

**AIL/KUT/ENV/2024-25/17**

**Date : 20.06.2024**

**XGN ID : 17766**

To,  
The Member Secretary,  
Gujarat Pollution Control Board,  
Paryavaran Bhavan, Sector - 10/A,  
Gandhinagar - 382010

**Subject : Environment Statement (Form-V) from April 2023- March 2024.**

Respected Sir,

With reference to the above mentioned subject, please find herewith the Environment Statement for the period April-2023 to March-2024 in Form-V for Aarti Industries Limited (Anushakti Division) located at Plot No.1430/1, N H 8-A, Bhachau-370140, Tal-Bhachau, Dist-Kutch.

We hope you will find the above is in order.

Thanking you,

Yours Faithfully,  
For, Aarti Industries Limited (Anushakti Division)

Authorized Signatory

Encl : as above

CC:

1. The Regional Officer, Gujarat Pollution Control Board, Kutch (East)
2. Unit Head-Kutch(East), Gujarat Pollution Control Board.



BT  
24/6/24  
Gujarat Pollution Control Board  
Head Office  
Sector No. 10-A,  
Gandhinagar 382010



**Form - V**  
(See Rule 14)

From :

**Aarti Industries Limited (Anushakti Division)**  
Plot No.1430/1, N H 8-A, Bhachau-370140, Tal-Bhachau, Dist-Kutch.

To,

**Gujarat Pollution Control Board, Sector 10-A, Gandhinagar - 382010**

**ENVIRONMENTAL STATEMENT**

(For the Financial Year from 1st April' 2023 to 31st March' 2024)

**PART - A**

(i)	Name and address of the owner/occupier of the industry operation or process	:	Mr. Ajay Kumar Gupta Aarti Industries Ltd. (Anushakti Division) Plot No.1430/1, N.H. No. 8-A, Bhachau-370140, Tal-Bhachau, Dist-Kutch.
(ii)	Industry Category - Primary - (STC Code) Secondary - (STC Code)	:	Large Scale
(iii)	Production Capacity Units	:	As per <b>Annexure -1</b>
(iv)	Year of Establishment	:	2004
(v)	Date of Last Environment Statement Submitted	:	28th August, 2023

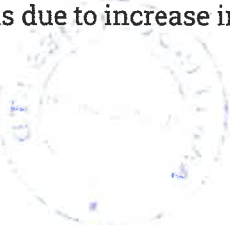
**PART - B**

**Water and Raw Material Consumption**

**1. Water Consumption**

Sr. No.	Particular	During Previous Financial Year (1st April'2022 to 31st March'2023)	During the current Financial Year (1st April' 2023 to 31st March' 2024)
		(KLD)	(KLD)
1.	Water Consumption	902.66	959.63
2.	Process	77.47	97.19
3.	Boiler +Cooling	785	822.12
4.	Domestic	40.19	40.32

\* Unit has obtained Environment Clearance for expansion with EC through EC Identification No. EC23A021GJ167443 Dated 17/06/2023. Unit has obtained a CTO amendment with no AWH-131855 dated 02/02/2024. Hence our fresh water consumption permission increased from 949 KLD to 1903 KLD. The increase in fresh water consumption from 902.66 KLD to 959.63 KLD is due to increase in production quantity.



Sr. No.	Name of Products	Process Water Consumption per unit of product Output(KL/MT)	
		During Previous Financial Year (1st April'2022 to 31st March'2023)	During the current Financial Year (1st April' 2023 to 31st March' 2024)
1.	Chloro products of benzene, toluene	0.816	1.102
2.	Hydrogenated/reduction	-	-
3.	Calcium chloride	-	-
4.	mono nitro derivatives of benzene, chlorobenzene/toluene/xylene/cumene	0.086	0.090
5.	phthalate derivatives	0.189	0.190

\* Unit has installed MEE for better performance of the water treatment facility considering segregation of different effluent streams, hence there is minor increase in specific product wise water consumption.

## 2. Raw Material Consumption

Name of Raw Material	Name of Products	Consumption of raw material per unit of output	
		During Previous Financial Year (1st April'2022 to 31st March'2023)	During the current Financial Year (1st April' 2023 to 31st March' 2024)
Chloro products of benzene, toluene			
Benzene	Dichlorobenzene (PDCB,ODCB & MDCB)	0.55	0.50
Chlorine		1.00	0.91
ODCB	1,2,4 Trichlorobenzene (1,2,4 TCB)	0.78	0.78
Benzene		0.46	0.46
mono nitro derivatives of benzene,chlorobenzene/toluene/xylene/cumene			
ODCB/PDCB	3,4- Dichloro nitrobenzene (3,4- DCNB)	0.78	0.74
Nitric Acid		0.34	0.34



Sulphuric acid		0.38	0.36
Soda solution		0.05	0.05
Spent acid		0.324	0.324
Hydrogenated/Reduction			
Aniline	N-Methyl Aniline (MMA)	0.86	0.87
Methanol		0.28	0.42
Phthalate derivatives			
Methanol	Dimethyl phthalate (DMP)	0.35	0.34
Phthalic anhydride		0.76	0.77
Sulphuric acid		0.012	0.012
Phthalic Anhydride (PA)	Di Octyl phthalate (DOP)	0.38	0.39
2 Ethyl Hexanol		0.66	0.68
Calcium chloride			
Spent HCL	CaCl <sub>2</sub>	2.10	2.18
CaCO <sub>3</sub>		0.96	1.04
Ca(OH) <sub>2</sub>		0.10	0.10

\*Production Quantity attached as in Annexure-1

**PART -C**  
**Pollution Discharged to environment/unit of output**  
(Parameters as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	The unit is a Zero Liquid Discharge Unit. Treated water is recycled back. Therefore no pollution load is added in the environment due to zero discharge of effluent.		
(b) Air			



Stack Attached to	Pollutants	Quantity of Pollutants discharged (Kg/Day)	Concentration of pollutants in discharges (mg/Nm <sup>3</sup> )	Within GPCB Permissible limits
CPP Stack	PM	12.983	21.630	
	SOX	10.192	16.980	
	NOX	12.370	20.610	
Hot Air Generator	PM	10.135	45.460	
	SOX	2.270	10.180	
	NOX	2.885	12.940	
TFH 1 (20 Lakh KCal/Hr)	PM	33.071	60.530	
	SOX	18.674	34.180	
	NOX	13.282	24.310	
TFH 2 (30 Lakh KCal/Hr)	PM	24.157	61.210	
	SOX	13.091	33.170	
	NOX	9.886	25.050	
12 TPH boiler	PM	37.984	56.330	
	SOX	27.728	41.120	
	NOX	17.323	25.690	
15 TPH boiler	PM	19.580	53.570	
	SOX	15.256	41.740	
	NOX	10.662	29.170	
CaCl <sub>2</sub> Dryer vents	PM	58.378	53.140	
Alkali Scrubber of CaCl <sub>2</sub> plant	PM	0.025	5.880	
	HCL	0.016	3.900	
Alkali scrubber of Chlorination plant (HCl stack)	HCl	0.002	5.110	
Alkali Scrubber of Nitration plant	NOx	0.000	1.050	
DG Set 1	PM	0.007	21.310	
	SOX	0.004	12.820	
	NOX	0.009	27.530	
DG Set 2	PM	0.008	21.970	
	SOX	0.004	12.310	
	NOX	0.010	28.610	
TFH 3 (10 Lakh KCal/Hr)	PM	58.950	58.950	
	SOX	8.500	8.500	
	NOX	13.500	13.500	



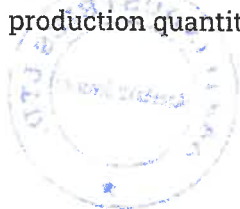
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**PART -D  
Hazardous Wastes**

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

Sr. No.	Hazardous Waste	Total Quantity in Ton	
		During Previous Financial Year (1st April'2022 to 31st March'2023)	During the current Financial Year (1st April' 2023 to 31st March' 2024)
(a) & (b)	Landfill waste Process waste (26.1) and ETP Sludge (35.3)	9646.7	10136.51*
(c)	(1) Quantity recycled or reutilized within the unit.		
	Spent acid (HCl)	64938.00	48784.776
	(2) Used Oil , Barrels/Carboys sent for reuse, Spent acid sent under Rule 9		
	Used Oil (recycle/reuse) MT	5.36	12.32*
	Empty Barrels/ Carboys (Recycle/Reuse) MT	5.7	49.5*
	Spent Acid (HCL)	42.82	0
	Spent Acid (Dilute Sulphuric Acid)	8003.12	3816.750
	(3) Disposed		
	Landfill waste Process waste (26.1) and ETP Sludge (35.3)	9565.882	10136.51* (2112.33 MT to Co-processing and 8024.18 MT to Landfill)
	Insulation waste	20.52	20.09
	Mix waste and liners (Landfill/Incineration)	25.11	11.87
	Mix waste and liners (Co-processing)	-	37.630*

\* Unit has obtained Environment Clearance for expansion with EC through EC Identification No. EC23A021GJ167443 dated 17/06/2023. Unit has obtained a CTO amendment through CCA No AWH-131855 dated 02/02/2024. The increase in hazardous waste is due to an increase in production quantity.





**PART - E**  
**Solid Wastes (Non-Hazardous)**

		Total Quantity in Ton	
		During Previous Financial Year (1st April'2022 to 31st March'2023)	During the current Financial Year (1st April' 2023 to 31st March' 2024)
a.	From Process	NA	NA
b.	From Pollution Control Facilities	NA	NA
c.	(1) Quantity recycled		
	E-Waste	5.58 MT	7.01 MT
	Battery Waste	0	0
	(2) Sold		
	Fly Ash	13825.71 MT	6905.23 MT *
	(3) Disposed	0	0

\* Fly Ash disposal for the reporting period is decreased by using imported grade coal and improving the process conditions.

**PART-F**

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

- Please refer Annexure-2 for waste wise characteristics and disposal methodology.

**PART - G**

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

- We are a Zero liquid discharge unit, all the effluent generated from the plant are treated in ETP, Bioreactor, RO, MEE and ATFD to complete the ZLD process.
- Raw material Drums are utilized for disposal of waste to the Common Incineration Site.
- Use of STP treated water for plantation and gardening purpose
- Unit has diverted waste from incineration/landfill to co-processing.
- We are sending distillation/process residue to co-processing.
- Bag-Filter, Cyclone separator and Wet Scrubber are provided in the Hot Air Generator for the Calcium Chloride Plant.
- Utilization of spent HCl as a resource for manufacturing of export grade CaCl<sub>2</sub>.
- Calcium Chloride sludge generated from the process is being sent to Cement Industries for Co-processing.





- Non recyclable liner bags are sent to the cement industry for co-processing instead of landfilling.
- Raw material Drums are utilized for disposal of waste to the Common Incineration/co-processing Site.
- 100% Fly ash is being sent to the Bricks manufacturing unit.
- Installation of Industrial Shredding machine for shredding of non-contaminated paper waste.

#### PART - H

#### Additional measures/investment proposal for environment protection including abatement of pollution/prevention of pollution

Sr. No.	Particular	Cost (in Rs. Lakhs)
1	Development of Green belt	37
2	Construction of Central Hazardous waste storage facility	300
3	Revamping of ETP System	350

#### PART-I

#### Any other particulars for improving the quality of the environment

- We are continuously developing the Green Belt inside and outside the boundary.
- We are ISO 9001: 2015, ISO 45001:2018, ISO 14001:2015 certified Company.
- We are carrying out Ambient Air Monitoring weekly twice.
- We have prepared the Sustainability Report and Uploaded it on the Company website.
- ICC have awarded Responsible Care Logo.
- The unit has opted for a Together For Sustainability Audit.
- The unit has secured Gold Award in EcoVadis, which is a rating platform to assess corporate social responsibility and sustainable development.
- The unit has installed OCEMS for stack and treated effluent for real time monitoring and the same has been connected to the CPCB portal.
- We are ISO:50001 certified company.
- We have received 14th Exceed Environment Award in the Conference on the theme : "Environment Preservation" by Sustainable Development Foundation - a unit of Ek Kaam Desh Ke Naam.

(Signature of a person carrying out an Industry Operation or process)



Date:- 20.06.2024

Name : **K. Madhusoodhanan**  
Designation : Senior General Manager

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**Annexure-1  
Production Details**

Production Data (MT)							
Month	Cogeneration power plant (CPP) (MWh)	Chlorination of benzene, toluene (Other derivatives)	Mononitro derivatives (Other derivatives)	Hydrogenated/reduction	Phthalate derivatives	Calcium chloride	Physical Separation (MDCB Rich Mixture/ ODCB Rich Mixture)
<b>Capacity</b>							
April 2023	1.780	3036.013	1903.854	4294.908	1596.100	2667.000	0.000
May 2023	1.790	3133.812	850.151	5937.437	1622.000	2029.000	0.000
June 2023	1.256	1428.615	456.017	6799.769	859.000	835.000	0.000
July 2023	1.360	3555.770	485.730	6952.626	1007.500	2735.000	0.000
August 2023	1.910	3507.497	736.295	6821.009	501.000	2467.000	0.000
September 2023	1.810	3064.599	1189.140	6875.960	533.200	1057.000	0.000
October 2023	1.810	3545.985	310.136	11257.250	262.800	1202.000	0.000
November 2023	1.780	2481.522	278.362	9922.359	1285.600	2008.000	0.000
December 2023	1.690	1177.133	271.427	12089.316	1021.100	0.000	0.000
January 2024	1.560	2630.504	415.412	11063.996	1243.200	2050.000	779.566
February 2024	1.650	2064.223	352.881	12430.329	1796.520	2246.000	1200.605
March 2024	1.850	1362.718	938.459	12995.791	1182.400	2110.000	2358.810
<b>Total</b>	<b>1.690</b>	<b>30988.391</b>	<b>8187.864</b>	<b>107440.750</b>	<b>12910.42</b>	<b>21406.000</b>	<b>4338.981</b>



## Annexure-2

### Details of Hazardous Waste and its management

Sr. No.	Category	Waste Type	Composition	Disposal Methodology
1.	35.3	ETP Sludge & MEE/ATFD Salt	Solid	Collection, Storage, Transportation and Disposal at Common TSDF site, Co-processing to cement industry
2.	5.1	Used Oil	Liquid	Collection, storage, Transportation & Disposal by Selling to MoEF registered recyclers/reprocessors.
3.	33.3	Discarded Containers, Barrels, Drums	Solid	Collection, Storage, Transportation and Disposal at Common TSDF site or Selling to Re-processors or co-processing.
4.	26.1	Sludge from Calcium Chloride Plant	Solid	Collection, Storage, Transportation and Disposal at Common TSDF site, Co-processing to cement industry
5.	B 15	Spent HCL	Liquid	Collection, Storage, Transportation & Sold to authorized agency under Rule 9 or inhouse utilization.
6.	B 15	Spent Sulphuric Acid	Liquid	Collection, Storage, Transportation and sold to Authorized agency under Rule 9
	26.1	Process residue	Liquid	Collection, Storage, Transportation and sent to Incineration/Pre/Co-processing at approved facility
	S1	Insulation waste	Solid	Collection, Storage, Transportation and Disposal at TSDF
6.	Z14	Fly Ash	Solid	Collection, Storage, Transportation and Disposal by selling to brick manufacturers.

### Hazardous Waste Generation & disposal Details

Sludge from Calcium Chloride Plant 26.1 (MT)				
Month	Opening stock	Generation	Disposal	Closing stock
Apr'23	211.258	925.000	1065.040	71.218
May'23	71.218	567.000	610.270	27.948
Jun'23	27.948	403.000	24.990	405.958
Jul'23	405.958	574.000	318.750	661.208



Aug'23	661.208	513.000	375.110	799.098
Sep'23	799.098	333.000	175.420	956.678
Oct'23	956.678	685.000	201.150	1440.528
Nov'23	1440.528	552.000	325.240	1667.288
Dec'23	1667.288	320.000	961.730	1025.558
Jan'24	1025.558	830.000	1043.800	811.758
Feb'24	811.758	820.000	1456.830	174.928
Mar'24	174.928	645.000	746.850	73.078
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024)</b>				
<b>FY 23'24</b>	211.258	7167.000	7305.180	73.078

<b>ETP Sludge ---35.3 (MT)</b>				
<b>Month</b>	<b>Opening stock</b>	<b>Generation</b>	<b>Disposal</b>	<b>Closing stock</b>
Apr'23	42.88	1001.10	979.87	64.11
May'23	64.11	284.90	344.00	5.01
Jun'23	5.01	143.40	23.53	124.88
Jul'23	124.88	185.50	0.00	310.38
Aug'23	310.38	184.60	34.59	460.39
Sep'23	460.39	168.50	68.67	560.22
Oct'23	560.22	138.00	69.46	628.76
Nov'23	628.76	128.00	339.71	417.05
Dec'23	417.05	140.00	523.77	33.28
Jan'24	33.28	178.00	169.83	41.45
Feb'24	41.45	132.50	149.89	24.06
Mar'24	24.06	104.00	128.01	0.05
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024)</b>				
<b>FY 23'24</b>	42.88	2788.50	2831.33	0.05

<b>Process Residue 26.1 (MT)</b>				
<b>Month</b>	<b>Opening stock</b>	<b>Generation</b>	<b>Disposal</b>	<b>Closing stock</b>
Apr'23	11.61	2.40	9.70	4.31
May'23	4.31	3.80	0.00	8.11
Jun'23	8.11	3.90	0.00	12.01
Jul'23	12.01	4.00	8.39	7.62





Aug'23	7.62	4.00	0.00	11.62
Sep'23	11.62	5.00	8.78	7.84
Oct'23	7.84	5.40	0.00	13.24
Nov'23	13.24	4.20	0.00	17.44
Dec'23	17.44	15.00	8.71	23.73
Jan'24	23.73	30.00	15.87	37.86
Feb'24	37.86	25.00	31.43	31.43
Mar'24	31.43	29.00	49.94	10.49
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024)</b>				
<b>FY 23'24</b>	11.61	131.70	132.82	10.49

<b>Discarded container/liner/plastic 33.1 (MT)</b>				
<b>Month</b>	<b>Opening stock</b>	<b>Generation</b>	<b>Disposal</b>	<b>Closing stock</b>
Apr'23	2.48	3.00	5.20	0.28
May'23	0.28	2.00	0.00	2.28
Jun'23	2.28	1.45	3.73	0.00
Jul'23	0.00	2.00	0.00	2.00
Aug'23	2.00	4.00	0.00	6.00
Sep'23	6.00	5.00	0.00	11.00
Oct'23	11.00	9.00	16.78	3.22
Nov'23	3.22	8.00	0.00	11.22
Dec'23	11.22	7.00	12.99	5.23
Jan'24	5.23	3.00	3.36	4.87
Feb'24	4.87	2.50	5.08	2.29
Mar'24	2.29	0.07	2.36	0.00
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024)</b>				
<b>FY 23'24</b>	2.48	47.02	49.50	0.00

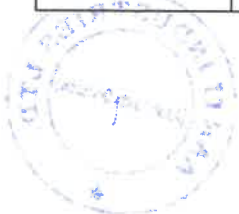
<b>Used Oil -- 5.1 (MT)</b>				
<b>Month</b>	<b>Opening stock</b>	<b>Generation</b>	<b>Disposal</b>	<b>Closing stock</b>
Apr'23	0.00	0.80	0.00	0.80
May'23	0.80	1.05	0.00	1.85
Jun'23	1.85	1.40	0.00	3.25
Jul'23	3.25	1.20	0.00	4.45



Aug'23	4.45	0.95	0.00	5.40
Sep'23	5.40	0.89	3.02	3.27
Oct'23	3.27	1.45	0.00	4.72
Nov'23	4.72	1.10	0.00	5.82
Dec'23	5.82	1.25	6.30	0.77
Jan'24	0.77	2.00	0.00	2.77
Feb'24	2.77	0.23	0.00	3.00
Mar'24	3.00	0.00	3.00	0.00
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024)</b>				
<b>FY 23'24</b>	0.00	12.32	12.32	0.00

<b>Spent HCl - B15 (MT)</b>				
Month	Opening Balance	Generated	Disposed	Closing stock
Apr'23	180.000	5543.000	5611.000	112.000
May'23	112.000	4166.000	4214.065	63.935
Jun'23	63.935	3168.065	3120.000	112.000
Jul'23	112.000	5682.000	5698.128	95.872
Aug'23	95.872	5118.208	5110.080	104.000
Sep'23	104.000	3021.255	3024.724	100.531
Oct'23	100.531	3939.725	3880.200	160.056
Nov'23	160.056	2654.924	2729.544	85.436
Dec'23	85.436	522.764	513.275	94.925
Jan'24	94.925	4359.765	4357.000	97.690
Feb'24	97.690	4414.149	4401.430	110.409
Mar'24	110.409	3830.120	3936.000	4.529
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024) MT</b>				
<b>FY 23'24</b>	180.000	46419.975	46595.446	4.529

<b>Spent HCl - B15 (MT) Reception</b>				
Month	Opening Balance	Reception	Recycle	Closing stock
Apr'23	0.000	0.000	0.000	0.000
May'23	0.000	0.000	0.000	0.000
Jun'23	0.000	0.000	0.000	0.000





Jul'23	0.000	0.000	0.000	0.000
Aug'23	0.000	0.000	0.000	0.000
Sep'23	0.000	0.000	0.000	0.000
Oct'23	0.000	67.690	67.690	0.000
Nov'23	0.000	90.930	62.630	28.300
Dec'23	28.300	521.450	521.450	28.300
Jan'24	28.300	412.150	440.450	0.000
Feb'24	0.000	661.460	661.460	0.000
Mar'24	0.000	435.650	435.650	0.000
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024) MT</b>				
<b>FY 23'24</b>	0.000	2189.330	2189.330	0.000

<b>Spent Sulphuric Acid - B15 (MT)</b>				
<b>Month</b>	<b>Opening Balance</b>	<b>Generated</b>	<b>Disposed</b>	<b>Closing Balance</b>
Apr'23	66.252	907.612	900.950	72.914
May'23	72.914	375.081	395.640	52.355
Jun'23	52.355	227.791	192.840	87.306
Jul'23	87.306	231.917	254.550	64.673
Aug'23	64.673	333.568	282.950	115.291
Sep'23	115.291	471.364	426.860	159.795
Oct'23	159.795	206.548	290.460	75.883
Nov'23	75.883	137.387	93.070	120.200
Dec'23	120.200	120.194	98.960	141.434
Jan'24	141.434	177.325	254.850	63.909
Feb'24	63.909	165.832	131.720	98.021
Mar'24	98.021	494.096	493.880	98.237
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024) MT</b>				
<b>FY 23'24</b>	66.252	3848.715	3816.730	98.237

<b>Insulation Waste (MT)</b>				
<b>Month</b>	<b>Opening Balance</b>	<b>Generated</b>	<b>Disposed</b>	<b>Closing Balance</b>
Apr'23	0	0.000	0.000	0
May'23	0	2.730	2.730	0



Jun'23	0	0.000	0.000	0
Jul'23	0	0.000	0.000	0
Aug'23	0	0.000	0.000	0
Sep'23	0	0.000	0.000	0
Oct'23	0	3.470	3.470	0
Nov'23	0	0.000	0.000	0
Dec'23	0	0.000	0.000	0
Jan'24	0	5.270	5.270	0
Feb'24	0	1.170	1.170	0
Mar'24	0	7.450	7.450	0
<b>Year's Cumulative (1st April - 2023 to 31st March- 2024) MT</b>				
<b>FY 23'24</b>	0	20.090	20.090	0



