Emission Sources - Maximum Allowable Emission Rates

Permit Number 103048

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)
RUPK31	Steam Boiler	VOC	0.53	--
		NO_x	2.45	--
		NO_x (MSS)	5.88	--
		CO	7.24	--
		SO_2	1.37	--
		PM	0.73	--
		PM_{10}	0.73	--
		$PM_{2.5}$	0.73	--
		NH_3	0.44	--
RUPK32	Steam Boiler	VOC	0.53	--
		NO_x	2.45	--
		NO_x (MSS)	5.88	--
		CO	7.24	--
		SO_2	1.37	--
		PM	0.73	--
		PM_{10}	0.73	--
		$PM_{2.5}$	0.73	--
		NH_3	0.44	--

Emission Sources - Maximum Allowable Emission Rates

RUPK31/RUPK32	Boiler Cap	VOC	--	1.40
		NO_x	--	2.75
		CO	--	9.61
		SO_2	--	3.64
		PM	--	1.94
		PM_{10}	--	1.94
		$PM_{2.5}$	--	1.94
		NH_3	--	1.17
RUPK71	Regenerative Thermal Oxidizer (RTO)	VOC	1.07	2.31
		NO_x	0.28	1.11
		CO	0.38	1.52
		SO_2	0.06	0.24
		PM	0.03	0.14
		PM_{10}	0.03	0.14
		$PM_{2.5}$	0.03	0.14
RUPK71MSS	RTO Downtime	VOC	34.84	2.29
3UF61A/B/C (6)	Flameless Thermal Oxidizer (FTO) System	VOC	3.99	(6)
		NO_x	30.62	(6)
		CO	111.82	(6)
		SO_2	0.42	(6)
		PM	0.22	(6)
		PM_{10}	0.22	(6)
		$PM_{2.5}$	0.22	(6)

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3UFLARE62 (6)	Elevated Flare	VOC	733.92	(6)
		NO_x	154.08	(6)
		CO	613.63	(6)
		SO_2	2.28	(6)
3UFLARE63 (6)	Multi-Point Ground Flare	VOC	989.06	(6)
		NO_x	687.67	(6)
		CO	1,051.73	(6)
		SO_2	0.04	(6)
PEXVCS (6)	Vent Control System	VOC	--	30.11
		NO_x	--	21.28
		CO	--	44.81
		SO_2	--	0.30
		PM	--	0.07
		PM_{10}	--	0.07
		$PM_{2.5}$	--	0.07
PEXTK1	Hexene Storage Tank	VOC	0.96	2.05
PEXANALZ	PEX Analyzers	VOC	0.04	0.18
PEXFUGEM (5)	Fugitives	VOC	2.10	9.20
		NH_3	0.06	0.26
RUCT01	Cooling Tower	VOC (5)	42.08	2.27
		PM	1.32	5.76
		PM_{10}	0.82	3.59
		$PM_{2.5}$	< 0.01	0.02
RLD01	Primary A/O Run Tank	VOC	< 0.01	0.01
RLD02	Secondary A/O Run Tank	VOC	< 0.01	0.02

Emission Sources - Maximum Allowable Emission Rates

4DDC04	Granule Filter Receiver (seed bed filter)	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3NDC01	Line 3 - Elutriator Cyclone Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4NDC01	Line 4 - Elutriator Cyclone Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PDC11	Line 3 - Prime Pellet Silo Vent 01	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PDC12	Line 3 - Prime Pellet Silo Vent 02	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PDC13	Line 3 - Prime Pellet Silo Vent 03	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PDC14	Line 3 - Prime Pellet Silo Vent 04	VOC	(8)	(8)

Emission Sources - Maximum Allowable Emission Rates

		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PDC15	Line 3 - Prime Pellet Silo Vent 05	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PDC16	Offspect - Pellet Silo Vent 06	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PDC11	Line 4 - Prime Pellet Silo Vent 01	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PDC12	Line 4 - Prime Pellet Silo Vent 02	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PDC13	Line 4 - Prime Pellet Silo Vent 03	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PDC14	Line 4 - Prime Pellet Silo Vent 04	VOC	(8)	(8)
		PM	(9)	(9)

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PDC15	Line 4 - Prime Pellet Silo Vent 05	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3MDC01	Line 3 - Pellet Surge Bin Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4MDC01	Line 4 - Pellet Surge Bin Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3MFAN01	Line 3 - Pellet Dryer Vent-01	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3MFAN02	Line 3 - Pellet Dryer Vent-02	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)

Emission Sources - Maximum Allowable Emission Rates

4MFAN01	Line 4 - Pellet Dryer Vent-01	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4MFAN02	Line 4 - Pellet Dryer Vent-02	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3MBN01	Line 3 - Film Test Extruder Filter Receiver	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4MBN01	Line 4 - Film Test Extruder Filter Receiver	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LDC23	Finishing Building Vacuum System Dust Collector	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
34PKGBLDG	Combined Packaging Building Fugitives	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PFAN01	Bagging Line 3 Feed Hopper Vent	VOC	(8)	(8)

Emission Sources - Maximum Allowable Emission Rates

		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PFAN21	Bagging Line 4 Feed Hopper Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PFAN41	Bagging Line 5 Feed Hopper Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PFAN01	Bagging Line 1 Feed Hopper Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PFAN21	Bagging Line 2 Feed Hopper Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3PFAN04	Bulk Loading Station 1 Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)

Emission Sources - Maximum Allowable Emission Rates

3PFAN05	Bulk Loading Station 2 Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PFAN04	Bulk Loading Station 3 Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4PFAN05	Bulk Loading Station 5 Vent	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LDC05	Line 3 – Granular Day Bin Filter-05	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4LDC05	Line 4 – Granular Day Bin Filter-05	VOC	(8)	(8)
		PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LFAN04	Line 3 Additive Feed Hopper Blower Vent	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)

Emission Sources - Maximum Allowable Emission Rates

4LFAN04	Line 4 Additive Feed Hopper Blower Vent	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LDC06	Line 3 - Additive Drying Hopper Dust Collector	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4LDC06	Line 4 - Additive Drying Hopper Dust Collector	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LB01	Line 3 - Vacuum Blower-01 Vent for Additive AB Transfer	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LB02	Line 4 - Vacuum Blower-02 Vent for Additive AB Transfer	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LB03	Line 3 - Vacuum Blower-03 Vent for Additive Transfer	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LB04 3LB05[1]	Lines 3/4 - Vacuum Blower-04 Vent for Additive Transfer	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4LB01	Line 4 - Vacuum Blower-01 Vent for Additive Transfer	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3LFAN01	Line 3 - Additive Dump Station Vent Dust Collector	PM	(9)	(9)

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4LFAN01	Line 4 - Additive Dump Station Vent Dust Collector	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3BFIL01	Line 3 - Cylinder Vent Filter-01	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3BFIL02	Line 3 - Cylinder Vent Filter-02	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3BFIL03	Line 3 - Cylinder Vent Filter-03	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4BFIL01	Line 4 - Cylinder Vent Filter-01	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4BFIL02	Line 4 - Cylinder Vent Filter-02	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4BFIL03	Line 4 - Cylinder Vent Filter-03	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)

Emission Sources - Maximum Allowable Emission Rates

3CFIL04	Line 3 - Catalyst Hold Tank Filter-04	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3CFIL05	Line 3 - Catalyst Hold Tank Filter-05	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
3CFIL06	Line 3 - Catalyst Hold Tank Filter-06	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4CFIL04	Line 4 - Catalyst Hold Tank Filter-04	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4CFIL05	Line 4 - Catalyst Hold Tank Filter-05	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
4CFIL06	Line 4 - Catalyst Hold Tank Filter-06	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
F-15005	Talc Surge Bin Filter	PM	(9)	(9)
		PM_{10}	(10)	(10)
		$PM_{2.5}$	(11)	(11)
MISCVENTS (7)	Miscellaneous Vents	VOC (8)	17.42	13.83
		PM (9)	5.94	15.80
		PM_{10} (10)	1.01	2.51
		$PM_{2.5}$ (11)	0.86	1.88

Emission Sources - Maximum Allowable Emission Rates

PEXMSS	Planned MSS	VOC	113.51	5.98
		NO_x	1.17	0.06
		CO	1.17	0.06
		PM	1.81	0.13
		PM_{10}	1.81	0.13
		$PM_{2.5}$	1.81	0.13
MAINDEG	Controlled Tank Degassing	VOC	0.67	< 0.01
		NO_x	8.16	0.10
		CO	0.63	< 0.01
		SO_2	< 0.01	< 0.01
		PM	0.02	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
NH3SUMP	Ammonia Sump	NH_3	0.07	< 0.01
PEXTOTES	Storage Totes 3UPK32 and 3UPK33	VOC	< 0.01	< 0.01

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
NH_3 - ammonia
(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 Vent Control System (EPN: PEXVCS) contains annual emissions from the FTO System, Elevated Flare, and Multi-Point Ground Flare (EPNs 3UF61A/B/C, 3UFLARE62, and 3UFLARE63).
(7) Miscellaneous Vents (EPN: MISCVENTS) includes emissions from the Pellet Loadout Sources, Polyethylene Product Sources, Additive Sources, Catalyst Transfer Sources, Pellet Finishing Building, Pellet Packaging Building, and Pellet Bagging System.

Emission Sources - Maximum Allowable Emission Rates

(8) The listed emission rates are the cap for VOC emissions from the group of emission points in the polyethylene product transfer, storage, and loadout systems. The sum of emissions from all of the emission points in this group shall not exceed the emission rate listed for the group.

(9) The listed emission rates are the cap for total PM emissions from the group of emission points in the polyethlyene product, catalyst, and additive systems. The sum of emissions from all of the emission points in this group shall not exceed the emission rate listed for the group.

(10) The listed emission rates are the cap for PM_{10} emissions from the group of emission points in the polyethlyene product, catalyst, and additive systems. The sum of emissions from all of the emission points in this group shall not exceed the emission rate listed for the group.

(11) The listed emission rates are the cap for $PM_{2.5}$ emissions from the group of emission points in the polyethlyene product, catalyst, and additive systems. The sum of emissions from all of the emission points in this group shall not exceed the emission rate listed for the group.

Date: January 13, 2017