection limit.			
		*Detection Limit: HCl :0.2 mg/Nm ³ , Cl ₂ :0.2 mg/Nm ³			

Part – D
Hazardous Waste

(As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.)

Hazardous Wastes		Total Quantity (MT)	
		During the previous financial year 2021-22	During the current financial year 2022-23
A	From Process	(*)	(*)
	From pollution control facilities (generation)	8,749.66 MT MEE salt & ETP Sludge 8297.40 KL of leachate water generated from landfilling treated in MEE plant 31,399 KL Condensate generated from MEE and treated in ETP plant 0.062 KLPA Used Oil generated	6,039.66 MT MEE salt & ETP Sludge 7772.20 KL of leachate water generated from landfilling treated in MEE plant 26,518 KL Condensate generated from MEE and treated in ETP plant 2.975 MT Residue generated from drum- decontamination plant 0.038 KLPA Used Oil generated 798.97 MT Qty Ash generated from Combustion chamber 1621.96 MT from scrubber (Lime Ash)
B	Quantity re-cycled or re-utilized within the unit	25,570 KL RO Permeate generated and reused in gardening and other industrial activities	20,940 KL RO Permeate generated and reused in gardening and other industrial activities 1621.96 MT of Lime ash generated from incinerator used for pre-treatment (stabilization) of Landfill waste.
	Total quantity disposed of for landfill	Received- 2,47,659.64 MT Disposed- 2,32,141.16 MT	Received- 2,27,519.72 MT Disposed- 2,43,002.19 MT
	Total quantity incinerated	NIL	3,072.49 MT
(*)	This being a TSDF Facility (Common Secured Landfill Facility), different types of wastes permitted by GPCB, are collected from member industries, and disposed at the landfill site as per CPCB guideline. Please see the attached Table for quantity disposed at the site.		

Part – E
Solid Waste

Hazardous Wastes		Total Quantity (MT)	
		During the previous financial year 2021-22	During the current financial year 2022-23
a	From Process	(*)	(*)
b	From pollution control facilities (MEE salt & ETP Sludge)		
(*)	This being a TSDF Facility (Common Secured Landfill Facility), different types of wastes permitted by GPCB, are collected from member industries, and disposed at the landfill site as per CPCB guideline. Please see the attached Table for quantity disposed at the site.		

Part – F

Please specify the characteristics (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

BEIL is receiving accepted types of wastes for secured landfilling. If waste is not meeting criteria for direct landfilling, necessary treatment like neutralization / stabilization etc. are given. Leachate generated is treated at in-house MEE followed by Spray Dryer.

Part – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

The Company has implemented Environmental Management System Standards ISO 14001:2015 & ISO 45001:2018 and helped in improving overall environmental condition and Safety of the unit.

This being a TSDF Facility (Common Secured Landfill Facility), & Common Incinerator Facility), there is no processing activity. We are collecting solid / hazardous wastes from our members and treating & disposing off. We are drawing samples from every truck coming to our site and a Quick Analysis is done for pH, Moisture Content and Organic Content, Paint Filter Liquid Test etc. Also, we are verifying whether waste is uniform and is not having any obnoxious smell. Also, detailed analysis of solid / hazardous waste samples is done at the laboratory. During monsoon period, the site is kept covered. We have also provided a storage facility for keeping the solid / hazardous wastes collected during monsoon. Leachate generated from the landfill is treated in in-house MEE at BEIL Dahej.

Landfill Site (Cell-I): - Capped

Landfill Site (Cell II & V): - Partially capped

Landfill Site (Cell III & Cell IV): - Under Operation

Landfill Site (Cell VI): - Operational

BEIL has installed multiple effect evaporation system (MEE), which is energy efficient compared to other evaporation system. We have Received CCA on 16.12.2017 and it is in operation.

BEIL Infrastructure Limited have installed one incinerator with capacity of 12 million K cal/Hr along with Heat recovery system. Generated steam is being utilized in Multi Effect Evaporation system (MEE). The system provided consists of Rotary kiln, Secondary Combustion Chamber, WHRB, Spray dryer adsorber (SDA), Bag Filter, Wet Scrubber, ID Fan, Chimney & Continuous Monitoring System.

We have installed solar panels above capped portion of landfill. We have generated 2,83,200 kWh unit during the year 2022-23.

Part – H

Addition measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution.

- GPCB XGN Online manifest system implemented for all industries.
- Laboratory at BEIL is NABL accredited.
- BEIL is also going for recognition of MoEF for Laboratory.
- Total investment for environmental protection including abatement of pollution, prevention of pollution is rupees 1,20,19,262 during the year 2022-2023. Details are as following:
 - ✓ Tarpaulin covering with LDPE sheet.
 - ✓ In Bag House of MEE plant damaged Bega had been replaced.
 - ✓ Installation and maintenance work related to CEMS

Part – I

Any other particulars for improving the quality of the environment.

- BEIL has implemented Environmental Management System Standards ISO 14001:2015 & ISO 45001:2018. Implementation of ISO 14001:2015 & ISO 45001:2018 has helped in improvement of the environmental protection and Safety.
- The design of secured landfill is done under the guidance of IIT, New Delhi. After construction of each cell, inspection is done by Professor from IITD.
- Lot of NGOs, community members, journalists, students, and industrialists are visiting BEIL and appreciating the operations. BEIL is exhibiting various details in front of the landfill. All the visitors are welcome.
- BEIL is maintaining a proper Manifest system as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. This helps in keeping proper records.
- Laboratory has been augmented. Laboratory got recognition of NABL.
- Green belt is developed around the periphery.
- We have installed solar panels above capped portion of landfill. We have generated 2,83,200 kWh unit during the year 2022-23.

For, **BEIL Infrastructure Limited, Dahej**


Authorized Signatory



**BEIL INFRASTRUCTURE LTD
DAHEJ**

LANDFILLING DETAILS

**Quantity of solid / hazardous waste received and disposed off
During April- 2022 to March – 2023**

Opening Stock- 15,482.477 MT

Sr No	Month	Received Quantity	Disposed Quantity
All quantity in MT			
1	April- 2022	32597.718	48080.195
2	May- 2022	24258.750	24258.750
3	June -2022	12059.920	5927.090
4	July -2022	9330.585	0
5	August -2022	11025.050	0
6	September -2022	11664.700	0
7	October -2022	16560.192	17,010.190
8	November-2022	27587.551	52,587.550
9	December -2022	22168.832	33,168.830
10	January- 2023	21778.950	23278.950
11	February- 2023	21486.730	21689.890
12	March - 2023	17000.740	17000.740
TOTAL		2,27,519.720	2,43,002.190

Closing Stock- NIL

BEIL INFRASTRUCTURE LTD. DAHEJ

**Decontamination & detoxify facility
During April- 2022 to March – 2023**

Opening Stock- 1,810 Nos.

Month	No. of Drums Received	No. of Drums Decontaminated	No. of Drums dispatches
April- 2022	5307	4772	4559
May- 2022	5371	4708	4254
June -2022	6780	7595	7768
July -2022	8219	8515	8269
August -2022	7049	7124	7301
September -2022	3798	5172	5077
October -2022	3134	2676	2527
November-2022	6718	5279	5383
December -2022	9753	10251	9606
January- 2023	6638	7231	7231
February- 2023	6203	5194	5194
March - 2023	6627	5305	5309
Total	75,597	73,822	72,478

Closing Stock- 4,929 Nos.

WASTE GENERATION DETAILS

Cat.:34.1- Residue generated from Drum- decontamination plant
During April- 2022 to March – 2023

Month	Residue Generation (MT)
April- 2022	0
May- 2022	0
June -2022	0
July -2022	0
August -2022	0
September -2022	0.30
October -2022	0.35
November-2022	0.45
December -2022	0.75
January- 2023	0.43
February- 2023	0.38
March - 2023	0.31
Total	2.97

**BEIL INFRASTRUCTURE LTD
DAHEJ**

**Wastewater generated from Landfill (Leachate) sent to
MEE at BEIL, Dahej during April- 2022 to March – 2023**

Month	Generated Leachate from land filling Treated in in-house MEE (KL)
April- 2021	648.90
May- 2021	667.20
June -2021	645.40
July -2021	666.50
August -2021	661.70
September -2021	636.00
October -2021	657.20
November-2021	636.00
December -2021	656.70
January- 2022	654.10
February- 2022	590.80
March - 2022	651.70
Total	7772.20

WASTE GENERATION AND DISPOSED DETAILS
MEE Salts & Chemical Sludge from wastewater treatment (MEE plant)

Month	Generation of MEE Salts	Generation of chemical Sludge
April- 2021	627	44.8
May- 2021	553	42.98
June -2021	550	43.1
July -2021	494	43
August -2021	408	43.88
September -2021	473.47	41.26
October -2021	332.66	60.56
November-2021	425.23	23.24
December -2021	515.63	45.88
January- 2022	420.69	56.04
February- 2022	288.82	42.46
March - 2022	425.87	38.03
Total	5514.43	525.23

WASTE GENERATION AND DISPOSED DETAILS
Ash from incinerator

Month	Generation	
	Burnt Ash	Lime Ash
August- 2022	--	--
September- 2022	--	--
October- 2022	70.130	105.230
November-2021	290.350	421.504
December -2021	116.490	304.082
January- 2022	97.150	439.600
February- 2022	106.150	232.520
March - 2022	118.700	119.030
Total	798.97	1,621.966

Note: Generated Ash is disposed of immediately in the Common Secured Landfill Facility after checking its quality as per the acceptance criteria and there is no storage facility. Lime ash is used for stabilization of Landfill waste.

WASTE GENERATION AND DISPOSED DETAILS
Cat.: 5.1 – Used / spent Oil

Month	Opening stock	Generation	Disposed	Closing Stock
All quantity in litres				
Apr-22	324	0		324
May-22	324	3		327
Jun-22	327	0		327
Jul-22	327	0		327
Aug-22	327	5		332
Sep-22	332	0		332
Oct-22	332	5	337	0
Nov-22	0	0		0
Dec-22	0	0		0
Jan-23	0	5		5
Feb-23	5	10		15
Mar-23	15	10		25
Total		38		

INCINERATION DETAILS

QUANTITY OF INCINERABLE WASTE RECEIVED AND DISPOSED OFF
DURING APRIL- 2022 TO MARCH- 2023

Opening Stock- NIL

Month	Waste Received (MT)	Waste Incinerated (MT)
April- 2022	--	--
May- 2022	--	--
June -2022	--	--
July -2022	--	--
August- 2022	75.87	--
September- 2022	378.13	11.75
October- 2022	1816.59	201.12
November-2022	1589.22	403.59
December -2022	889.38	502.26
January- 2023	778.92	773.38
February- 2023	583.21	545.63
March - 2023	594.20	634.76
Total	6,705.52	3,072.49
Closing stock - 3633.03 MT		

Note: Incinerator plant trial run taken in the month of September'22 and October'22 and operation started in the month of November'22.