



2023 CONTAMINANT SUMMARY REPORT

September 23, 2024

3:26 pm

CN : CN606211746

Organization : KETJEN LIMITED LIABILITY COMPANY

RN : RN100218247

Account : HG0225N

Site : ALBEMARLE HOUSTON PLANT

Last EI Date : 12/31/2023

CRITERIA EMISSIONS TOTALS

Pollutant Class	Annual (TPY)	Ozone (PPD)	SMSS (TPY)	Emiss Event (TPY)	EE/SMSS (TPY)
PM2.5	21.4598	117.5873	0.0000	0.0000	0.0000
VOC	103.8802	569.2767	0.2476	0.2107	0.4583
CO	47.6447	261.0673	0.0000	0.0000	0.0000
NOX	18.2562	100.0346	0.0000	0.0000	0.0000
SO2	0.3421	1.8740	0.0000	0.0000	0.0000
PB	0.0003	0.0014	0.0000	0.0000	0.0000
PM10	21.4624	117.6018	0.0105	0.0482	0.0587

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Contam	Contam Name	Annual (TPY)	Ozone (PPD)	SMSS (TPY)	Emiss Event (TPY)	EE/SMSS (TPY)
10000	PART-U	10.8200	59.2877	0.0000	0.0003	0.0003
11160	HYDROCHLORIC ACID	0.0000	0.0000	0.0000	0.0000	0.0000
11175	SULFURIC ACID	0.0000	0.0000	0.0000	0.0000	0.0000
13040	CELLULOSE	0.0000	0.0000	0.0000	0.0000	0.0000
13045	SAWDUST	0.0000	0.0000	0.0000	0.0000	0.0000
14000	PART-MINERAL-U	0.0000	0.0000	0.0000	0.0000	0.0000
14010	ALUMINUM - AL	7.9944	43.8058	0.0000	0.0000	0.0000
14012	ALUMINUM CHLORIDE- ALCL3	0.0000	0.0000	0.0000	0.0000	0.0000
14014	ALUMINUM HYDROXIDE -ALOH3	0.0000	0.0000	0.0000	0.0000	0.0000
14016	ALUMINM OXIDE- AL2O3	3.1966	17.5143	0.0061	0.0000	0.0061
14160	CHROMIUM-CR	0.0012	0.0064	0.0000	0.0000	0.0000
14165	CHROME- HEXAVALENT	0.0004	0.0024	0.0000	0.0000	0.0000
14170	COBALT-CO	0.0000	0.0000	0.0000	0.0000	0.0000
14203	DIATOMACEOUS EARTH	0.0000	0.0000	0.0000	0.0000	0.0000
14310	LEAD-PB	0.0003	0.0014	0.0000	0.0000	0.0000
14335	MAGNESIUM-MG	0.0005	0.0029	0.0000	0.0000	0.0000
14337	MAGNESITE	0.0000	0.0000	0.0000	0.0000	0.0000
14344	MAGNESIUM OXIDE-MGO	0.0000	0.0000	0.0000	0.0000	0.0000
14350	MANGANESE-MN	0.0012	0.0068	0.0000	0.0000	0.0000
14390	NICKEL-NI	0.0003	0.0015	0.0000	0.0000	0.0000
14488	POTASSIUM OXIDE-K2O	0.0000	0.0000	0.0000	0.0000	0.0000
14570	SAND	0.0000	0.0000	0.0000	0.0000	0.0000
14602	SILICA,CRYSTALLINE	0.0002	0.0010	0.0000	0.0000	0.0000
14620	SODIUM-NA	0.0000	0.0000	0.0000	0.0000	0.0000
14630	SODIUM HYDROXIDE, NAOH	0.6221	3.4130	0.0000	0.0019	0.0019
14730	TITANIUM-TI	0.0000	0.0000	0.0000	0.0000	0.0000
14782	ZINC CHLORIDE-ZNCL2	0.0000	0.0000	0.0000	0.0000	0.0000
14784	ZINC OXIDE-ZNO	0.0000	0.0000	0.0000	0.0000	0.0000



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Contam	Contam Name	Annual (TPY)	Ozone (PPD)	SMSS (TPY)	Emiss Event (TPY)	EE/SMSS (TPY)
15000	ORGANO METAL - U	0.0000	0.0000	0.0000	0.0000	0.0000
20000	PM10 PART-U	10.2707	56.2778	0.0000	0.0000	0.0000
24010	PM10 ALUMINUM - AL	7.9944	43.8058	0.0044	0.0018	0.0062
24016	PM10 ALUMINM OXIDE- AL2O3	3.1966	17.5143	0.0061	0.0464	0.0525
24203	PM10 DIATOMACEOUS EARTH	0.0000	0.0000	0.0000	0.0000	0.0000
24335	PM10 MAGNESIUM-MG	0.0005	0.0029	0.0000	0.0000	0.0000
24344	PM10 MAGNESIUM OXIDE-MGO	0.0000	0.0000	0.0000	0.0000	0.0000
24488	PM10 POTASSIUM OXIDE-K2O	0.0000	0.0000	0.0000	0.0000	0.0000
24570	PM10 SAND	0.0000	0.0000	0.0000	0.0000	0.0000
24602	PM10 SILICA,CRYSTALLINE	0.0002	0.0010	0.0000	0.0000	0.0000
24620	PM10 SODIUM-NA	0.0000	0.0000	0.0000	0.0000	0.0000
24784	PM10 ZINC OXIDE-ZNO	0.0000	0.0000	0.0000	0.0000	0.0000
39999	TOTAL PM2.5 PARTICULATE	21.4598	117.5873	0.0000	0.0000	0.0000
50001	VOC-UNCLASSIFIED	10.3579	56.7643	0.0479	0.0142	0.0621
51200	MALEIC ACID	0.0000	0.0000	0.0000	0.0000	0.0000
51400	ALCOHOLS-U	0.0000	0.0000	0.0000	0.0000	0.0000
51440	N-BUTYL ALCOHOL	0.0000	0.0000	0.0000	0.0000	0.0000
51460	ETHANOL	0.0000	0.0000	0.0000	0.0000	0.0000
51470	GLYCOLS-U	0.0000	0.0000	0.0000	0.0000	0.0000
51471	ETHYLENE GLYCOL	0.0000	0.0000	0.0000	0.0000	0.0000
51490	ISOBUTANOL	0.0000	0.0000	0.0000	0.0000	0.0000
51520	HEXANOL	0.0000	0.0000	0.0000	0.0000	0.0000
51600	ALDEHYDES-U	0.0158	0.0860	0.0000	0.0000	0.0000
52002	DIPHENYL ETHER	3.6402	19.9574	0.0010	0.0634	0.0644
52200	AMINES-U	3.4368	18.8567	0.0024	0.0029	0.0053
52220	ANILINE-U	0.1752	0.9596	0.0000	0.0004	0.0004
52232	2-METHYL-6-ETHYLANILINE	2.7898	15.2862	0.0000	0.0022	0.0022
52233	2,6-DIETHYLANILINE	0.5984	3.2840	0.0000	0.0000	0.0000
52250	DIETHYLAMINE	0.0000	0.0000	0.0000	0.0000	0.0000
52282	TRIETHANOLAMINE	0.0000	0.0000	0.0000	0.0000	0.0000
52320	N- PROPYLAMINE	0.0000	0.0000	0.0000	0.0000	0.0000
52375	TOLUENE-2,4-DIAMINE	0.6733	3.6950	0.0001	0.0023	0.0024
52400	AROMATICS-U	0.0000	0.0000	0.0000	0.0000	0.0000
52433	DIETHYL BENZENE	0.4744	2.5992	0.0000	0.0000	0.0000
52451	CHLORINATED DIPHENYL OXIDES	0.0000	0.0000	0.0000	0.0000	0.0000
52475	BIPHENYL	1.3215	7.2452	0.0009	0.0232	0.0241
52485	TERPENE	0.0000	0.0000	0.0000	0.0000	0.0000
52490	TOLUENE	0.2243	1.2276	0.0004	0.0003	0.0007



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Contam	Contam Name	Annual (TPY)	Ozone (PPD)	SMSS (TPY)	Emiss Event (TPY)	EE/SMSS (TPY)
52499	O-TOLUIDINE	1.7502	9.5926	0.0027	0.0009	0.0036
52600	ESTERS-U	0.0000	0.0000	0.0000	0.0000	0.0000
52821	BUTYL CARBITOL	0.0000	0.0000	0.0000	0.0000	0.0000
52950	PHENYL ETHER VAPOR	0.0000	0.0000	0.0000	0.0000	0.0000
53104	1,1,1,2-TETRAFLUOROETHANE	0.0000	0.0000	0.0000	0.0000	0.0000
53250	METHYLENE CHLORIDE	0.0000	0.0000	0.0000	0.0000	0.0000
53260	ETHYL CHLORIDE	0.9845	5.3946	0.0198	0.0000	0.0198
53280	METHYL CHLORIDE	0.8232	4.5113	0.0178	0.0402	0.0580
53300	N BUTYL CHLORIDE	0.2462	1.3491	0.0179	0.0000	0.0179
53400	FLUOROCARBONS-U	0.0000	0.0000	0.0000	0.0000	0.0000
53450	FREONS-U	0.0000	0.0000	0.0000	0.0000	0.0000
53527	TRIFLUOROMONOBROMOMETHANE	0.0000	0.0000	0.0000	0.0245	0.0245
54020	ACETONE	0.0000	0.0000	0.0000	0.0000	0.0000
55000	OLEFINS-U	0.0000	0.0000	0.0000	0.0000	0.0000
55003	DECENE,1-	1.1375	6.2330	0.0000	0.0001	0.0001
55150	1,3- BUTADIENE	0.0000	0.0000	0.0000	0.0000	0.0000
55175	BUTENE	0.0000	0.0000	0.0000	0.0000	0.0000
55176	1-BUTENE	3.2952	18.0561	0.0187	0.0010	0.0197
55177	CIS-2-BUTENE	0.0021	0.0112	0.0000	0.0000	0.0000
55178	ISOBUTENE	0.0280	0.1536	0.0000	0.0000	0.0000
55179	TRANS-2-BUTENE	0.0019	0.0103	0.0000	0.0000	0.0000
55250	DODECENE	0.0000	0.0000	0.0000	0.0000	0.0000
55300	ETHYLENE	24.8592	136.2270	0.0014	0.0234	0.0248
55400	ISOBUTYLENE	3.2793	17.9688	0.0019	0.0000	0.0019
55500	PENTADIENE	0.0000	0.0000	0.0000	0.0000	0.0000
55600	PROPYLENE	0.0014	0.0075	0.0000	0.0000	0.0000
56000	PARAFFINS-U	0.0000	0.0000	0.0000	0.0000	0.0000
56050	CYCLOHEXANE	0.8159	4.4706	0.0000	0.0005	0.0005
56200	METHYLCYCLOPENTANE	0.0357	0.1955	0.0000	0.0000	0.0000
56500	PARAFFIN LINEAR-U	0.0000	0.0000	0.0000	0.0000	0.0000
56524	2,3-DIMETHYLBUTANE	0.0021	0.0119	0.0000	0.0000	0.0000
56526	DIMETHYL BUTANE 2,2	0.0000	0.0000	0.0000	0.0000	0.0000
56528	ISOHEXANE AKA 2-METHYLPENTANE	4.8030	26.3154	0.0000	0.0004	0.0004
56550	ETHANE	20.1799	110.5819	0.0000	0.0006	0.0006
56575	HEPTANE	2.5139	13.7754	0.0001	0.0001	0.0002
56590	HEXENE	1.9961	10.9384	0.0002	0.0000	0.0002
56600	HEXANE	2.1121	11.5724	0.0007	0.0010	0.0017
56601	METHYL PENTANE 3	0.0000	0.0000	0.0000	0.0000	0.0000



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56625	ISOBUTANE	5.7040	31.2556	0.0000	0.0036	0.0036
56673	OCTENE	3.4852	19.0993	0.0001	0.0016	0.0017
56674	OCTANE	1.8074	9.9026	0.0000	0.0009	0.0009
56675	ISO OCTANE	0.0000	0.0000	0.0000	0.0000	0.0000
56680	DECANE	0.2214	1.2126	0.0000	0.0000	0.0000
56681	DODECANE	0.1046	0.5731	0.0000	0.0000	0.0000
56700	ISO PENTANE	6.1983	33.9625	0.1088	0.0008	0.1096
56725	N BUTANE	7.9047	43.3159	0.0000	0.0000	0.0000
56730	N-HEXANE	1.4990	8.2131	0.0000	0.0000	0.0000
56750	PENTANE	0.0973	0.5332	0.0000	0.0000	0.0000
56775	PROPANE	0.1298	0.7116	0.0000	0.0000	0.0000
56780	1-PHENYLPROPANE	0.0000	0.0000	0.0000	0.0000	0.0000
58460	MALEIC ANHYDRIDE	0.0000	0.0000	0.0000	0.0000	0.0000
58799	DIMETHYL SULFIDE	0.0000	0.0000	0.0000	0.0000	0.0000
59000	VOC GAS MIXTURE-U	4.8278	26.4538	0.0000	0.0000	0.0000
59003	GASOLINE	0.8775	4.8081	0.0000	0.0000	0.0000
59005	KEROSENE	2.0146	11.0405	0.0048	0.0050	0.0098
59006	MINERAL OIL	0.0000	0.0000	0.0000	0.0000	0.0000
59150	DIESEL	0.0017	0.0091	0.0000	0.0000	0.0000
59305	NAPHTHA, PETROLEUM, HYDRO TREAT LT	0.0000	0.0000	0.0000	0.0000	0.0000
59835	N,N-DIETHYL ANILINE	0.0000	0.0000	0.0000	0.0000	0.0000
70000	INORGANIC GASES-U	0.0000	0.0000	0.0000	0.0000	0.0000
70030	HYDROGEN	0.3432	1.8808	0.0000	0.0000	0.0000
70050	AMMONIA	1.3211	7.2391	0.0000	0.0000	0.0000
70110	CHLORINE	0.0000	0.0000	0.0000	0.0000	0.0000
70175	HYDROGEN BROMIDE, HBR	0.0000	0.0000	0.0000	0.0000	0.0000
70200	HYDROGEN CHLORIDE	5.7608	31.5663	0.9944	1.2800	2.2744
70400	NITROGEN OXIDES	18.2562	100.0346	0.0000	0.0000	0.0000
70402	NITROGEN DIOXIDE	0.0000	0.0000	0.0000	0.0000	0.0000
70403	NITROUS OXIDE	0.0000	0.0000	0.0000	0.0000	0.0000
70500	SULFUR OXIDE-U	0.0000	0.0000	0.0000	0.0000	0.0000
70510	SULFUR DIOXIDE	0.3421	1.8740	0.0000	0.0000	0.0000
70515	SULFUR TRIOXIDE	0.0000	0.0000	0.0000	0.0000	0.0000
70516	SULFURIC ACID VAPOR	0.0000	0.0000	0.0000	0.0000	0.0000
75000	NITROGEN TRIFLUORIDE	0.0000	0.0000	0.0000	0.0000	0.0000
80500	NITROGEN	2.9421	16.1207	0.0000	0.0000	0.0000
90300	CARBON MONOXIDE	47.6447	261.0673	0.0000	0.0000	0.0000



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11160	HYDROCHLORIC ACID	0.0000	0.0000	0.0000	0.0000	0.0000
14160	CHROMIUM-CR	0.0012	0.0064	0.0000	0.0000	0.0000
14165	CHROME- HEXAVALENT	0.0004	0.0024	0.0000	0.0000	0.0000
14170	COBALT-CO	0.0000	0.0000	0.0000	0.0000	0.0000
14310	LEAD-PB	0.0003	0.0014	0.0000	0.0000	0.0000
14350	MANGANESE-MN	0.0012	0.0068	0.0000	0.0000	0.0000
14390	NICKEL-NI	0.0003	0.0015	0.0000	0.0000	0.0000
51471	ETHYLENE GLYCOL	0.0000	0.0000	0.0000	0.0000	0.0000
52375	TOLUENE-2,4-DIAMINE	0.6733	3.6950	0.0001	0.0023	0.0024
52451	CHLORINATED DIPHENYL OXIDES	0.0000	0.0000	0.0000	0.0000	0.0000
52475	BIPHENYL	1.3215	7.2452	0.0009	0.0232	0.0241
52490	TOLUENE	0.2243	1.2276	0.0004	0.0003	0.0007
52499	O-TOLUIDINE	1.7502	9.5926	0.0027	0.0009	0.0036
52821	BUTYL CARBITOL	0.0000	0.0000	0.0000	0.0000	0.0000
52950	PHENYL ETHER VAPOR	0.0000	0.0000	0.0000	0.0000	0.0000
53250	METHYLENE CHLORIDE	0.0000	0.0000	0.0000	0.0000	0.0000
53260	ETHYL CHLORIDE	0.9845	5.3946	0.0198	0.0000	0.0198
53280	METHYL CHLORIDE	0.8232	4.5113	0.0178	0.0402	0.0580
55150	1,3- BUTADIENE	0.0000	0.0000	0.0000	0.0000	0.0000
56600	HEXANE	2.1121	11.5724	0.0007	0.0010	0.0017
56730	N-HEXANE	1.4990	8.2131	0.0000	0.0000	0.0000
58460	MALEIC ANHYDRIDE	0.0000	0.0000	0.0000	0.0000	0.0000
59835	N,N-DIETHYL ANILINE	0.0000	0.0000	0.0000	0.0000	0.0000
70110	CHLORINE	0.0000	0.0000	0.0000	0.0000	0.0000
70200	HYDROGEN CHLORIDE	5.7608	31.5663	0.9944	1.2800	2.2744
Total		15.1523	83.0366	1.0368	1.3479	2.3847