

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 9347 and PSDTX285M5

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, sources, and related activities. 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	
			lbs/hour	TPY (4)
Plant 1				
DR401D	PVC Dryer	PM	1.80	
		PM ₁₀	1.80	
		PM _{2.5}	1.80	
		NVOC	8.50	
		VCM	5.10	
DR401E	PVC Dryer	PM	1.80	
		PM ₁₀	1.80	
		PM _{2.5}	1.80	
		NVOC	8.50	
		VCM	5.10	
DR401F	PVC Dryer	PM	1.80	
		PM ₁₀	1.80	
		PM _{2.5}	1.80	
		NVOC	8.50	
		VCM	5.10	
DR401G	PVC Dryer	PM	1.80	
		PM ₁₀	1.80	
		PM _{2.5}	1.80	

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		NVVO	8.50	
		VCM	5.10	
LV-5	VCM Incinerator	CO	0.10	
		HCl	0.20	
		Cl ₂	0.02	
		NO _x	2.10	
		VCM	0.10	
		PM	0.20	
		PM ₁₀	0.20	
		PM _{2.5}	0.20	
		SO ₂	0.01	
		Dioxin/Furan (10)	<0.01	
		THC (10)	<0.01	
		VOC	0.03	
TK116	VOC Tank	VOC	0.34	
TK117	VOC Tank	VOC	0.34	
TK124	VOC Tank	VOC	1.84	
TK115	VOC Tank	VOC	0.24	
TK123	VOC Tank	VOC	0.85	
TK502A, TK502B, TK502C, TK502D, TK503A, TK503C, TK503D, TK503E, TK551A, TK551E	Plant 1 Silos	PM	3.58	
		PM ₁₀	3.58	
		PM _{2.5}	3.58	
		VCM	2.80	

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TK503B	PVC Loading Silo	PM	0.35	
		PM ₁₀	0.35	
		PM _{2.5}	0.35	
		VCM	0.30	
TK510	PVC Storage Silo	PM	0.18	
		PM ₁₀	0.18	
		PM _{2.5}	0.18	
		VCM	0.01	
TK561A	PVC Storage Silo	PM	0.19	
		PM ₁₀	0.19	
		PM _{2.5}	0.19	
		VCM	0.60	
TK561B	PVC Storage Silo	PM	0.19	
		PM ₁₀	0.19	
		PM _{2.5}	0.19	
		VCM	0.60	
TK561C	PVC Storage Silo	PM	0.25	
		PM ₁₀	0.25	
		PM _{2.5}	0.25	
		VCM	0.60	
UN752A	Boiler	CO	13.14	
		NO _x	4.38	
		PM	0.61	

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		PM ₁₀	0.61	
		PM _{2.5}	0.61	
		SO ₂	1.04	
		VOC	0.39	
UN752B	Boiler	CO	13.14	
		NO _x	4.38	
		PM	0.61	
		PM ₁₀	0.61	
		PM _{2.5}	0.61	
		SO ₂	1.04	
		VOC	0.39	
UN752D	Boiler	CO	1.08	
		NO _x	0.90	
		PM	0.50	
		PM ₁₀	0.50	
		PM _{2.5}	0.50	
		SO ₂	0.85	
		VOC	0.32	
P1FUG	Plant 1 Fugitives (5)	VCM	1.11	
		NVOC	0.58	
		Exempt Solvent	0.01	
		Inorganic Salt Solution	0.15	
PL1BIO (6)	Biological Treatment	VOC	1.08	

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		VCM	0.15	
CF-401D (6)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-401E (6)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-401F (6)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-401G (6)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-402D (6)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-402E (6)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-402F (6)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-402G (6)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
TK-455D (6)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
TK-455E (6)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
TK-455F (6)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	

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TK-455G (6)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
RAILWASH1	Railcar Washing	VOC	0.184	0.17
HL-301	Gas Holder	VOC	0.15	
HL-302	Gas Holder	VOC	0.09	
PIT-684 (6)	Equalization Pit	VOC	1.56	
CL-681 (6)	Waste Water Clarifier	VOC	0.05	
PIT-690 (6)	Clarified Wastewater Pit	VOC	0.01	
PIT-687&688 (6)	No. 1 & 2 pH Adjustment Pits	VOC	0.01	
PIT-689 (6)	Post Aeration/Final Pit	VOC	0.01	
TK-418 (6)	Coagulation Tank	VOC	0.31	
FL-407A/B/C (6)	Gravity Filters (A,B,C)	VOC	0.10	
TK-419 (6)	Clearwell Tank	VOC	0.02	
TK-414 (6)	RDW Tank	VOC	0.02	
TK-420 (6)	RDW Cushion (overflow) Tank	VOC	0.01	
PIT-451 (6)	SH-C Pit	VOC	0.02	
PIT-681 (6)	Extended Aeration Lagoon	VOC	0.88	
PIT-682 (6)	Settling Pit	VOC	0.01	
CL-661 (6)	Raw Water Clarifier	VOC	0.01	
WASTEWTR1	Wastewater Annual Cap	VOC		5.59
		Cl ₂		1.16
Plant 2				
DR-2401A	PVC Dryer	PM	1.76	

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		PM ₁₀	1.76	
		PM _{2.5}	1.76	
		NVOC	8.50	
		VCM	6.80	
DR-2401B	PVC Dryer	PM	1.76	
		PM ₁₀	1.76	
		PM _{2.5}	1.76	
		NVOC	8.50	
		VCM	6.80	
DR-2401C	PVC Dryer	PM	1.80	
		PM ₁₀	1.80	
		PM _{2.5}	1.80	
		NVOC	10.00	
		VCM	8.00	
TK551B, TK551C, TK551D, TK553A, TK553B, TK2503A, TK2503B, TK2503C TK2503D, TK2503E, TK2503F, TK2503G, TK2503H, TK2503I	Plant 2 Silos	PM	2.95	
		PM ₁₀	2.95	
		PM _{2.5}	2.95	
		VCM	2.10	
UNLDGA	VCM Unloading	VCM	0.02	
UNLDGB	VCM Unloading	VCM	0.02	
UNLDGC	VCM Unloading	VCM	0.02	
UNLDGD	VCM Unloading	VCM	0.02	
UNLDGE	VCM Unloading	VCM	0.02	

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UNLDGF	VCM Unloading	VCM	0.02	
UNLDGG	VCM Unloading	VCM	0.02	
UNLDGH	VCM Unloading	VCM	0.02	
UNLDGJ	VCM Unloading	VCM	0.02	
UNLDGK	VCM Unloading	VCM	0.02	
UNLDGL	VCM Unloading	VCM	0.02	
UNLDGM	VCM Unloading	VCM	0.02	
UN2701A	Boiler	PM	0.63	
		PM ₁₀	0.63	
		PM _{2.5}	0.63	
		VOC	0.41	
		NO _x	4.56	
		SO ₂	1.09	
		CO	8.36	
UN2701B	Boiler	PM	0.63	
		PM ₁₀	0.63	
		PM _{2.5}	0.63	
		VOC	0.41	
		NO _x	4.56	
		SO ₂	1.09	
		CO	8.36	
UN2701C	Boiler	PM	0.63	
		PM ₁₀	0.63	

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		PM _{2.5}	0.63	
		VOC	0.41	
		NO _x	4.56	
		SO ₂	1.09	
		CO	8.36	
UN2703A	VCM Incinerator	PM	0.20	
		PM ₁₀	0.20	
		PM _{2.5}	0.20	
		NO _x	2.10	
		SO ₂	0.01	
		CO	0.16	
		VCM	0.60	
		HCl	0.20	
		Cl ₂	0.02	
		Dioxin/Furan (10)	<0.01	
		THC (10)	<0.01	
		VOC	0.03	
UN2703B	VCM Incinerator	PM	0.20	
		PM ₁₀	0.20	
		PM _{2.5}	0.20	
		NO _x	2.10	
		SO ₂	0.01	
		CO	0.16	

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		VCM	0.60	
		HCl	0.20	
		Cl ₂	0.02	
		Dioxin/Furan (10)	<0.01	
		THC (10)	<0.01	
		VOC	0.03	
P2FUG	Plant 2 Fugitives (5)	VCM	1.81	
		NVVOG	0.25	
		Exempt Solvent	0.17	
		Inorganic Salt Solution	0.15	
PL2BIO (7)	Biological Treatment	NVVOG	1.43	
		VCM	0.15	
TK2115A	VOC Storage Tank	VOC	0.01	
TK2115B	VOC Storage Tank	VOC	0.01	
TK2131	VOC Storage Tank	VOC	7.86	
TK2132	VOC Storage Tank	VOC	1.79	
TK2133	VOC Storage Tank	VOC	17.50	
CF-2401A (7)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-2401B (7)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-2401C (7)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	

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CF-2402A (7)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-2402B (7)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-2402C (7)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
TK-2455A (7)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
TK-2455B (7)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
TK-2455C (7)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
HL-2301	Gas Holder	VOC	0.18	
HL-2302	Gas Holder	VOC	0.12	
PIT-2687 (7)	Equalization Pit	VOC	0.53	
CL-2681 (7)	Waste Water Pit	VOC	0.04	
PIT-2691 (7)	Clarifying Pit	VOC	0.01	
PIT-2686 (7)	Post Aeration and Neutralization Pit	VOC	0.01	
PIT-2685 (7)	Final Pit	VOC	0.01	
TK-2691 (7)	Coagulation Tank	VOC	0.01	
FL-2691A/B/C (7)	Gravity Filters (A,B,C)	VOC	0.39	
TK-2693 (7)	Clearwell Tank	VOC	0.04	
TK-2651 (7)	RDW Tank	VOC	0.03	

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PIT-2690 (7)	Effluent Pit	VOC	0.03	
WASTEWTR2	Wastewater Annual Cap	VOC		3.81
		Cl ₂		0.87
Plant 3				
DR3401A	PVC Dryer	NVOC	11.50	
		PM	2.05	
		PM ₁₀	2.05	
		PM _{2.5}	2.05	
		VCM	6.90	
DR3401B	PVC Dryer	NVOC	11.50	
		PM	2.05	
		PM ₁₀	2.05	
		PM _{2.5}	2.05	
		VCM	6.90	
DR3401C	PVC Dryer	NVOC	13.13	
		PM	2.40	
		PM ₁₀	2.40	
		PM _{2.5}	2.40	
		VCM	7.88	
TK3503A, TK3503B, TK3503C, TK3503D, TK3503E, TK3503F, TK3503G, TK3503H, TK3503I	Plant 3 Silos	PM	1.44	
		PM ₁₀	1.44	
		PM _{2.5}	1.44	
		VCM	0.90	

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UN3701A	Boiler	CO	1.31	
		NO _x	1.10	
		PM	0.63	
		PM ₁₀	0.63	
		PM _{2.5}	0.63	
		SO ₂	1.04	
		VOC	0.39	
UN3701B	Boiler	CO	1.10	
		NO _x	4.63	
		PM	0.63	
		PM ₁₀	0.63	
		PM _{2.5}	0.63	
		SO ₂	1.04	
		VOC	0.39	
UN3701C	Boiler	CO	1.10	
		NO _x	4.63	
		PM	0.63	
		PM ₁₀	0.63	
		PM _{2.5}	0.63	
		SO ₂	1.04	
		VOC	0.39	
UN3703A	Incinerator	Cl ₂	0.02	
		CO	0.41	

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		HCl	0.05	
		NO _x	1.03	
		VCM	0.06	
		SO ₂	0.01	
		PM	0.20	
		PM ₁₀	0.20	
		PM _{2.5}	0.20	
		Dioxin/Furan (10)	<0.01	
		THC (10)	<0.01	
		VOC	0.03	
UN3703B	Incinerator	Cl ₂	0.02	
		CO	0.41	
		HCl	0.05	
		NO _x	1.03	
		VCM	0.06	
		SO ₂	0.01	
		PM	0.20	
		PM ₁₀	0.20	
		PM _{2.5}	0.20	
		Dioxin/Furan (10)	0.01	
		THC (10)	0.01	
		VOC	0.03	
TK3132	VOC Storage Tank	VOC	2.68	

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TK3133	VOC Storage Tank	VOC	16.00	
TK3134	VOC Storage Tank	VOC	0.98	
TK3510	PVC Storage Silo	PM	0.18	
		PM ₁₀	0.18	
		PM _{2.5}	0.18	
		VCM	0.01	
P3FUG	Plant 3 Fugitive (5)	VCM	1.42	
		NVOC	0.37	
		Exempt Solvent	0.24	
		Inorganic Salt Solution	0.16	
PL3BIO (8)	Lagoon	VOC	1.54	
		VCM	0.10	
CF-3401A (8)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-3401B (8)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-3401C (8)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-3402A (8)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-3402B (8)	Centrifuge	VOC	0.04	
		Cl ₂	0.03	
CF-3402C (8)	Centrifuge	VOC	0.04	

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		Cl ₂	0.03	
TK-3455A (8)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
TK-3455B (8)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
TK-3455C (8)	Cushion Tank	Cl ₂	0.01	
		VOC	0.01	
RAILWASH3	Railcar Washing	VOC	0.184	0.17
HL-3301	Gas Holder	VOC	0.38	
HL-3302	Gas Holder	VOC	0.11	
PIT-3681 (8)	Equalization Pit	VOC	1.63	
CL-3681 (8)	Waste Water Clarifier	VOC	0.04	
PIT-3688 (8)	Clarified Wastewater Pit	VOC	0.01	
PIT-3685&3686 (8)	No. 1 & 2 pH Adjustment Pits	VOC	0.01	
PIT-3687 (8)	Post Aeration/Final Pit	VOC	0.05	
TK-3691 (8)	Coagulation Tank	VOC	0.08	
FL-3691A/B (8)	Gravity Filters (A,B)	VOC	0.03	
TK-3693 (8)	Clearwell Tank	VOC	0.01	
TK-3651 (8)	RDW Tank	VOC	0.01	
PIT-3691 (8)	Effluent Pit	VOC	0.02	
PIT-3693 (8)	Biological Pit	VOC	0.59	
PIT-3694 (8)	RDW Pit	VOC	0.01	
CL-3661 (8)	Clarifier (Raw Water Clarifier)	VOC	0.01	

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PIT-3692 (8)	Equalization Pit	VOC	0.16	
CL-3682 (8)	RDW2 Clarifier	VOC	0.04	
WASTEWTR3	Wastewater Annual Cap	VOC		5.52
		Cl ₂		0.87
Small Organic Liquid Storage Vessels				
TK107	Tank TK107	VOC	0.20	
TK108	Tank TK108	VOC	0.20	
TK109	Tank TK109	VOC	0.44	
TK110	Tank TK110	VOC	0.05	
TK111	Tank TK111	VOC	0.05	
TK120	Tank TK120	VOC	0.27	
TK121	Tank TK121	VOC	0.62	
TK353	Tank TK353	VOC	0.13	
TK2119	Tank TK2119	VOC	0.66	
TK2120	Tank TK2120	VOC	0.66	
TK2121	Tank TK2121	VOC	0.26	
TK2122	Tank TK2122	VOC	0.26	
TK2125	Tank TK2125	VOC	0.46	
TK2126	Tank TK2126	VOC	0.46	
TK2130	Tank TK2130	VOC	0.02	
TK3115	Tank TK3115	VOC	0.24	
TK3116	Tank TK3116	VOC	0.01	
TK3117	Tank TK3117	VOC	0.09	

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TK3118	Tank TK3118	VOC	0.01	
TK3119	Tank TK3119	VOC	0.64	
TK3120	Tank TK3120	VOC	0.64	
TK3121	Tank TK3121	VOC	0.57	
TK3122	Tank TK3122	VOC	0.57	
TK3124	Tank TK3124	VOC	0.72	
TK3125	Tank TK3125	VOC	0.72	
Emission Caps				
Total Site Emissions (all EPNs) for routine operations (1)		CO		257.80
		Cl ₂		0.60
		HCl		2.20
		NO _x		151.60
		SO ₂		40.90
		PM		140.60
		PM ₁₀		22.60
		PM _{2.5}		22.60
		VCM		61.40
		VOC		138.40
Sitewide Reactors, Refer to Footnote (9) for EPNs		VCM	7.99	
Maintenance, Start-Up, and Shutdown Emissions				
MSSSPHERE	VCM Storage Sphere MSS includes TK2901 A-D, TK3901 A-B	VCM	62.29	0.25
MSSSOLV	Solvent Usage	VOC	1.32	1.37
MSSMISC	Turnarounds, Process Vessels, Fugitive component repair	VCM	12.40	0.22

Emission Sources - Maximum Allowable Emission Rates

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3)

PM	-	total particulate matter, suspended in the atmosphere
PM ₁₀	-	particulate matter equal to or less than 10 microns in diameter
PM _{2.5}	-	particulate matter equal to or less than 2.5 microns in diameter
NVOC	-	non-vinyl chloride volatile organic compounds
VCM	-	vinyl chloride monomer
VOC	-	volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
CO	-	carbon monoxide
NO _x	-	total oxides of nitrogen
SO ₂	-	sulfur dioxide
HCl	-	hydrogen chloride
Cl ₂	-	Chlorine
Exempt Solvent	-	those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) The annual emission rate of these sources fall under the emission cap EPN WASTEWTR1
- (7) The annual emission rate of these sources fall under the emission cap EPN WASTEWTR2
- (8) The annual emission rate of these sources fall under the emission cap EPN WASTEWTR3
- (9) The following EPNs are included: PL251A, PL251B, PL251C, PL251D, PL251E, PL251F, PL2251A, PL2251B, PL2251C, PL2251D, PL2251E, PL2251F, PL3251A, PL3251B, PL3251C, PL3251D, PL3251E, and PL3251F.
- (10) Allowable emission rates for Dioxin Furan and THC listed below:
 - EPN LV-5: <0.0001 lb/hr Dioxin Furan, <0.001 lb/hr THC
 - EPN UN2703A: <0.0001 lb/hr Dioxin Furan, <0.001 lb/hr THC
 - EPN UN2703B: <0.0001 lb/hr Dioxin Furan, <0.001 lb/hr THC
 - EPN UN3703A: <0.0001 lb/hr Dioxin Furan, <0.001 lb/hr THC
 - EPN UN3703B: <0.0001 lb/hr Dioxin Furan, <0.001 lb/hr THC

Date: February 27, 2018