EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 5064 and N001

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
E-1	Carbon Adsorption Unit	VOC	67.11	23.50
E-2	Carbon Adsorption Unit	VOC	9.92	1.40
E-3	Carbon Adsorption Unit	VOC	26.92	3.80
E-4	Incinerator Train I (4)	NO_x	--	(5)
		CO 13.60	54.70	
		SO_2	6.40	25.80
		PM_{10}	23.94	96.50
		HCl 4.00	17.52	
		Cl_2 0.25	1.01	
		As 0.03	0.14	
		Ag 0.05	0.22	
		Ba 2.80	12.09	
		Be 0.005	0.02	
		Cd 0.05	0.22	
		Cr 0.05	0.22	
		Hg 0.28	1.21	
		Ni 0.03	0.12	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		Pb 1.50	6.04	
		Sb 2.80	12.09	
		Tl 0.50	2.02	
		Vinyl Chloride	0.45	1.81
		Total Organics	--	0.85
		Total Dioxin/Furans	2.88 E-5	1.26 E-4
		Total PCB	2.35 E-3	9.47 E-3
E-4	Incinerator Train II (4)	NO_x	--	(5)
		CO 20.40	82.10	
		SO_2	9.60	38.70
		PM_{10}	35.91	144.67
	PM_{10} (6)	71.82	144.78	
		HCl	4.00	17.52
		Cl_2 0.38	0.44	
		As 0.03	0.14	
		Ag 0.05	0.22	
		Ba 2.80	12.09	
		Be 0.005	0.02	
		Cd 0.05	0.22	
		Cr 0.05	0.22	
		Hg 0.28	1.21	
		Ni 0.05	0.20	
		Pb 1.42	5.72	
		Sb 2.80	12.09	
		Tl 0.50	2.02	
		Vinyl Chloride	0.67	2.70
		Total Organics	–	2.29
		Total Dioxin/Furans	2.46 E-5	1.08 E-4
		Total PCB	2.35 E-3	9.47 E-3

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
E-4	Incinerator Trains I and II (4)	NO_x	134.00	261.80 (5)
		CO	34.00	136.80
		SO_2	16.00	65.00
		PM_{10}	59.85	241.17
		PM_{10} (6)	95.76	241.28
		HCl	8.00	35.04
		Cl_2	0.63	1.45
		As	0.06	0.24
		Ag	0.09	0.41
		Ba	4.50	19.71
		Be	0.01	0.04
		Cd	0.10	0.44
		Cr	0.09	0.41
		Hg	0.45	1.97
		Ni	0.08	0.32
		Pb	2.50	10.07
		Sb	4.50	19.71
		Tl	0.93	4.04
		Vinyl Chloride	1.12	4.51
		Total Organics	–	3.14
		Total Dioxins/Furans	5.34 E-5	2.34 E-4
		Total PCB	2.35 E-3	9.47 E-3

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
E-4-I	Incinerator Train I (7)	NO_x	134.00	130.90 (5)
		CO 13.60	54.70	
		SO_2	6.40	25.80
		PM_{10}	6.29	27.55
		HCl 4.00	17.52	
		Cl_2 0.25	1.01	
		As/Be/Cr	1.80 E-2	7.88 E-2
		Ag 0.05	0.22	
		Ba 2.80	12.09	
		Cd/Pb 4.44 E-2	0.19	
		Hg 2.41 E-2	0.11	
		Ni 0.03	0.12	
		Sb 2.80	12.09	
		Tl 0.50	2.02	
		Vinyl Chloride	0.45	1.81
		Total Organics	--	0.85
		Total Dioxin/Furans	7.41 E-8	3.25 E-7
		Total PCB	2.35 E-3	9.47 E-3
		NH_3 1.38	6.04	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
E-4-II	Incinerator Train II (7)	NO_x	134.00	130.90 (5)
		CO 20.40	82.10	
		SO_2	9.60	38.70
		PM_{10}	6.29	27.55
	HCl	4.00	17.52	
		Cl_2 0.38	0.44	
		As/Be/Cr	1.80 E-2	7.88 E-2
		Ag 0.05	0.22	
		Ba 2.80	12.09	
		Cd/Pb 4.44 E-2	0.19	
		Hg 2.41 E-2	0.11	
		Ni 0.05	0.20	
		Sb 2.80	12.09	
		Tl 0.50	2.02	
		Vinyl Chloride	0.67	2.70
		Total Organics	–	2.29
		Total Dioxin/Furans	7.41 E-8	3.25 E-7
		Total PCB	2.35 E-3	9.47 E-3
		NH_3 1.38	6.04	
BCO-1	Blasting/Coating	VOC	5.94	6.32
		PM 20.40	17.99	
E-5	PCB Shredder	VOC	0.01	0.01
E-6	South Landfill Leachate Collection System	VOC	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
F-2	North Landfill (Active Area)	VOC	2.14	9.38
F-3	North Landfill (Exposed Area)	VOC	4.76	6.19
		PM_{30}	0.40	0.52
F-4	Paved Roads	PM_{30}	5.44	8.50
F-5	Unpaved Roads	PM_{30}	4.37	6.55
5	Lime Storage Silo	PM_{30}	0.24	0.06
D-1	1,215-HP Diesel Generator	VOC	0.86	0.03
		NO_x	29.16	0.73
		SO_2	0.49	0.02
		PM_{10}	0.20	0.01
		CO	6.69	0.17
D-2	1,215-HP Diesel Generator	VOC	0.86	0.03
		NO_x	29.16	0.73
		SO_2	0.49	0.02
		PM_{10}	0.20	0.01
		CO	6.69	0.17
D-3	1,215-HP Diesel Generator	VOC	0.86	0.03
		NO_x	29.16	0.73
		SO_2	0.49	0.02
		PM_{10}	0.20	0.01
		CO	6.69	0.17
D-4	1,215-HP Diesel Generator	VOC	0.86	0.03
		NO_x	29.16	0.73
		SO_2	0.49	0.02
		PM_{10}	0.20	0.01
		CO	6.69	0.17

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
G-1	North Fire Water Pump	VOC	0.76	0.02
		NO_x	9.30	0.24
		SO_2	0.62	0.02
		PM_{10}	0.66	0.02
		CO	2.01	0.05
G-2	South Fire Water Pump	VOC	0.72	0.02
		NO_x	8.84	0.23
		SO_2	0.59	0.02
		PM_{10}	0.63	0.02
		CO	1.91	0.05
FU-1	Fugitive Equipment Leaks	VOC	0.44	1.92
		NH_3	0.01	0.06
FU-2	Carbon Adsorption Units for Groundwater Treatment	VOC	0.01	0.01
T-150	Wastewater Tank	VOC	2.76	3.72
SE-1	S and E Baghouse Vents	PM_{10}	7.20	4.32
SE-2	S and E Silo Vent V-1205	PM_{10}	0.05	0.01
SE-3	S and E Silo Vent V-1206	PM_{10}	0.05	0.01
SE-4	S and E Silo Vent V-1207	PM_{10}	0.05	0.01
SE-5	S and E Silo Vent V-1208	PM_{10}	0.05	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
RRR-1	Rotary Reagent BIN F-611	PM_{10}	0.51	0.02
RRR-2	Rotary Reagent BIN F-612	PM_{10}	0.51	0.03
RRR-3	Rotary Reagent BIN F-613	PM_{10}	0.51	0.01
RRR-4	Rotary Reagent BIN F-622	PM_{10}	0.51	0.01
RRR-5	Rotary Reagent BIN F-623	PM_{10}	0.51	0.03
RRR-6	Rotary Reagent BIN F-624	PM_{10}	0.51	0.02
B-1	Boiler	VOC	0.02	0.09
		NO_x 0.42	1.84	
		SO_2 0.06	0.26	
		PM_{10} 0.03	0.13	
		CO 0.35	1.53	
B-2	Boiler	VOC	0.02	0.09
		NO_x 0.42	1.84	
		SO_2 0.06	0.26	
		PM_{10} 0.03	0.13	
		CO 0.35	1.53	

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
(2) Specific point source names. For fugitive sources use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1
NO_x - total oxides of nitrogen

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**

CO - carbon monoxide
SO_2 - sulfur dioxide
PM - particulate matter, suspended in the atmosphere, including PM_{10}
PM_{10} - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
HCl - hydrogen chloride
Cl_2 - chlorine
As - arsenic
Ag - silver
Ba - barium
Be - beryllium
Cd - cadmium
Cr - chromium
Hg - mercury
Ni - nickel
NH_3 - ammonia
Pb - lead
Sb - antimony
Tl - thallium
PCB - polychlorinated biphenyls
PM_{30} - particulate matter equal to or less than 30 microns in diameter

(4) Allowables for Incinerator Trains I and II until September 29, 2004.

(5) Clean Harbors Deer Park, L.P., is also subject to the Mass Emissions Cap and Trade Program as outlined in 30 TAC § 101.351. The Mass Cap and Trade Program limits annual NO_x emissions to a prescribed schedule of allowances, which are lower than the existing permit allowables.

(6**)** Emission rate is limited to testing of particulate emissions while varying the pressure drop across the Calvert collision scrubbers as described in the Calvert Test Plan submitted August 14, 2000.

(7) No later than September 30, 2004, a wet electrostatic precipitator system and a Selective Catalytic Reduction ~~(SCR?)~~ De-NO_x system shall be operational on each of the incinerator trains resulting in these allowables. In addition, each of the two incinerator trains will have a separate stack.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- Engines at 50 hours per year total.
- Pumps at 50 hours per year each.
- All emission rates are based on continuous operation.

** Compliance with annual emission limits is based on a rolling 12-month period. The annual emission limit for EPN E-4 is based on the calendar year. Emissions of air contaminants from EPN E-4 are permitted under NA and State.

Dated August 4, 2003