

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 8758

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 Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	
TPY **				
F-400	Fugitives (4)	VOC	13.23	57.96
401	Cat Supp Dehydrator	PM ₁₀	0.01	0.01
		VOC	0.40	0.03
402	Cat Blow Tank	PM ₁₀	0.01	0.01
403	Storage Vessel	PM ₁₀	0.01	0.01
413	Cat Fdr RX44	PM ₁₀	0.01	0.01
415	Cat Fdr RX45	PM ₁₀	0.01	0.01
423	Prod. Conveying Filter	PM ₁₀	0.01	0.01
		TSP	0.03	0.11
		VOC	(18)	(18)
424	Prod. Conveying Filter	PM ₁₀	0.01	0.01
		TSP	0.03	0.11
		VOC	(18)	(18)
429A	Analyzer	VOC	0.36	0.43
429B	Analyzer	VOC	0.36	0.43
429C	Analyzer	VOC	0.67	0.80
429D	Analyzer	VOC	0.67	0.80

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Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	
TPY **				
429E	Analyzer	VOC	0.36	0.43
429F	Analyzer	VOC	0.36	0.43
612-F5959	TNPPTANK	VOC	0.02	0.01
612-F6640A	OMS/Peroxide Tank	VOC	0.04	0.01
612-F6640B	OMS/Peroxide Tank	VOC	0.04	0.01
612-F4706	Diesel Tank	VOC	0.02	0.01
641A	Analyzer	VOC	0.07	0.08
642A	Analyzer	VOC	1.84	2.21
642B	Analyzer	VOC	1.84	2.21

642C	Analyzer	VOC	0.01	0.01
642D	Analyzer	VOC	0.01	0.01
642E	Analyzer	VOC	0.01	0.01
642F	Analyzer	VOC	1.30	1.56
642G	Analyzer	VOC	0.01	0.01
642H	Analyzer	VOC	0.01	0.01
643	Analyzer	VOC	0.13	0.57

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Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name	lb/hr	
TPY **				
645	Surge Silo	PM ₁₀	0.01	0.01
		VOC	111.38	162.00
	TSP	0.50	2.07	
		TSP	0.50	2.07
646A	Filter Receiver	PM ₁₀	0.27	0.16
		TSP	0.27	0.16
647A	Storage Silo	PM ₁₀	0.01	0.01
		TSP	0.26	0.49
648	Additive Vacuum	PM ₁₀	0.01	0.01
		TSP	0.01	0.04
649	Additive Vacuum	PM ₁₀	0.01	0.01
		TSP	0.01	0.04
650	Spin Drier 4A	TSP	1.33	3.62
		VOC	(18)	(18)

651	Spin Drier 4B	TSP	(21)	(21)
		VOC	(18)	(18)
652	Product Silo	PM ₁₀	0.01	0.02
		TSP	0.25	1.02
		VOC	(18)	(18)
653	Product Silo	PM ₁₀	0.01	0.02
		TSP	0.25	1.02
		VOC	(18)	(18)

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name	lb/hr	
TPY **				
654AB	L4A Flo-Triator	PM ₁₀	0.02	0.08
		TSP	1.17	4.71
		VOC	(18)	(18)
655AB	L4B Flo-Triator	PM ₁₀	0.02	0.08
		TSP	1.17	4.71
		VOC	(18)	(18)
656	Line 4A Railcar Loadout Filter	TSP	0.03	0.02
		PM ₁₀	0.01	0.01
		VOC	(18)	(18)
657	Line 4B Railcar Loadout Filter	TSP	(7)	(7)
		PM ₁₀	0.01	0.01
		VOC	(18)	(18)
662	Surge Silo	PM ₁₀	(19)	(19)
		VOC	(18)	(18)
		TSP	(19)	(19)

663	Surge Silo	PM ₁₀	(19)	(19)
		VOC	(18)	(18)
		TSP	(19)	(19)
664	Surge Silo	PM ₁₀	(19)	(19)
		VOC	(18)	(18)
		TSP	(19)	(19)
665	Line 5 Loadout Surge Vessel	VOC	(18)	(18)
666	Line 5 Loadout Surge Vessel	VOC	(18)	(18)
667	Line 5 Prefill Bin	VOC	(18)	(18)

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant		<u>Emission</u>
Point No. (1)	Name(2)	Name		lb/hr
TPY **				
668	Line 5 Prefill Bin	VOC	(18)	(18)
669	Line 5 Prefill Bin	VOC	(18)	(18)
670	Line 5 Prefill Bin	VOC	(18)	(18)
671	Line 5 Prefill Bin	VOC	(18)	(18)
672	Line 5 Prefill Bin	VOC	(18)	(18)
673	Line 5 Prefill Bin	VOC	(18)	(18)
674	Line 5 Prefill Bin	VOC	(18)	(18)
675	Line 6 Loadout Surge Vessel	VOC	(18)	(18)
676	Line 6 Loadout Surge Vessel	VOC	(18)	(18)
677	Line 6 Prefill Bin	VOC	(18)	(18)

678	Line 6 Prefill Bin	VOC	(18)	(18)
679	Line 6 Prefill Bin	VOC	(18)	(18)
680	Line 6 Prefill Bin	VOC	(18)	(18)
681	Line 6 Prefill Bin	VOC	(18)	(18)
682	Line 6 Prefill Bin	VOC	(18)	(18)
683	Line 6 Prefill Bin	VOC	(18)	(18)

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Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name(2)	Name	lb/hr	
TPY **				
684	Line 6 Prefill Bin	VOC	(18)	(18)
685	Storage Silo	PM ₁₀	(20)	(20)
		TSP	(20)	(20)
686	Seed Silo	PM ₁₀	0.01	0.01
		TSP	0.38	0.05
		VOC	(18)	(18)
687	Feed Hopper	PM ₁₀	0.01	0.01
		TSP	0.01	0.02
		VOC	(18)	(18)
688	Feed Hopper	PM ₁₀	0.01	0.01
		TSP	0.01	0.02
		VOC	(18)	(18)
689	L5 Product Silo	PM ₁₀	0.01	0.05
		TSP	0.45	1.81
		VOC	(18)	(18)
690	L5 Product Silo	PM ₁₀	0.01	0.06
		TSP	0.45	1.81

		VOC	(18)	(18)
691	L5 Product Silo	PM ₁₀	(8)	(8)
		TSP	(8)	(8)
		VOC	(18)	(18)
692	L5 Product Silo	PM ₁₀	(9)	(9)
		TSP	(9)	(9)
		VOC	(18)	(18)

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name(2)	Name	lb/hr	
TPY **				
693	Lines 5 and 6 Vacuum System Filter	TSP	0.04	0.17
		PM ₁₀	0.01	0.01
694	Line 4A/4B Vacuum System Filter	TSP	0.03	0.14
		PM ₁₀	0.01	0.01
695	Sample Pot	TSP	4.01	0.55
		VOC	(18)	(18)
696	Sample Pot	TSP	4.01	0.55
		VOC	(18)	(18)
697	Sample Pot	TSP	1.99	0.55
		VOC	(18)	(18)
698	Sample Pot	TSP	1.99	0.55
		VOC	(18)	(18)
699	Sample Pot	TSP	1.99	0.01
		VOC	(18)	(18)

721	Flare Air-Assist (10)	VOC	270.52	257.79
		CO	181.32	138.56
		NO _x	25.75	43.23
723	Steam Generator	VOC	0.02	0.11
		NO _x	0.45	1.97
		CO	0.38	1.66
		SO ₂	0.01	0.01
		PM ₁₀	0.03	0.15

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name(2)	Name	lb/hr	
TPY **				
723A	Boiler	VOC	0.03	0.14
		CO	0.49	2.16
		NO _x	0.59	2.58
		PM ₁₀	0.04	0.20
		SO ₂	0.01	0.02
800	Fugitives (4)	VOC	4.29	18.79
801	Cat Supp Dehydrator	PM ₁₀	0.01	0.01
802	Cat Blow Tank	PM ₁₀	0.01	0.01
803	Storage	PM ₁₀	0.01	0.01
813	Cat Feeder RX60	PM ₁₀	0.01	0.01
817	Reactor 60	VOC	19.90	0.20
819A	Analyzer	VOC	0.36	0.43
819B	Analyzer	VOC	0.36	0.43

819C	Analyzer	VOC	0.36	0.43
819D	Analyzer	VOC	0.36	0.43
819E	Analyzer	VOC	0.36	0.43
821	Prod. Conveying	PM ₁₀	0.01	0.01
		TSP	0.03	0.11
		VOC	(18)	(18)

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant		<u>Emission</u>
Point No. (1)	Name(2)	Name		lb/hr
TPY **				
845	Surge Silo	PM ₁₀	(19)	(19)
		VOC	(18)	(18)
		TSP	(19)	(19)
848	Additive Vacuum	PM ₁₀	0.60	2.43
		TSP	0.60	2.43
849AB	Additive Vacuum	PM ₁₀	0.01	0.01
		TSP	0.02	0.08
850	Spin Drier	TSP	(21)	(21)
		VOC	(18)	(18)
851	Spin Drier	TSP	(21)	(21)
		VOC	(18)	(18)
854	Elutriator	PM ₁₀	0.03	0.11
		TSP	0.88	3.62
		VOC	(18)	(18)
855	Elutriator	PM ₁₀	0.03	0.12
		TSP	0.88	3.62
		VOC	(18)	(18)

858	Flare-Ground	VOC	(10)	(10)
		CO	(10)	(10)
		NO _x	(10)	(10)
861	Reactor 44	VOC	20.0	0.20
862	Reactor 45	VOC	20.0	0.20
863	Hexene Storage	VOC	0.47	0.88

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name(2)	Name	lb/hr	
TPY **				
866	Surge Silo	PM ₁₀	0.01	0.04
		VOC	(18)	(18)
		TSP	0.69	2.87
867	Surge Silo	PM ₁₀	(11)	(11)
		VOC	(18)	(18)
		TSP	(11)	(11)
868	Surge Silo	PM ₁₀	(11)	(11)
		VOC	(18)	(18)
		TSP	(11)	(11)
869	Surge Silo	PM ₁₀	(11)	(11)
		VOC	(18)	(18)
		TSP	(11)	(11)
870	Surge Silo	PM ₁₀	(11)	(11)
		VOC	(18)	(18)
		TSP	(11)	(11)
871	Filter Receiver	PM ₁₀	0.01	0.01
		TSP	0.57	2.38
		VOC	(18)	(18)

872	Filter Receiver	PM ₁₀	0.01	0.01
		TSP	0.57	2.38
		VOC	(18)	(18)
873	Filter Receiver	PM ₁₀	0.01	0.01
		TSP	0.57	2.38
		VOC	(18)	(18)

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name(2)	Name	lb/hr	
TPY **				
877	Additive Vacuum	PM ₁₀	0.01	0.01
		TSP	0.02	0.08
878	Product Silo	PM ₁₀	(8)	(8)
		TSP	(8)	(8)
		VOC	(18)	(18)
879	Product Silo	PM ₁₀	(9)	(9)
		TSP	(9)	(9)
		VOC	(18)	(18)
884	Feed Silo	PM ₁₀	0.01	0.04
		TSP	0.62	2.61
		VOC	(18)	(18)
885	Feed Silo	PM ₁₀	0.04	0.07
		TSP	0.04	0.07
886	Feed Silo	PM ₁₀	(12)	(12)
		TSP	(12)	(12)
		VOC	(18)	(18)
887	Feed Silo	PM ₁₀	(20)	(20)
		TSP	(20)	(20)

888	Feed Silo	PM ₁₀	(20)	(20)
		TSP	(20)	(20)
889	Feed Silo	PM ₁₀	0.01	0.04
		TSP	0.62	2.61
		VOC	(18)	(18)
890	Feed Silo	PM ₁₀	(13)	(13)
		TSP	(13)	(13)

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant		<u>Emission</u>
Point No. (1)	Name(2)	Name		lb/hr
TPY **				
891	Feed Silo	PM ₁₀	(14)	(14)
		TSP	(14)	(14)
		VOC	(18)	(18)
892	Feed Silo	PM ₁₀	(20)	(20)
		TSP	(20)	(20)
893	Feed Silo	PM ₁₀	(20)	(20)
		TSP	(20)	(20)
900	Filter Receiver	PM ₁₀	0.01	0.01
		TSP	0.26	0.04
		VOC	(18)	(18)
902	Storage	PM ₁₀	0.08	0.06
		TSP	0.08	0.06
910	Feed Silo	PM ₁₀	0.01	0.01
		TSP	0.32	1.34
		VOC	(18)	(18)
911	Feed Silo	PM ₁₀	(15)	(15)
		TSP	(15)	(15)
		VOC	(18)	(18)
912	Feed Silo	PM ₁₀	(20)	(20)

		TSP	(20)	(20)
913	Feed Silo	PM ₁₀	0.01	0.01
		TSP	0.04	0.04
922	Storage Silo	PM ₁₀	0.01	0.01
		TSP	0.01	0.04

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name(2)	Name	lb/hr	
TPY **				
923	Storage Silo	PM ₁₀	0.01	0.01
		TSP	0.01	0.04
924	Hold-Up Bin	VOC	(18)	(18)
925	Product Silo	PM ₁₀	(6)	(6)
		TSP	(6)	(6)
		VOC	(18)	(18)
926	Product Silo	PM ₁₀	(6)	(6)
		TSP	(6)	(6)
		VOC	(18)	(18)
927	Filter Receiver	PM ₁₀	0.01	0.01
		TSP	0.45	0.13
		VOC	(18)	(18)
928	L4B Scalperator	PM ₁₀	0.01	0.01
		TSP	0.86	3.38
		VOC	(18)	(18)
929	Product Silo	PM ₁₀	(6)	(6)
		TSP	(6)	(6)
		VOC	(18)	(18)
930	Feed Silo	PM ₁₀	0.01	0.01
		TSP	0.32	1.34

		VOC	(18)	(18)
931	Feed Silo	PM ₁₀	(17)	(17)
		TSP	(17)	(17)
		VOC	(18)	(18)

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant		<u>Emission</u>
Point No. (1)	Name(2)	Name		lb/hr
TPY **				
932	Feed Silo	PM ₁₀	(16)	(16)
		TSP	(16)	(16)
933	Feed Silo	PM ₁₀	(20)	(20)
		TSP	(20)	(20)
942	Storage Silo	PM ₁₀	0.01	0.01
		TSP	0.01	0.04
943	Storage Silo	PM ₁₀	0.01	0.01
		TSP	0.01	0.04
944	Hold-Up Bin	VOC	(18)	(18)
945	Product Silo	PM ₁₀	(5)	(5)
		TSP	(5)	(5)
		VOC	(18)	(18)
946	Product Silo	PM ₁₀	(5)	(5)
		TSP	(5)	(5)
		VOC	(18)	(18)
947	Product Silo	PM ₁₀	(5)	(5)
		TSP	(5)	(5)
		VOC	(18)	(18)
948	L4A Scalperator	PM ₁₀	0.02	0.06
		TSP	0.86	3.38

		VOC	(18)	(18)
949	Filter Receiver	PM ₁₀	0.01	0.01
		TSP	0.45	0.13
		VOC	(18)	(18)

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AIR CONTAMINANTS DATA

Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name(2)	Name	lb/hr	
TPY **				
950	Dust Collector	PM ₁₀	0.01	0.01
		TSP	0.17	0.71
953	Sampler	TSP	0.05	0.01
		VOC	(18)	(18)
954	Sampler	TSP	0.05	0.01
		VOC	(18)	(18)
955	Hold-Up Bin	VOC	(18)	(18)
956	Hold-Up Bin	VOC	(18)	(18)
957	Hold-Up Bin	VOC	(18)	(18)
958	Hold-Up Bin	VOC	(18)	(18)
959	Sample Hopper	TSP	10.39	0.01
		VOC	(18)	(18)
960	Sample Hopper	TSP	10.39	0.01
		VOC	(18)	(18)
961	Sample Hopper	TSP	5.20	0.01
		VOC	(18)	(18)
962	Sample Hopper	TSP	5.20	0.01
		VOC	(18)	(18)

963	Reclaim System	PM ₁₀	0.01	0.01
		TSP	0.01	0.02
		VOC	(18)	(18)

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Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name	lb/hr	
TPY **				
970	Storage Silo	PM ₁₀	(20)	(20)
		TSP	(20)	(20)
973	Surge Silo	TSP	0.03	0.11
		PM ₁₀	0.01	0.01
		VOC	(18)	(18)
974	Vacuum Filter Receiver	TSP	0.09	0.19
		PM ₁₀	0.01	0.01
976	Boiler	VOC	0.03	0.14
		NO _x	0.59	2.58
		CO	0.49	2.16
		SO _x	0.01	0.02
		PM ₁₀	0.04	0.20
980	Emergency Generator	VOC	1.09	0.05
		NO _x	13.45	0.67
		CO	2.90	0.14
		SO ₂	0.89	0.04
		PM ₁₀	0.95	0.05
988	Compounding Shop Safety Kleen Degreaser	VOC	0.21	0.20
989	LP Shop Safety Kleen Degreaser	VOC	0.21	0.20
991	Feed Purification	VOC	0.11	0.10

992	Feed Purification	VOC	0.19	0.17
993A	Silyl Chromate Pot	VOC	1.70	0.10

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Emission Rates*	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name(2)	Name	lb/hr	
TPY **				
993B	Silyl Chromate Pot	PM _{2.5}	0.01	0.01
		TSP	0.01	0.01
995	M-1999 or M-19108 Line 4a Additive Transfer Blower Guard Filter	PM ₁₀	0.02	0.10
996	M-2999 or M-29108 Line 4a Additive Transfer Blower Guard Filter	PM ₁₀	0.02	0.10
997	M-46996 Line 4a Additive Transfer Filter Receiver	PM ₁₀	0.10	0.45

- (1) Emission point identification - either specific equipment designated or emission point number from plot plan.
- (2) Specific point source name. 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
PM₁₀ - particulate matter equal to or less than 10 microns in diameter
TSP - total suspended particulate
CO - carbon monoxide
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
SO_x - sulfur oxides
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- (5) Total particulate emissions from Emission Point Nos. (EPNs) 652, 945, 946, and 947 are listed under EPN 652.
- (6) Total particulate emissions from EPNs 653, 925, 926, and 929 are listed under EPN 653.

- (7) Total particulate emissions from EPNs 656 and 657 are listed under EPN 656.
- (8) Total particulate emissions from EPNs 689, 691, and 878 are listed under EPN 689.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (9) Total particulate emissions from EPNs 690, 692, and 879 are listed under EPN 690.
- (10) Total VOC, NO_x, and CO emissions for the two Flares (EPNs 721 and 858) are listed under EPN 721.
- (11) Total particulate emissions from EPNs 866, 867, 868, 869, and 870 are listed under EPN 866.
- (12) Total particulate emissions from EPNs 884 and 886 are listed under EPN 884.
- (13) Total particulate emissions from EPNs 885 and 890 are listed under EPN 885.
- (14) Total particulate emissions from EPNs 889 and 891 are listed under EPN 889.
- (15) Total particulate emissions from EPNs 910 and 911 are listed under EPN 910.
- (16) Total particulate emissions from EPNs 913 and 932 are listed under EPN 913.
- (17) Total particulate emissions from EPNs 930 and 931 are listed under EPN 930.
- (18) Total residual VOC emissions from all EPNs downstream of the product purge vessels are listed under EPN 645.
- (19) Total particulate emissions from EPNs 645, 662, 663, 664, and 845 are listed under EPN 645.
- (20) Total particulate emissions from EPNs 647A, 685, 887, 888, 892, 893, 912, 933, and 970 are listed under EPN 647A.
- (21) Total particulate emissions from EPNs 650, 651, 850, and 851 are listed under EPN 650.

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

8,760 hrs/year.

** Compliance with annual emission limits is based on a rolling 12-month period.

2009

Dated November 9,