Permit Number 90163

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.	Source Name (2)	Air Contaminant Name (3)	Emiss	sion Rates
(1)			lbs/hour	TPY (4)
1	TDU Dryer (32 MMBtu/hr	PM	0.24	1.04
	Natural Gas fired)	PM ₁₀	0.24	1.04
		PM _{2.5}	0.24	1.04
		SO ₂	0.02	0.08
		NO _x	3.14	13.74
		со	2.64	11.54
		voc	0.17	0.76
		НАР	0.06	0.26
7	TDU Steam Boiler (8 MMBtu/hr	PM	0.06	0.26
	Natural Gas fired)	PM ₁₀	0.06	0.26
		PM _{2.5}	0.06	0.26
		SO ₂	<0.01	0.02
		NO _x	0.78	3.44
		со	0.66	2.89
		voc	0.04	0.19
		НАР	0.01	0.06
8A	TDU Conveyor	PM	<0.01	0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		НАР	<0.01	<0.01
8B	TDU Transfer Points (Desorbed	PM	0.03	0.06
	Solids Bin)	PM ₁₀	0.02	0.03
		PM _{2.5}	<0.01	<0.01
		HAP	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

CKD-T1	Truck CKD	PM	0.01	0.09
	Offloading - Drop Point	PM ₁₀	<0.01	0.04
		PM _{2.5}	<0.01	<0.01
CKD-T2	Transfer Outdoor CKD to Partially	PM	<0.01	0.04
	Enclosed CKD Stockpile - Drop	PM ₁₀	<0.01	0.02
	Point Point	PM _{2.5}	<0.01	<0.01
TM-T1	Truck Clay Offloading - Drop	PM	0.08	0.35
	Point	PM ₁₀	0.04	0.17
		PM _{2.5}	<0.01	0.03
BH/Venturi	TDU Cooling Baghouse/Venturi	PM	0.09	0.38
	Scrubber Scrubber	PM ₁₀	0.09	0.38
		PM _{2.5}	0.09	0.38
		VOC	0.20	0.37
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	<0.01	<0.01
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
		H ₂ S	<0.01	<0.01
		HAP	0.20	0.37 (8)
		HF	<0.01	
		HCI	<0.01	
СТ	TDU Cooling Tower	PM	0.10	0.44
		PM ₁₀	0.05	0.22
		PM _{2.5}	<0.01	<0.01
		VOC	0.06 (5)	0.25 (5)
		H ₂ S	<0.01	0.03
		HF	<0.01	0.04
		HCI	0.06	0.24

		NH ₃	0.06	0.25
		HNO ₃	0.05	0.22
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	0.04	0.17
		H ₂ SO ₄	<0.01	<0.01
BOX-1	TDU Centrifuge Cake Rolloff 1	voc	5.57	0.83
	Cake Rolloll 1	НАР	1.99	0.02 (8)
		HF	<0.01	
		HCI	0.03	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.15	0.06
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
3OX-1B	TDU Centrifuge Cake Rolloff 1B	VOC	5.57	0.83
	Cake Rolloll 1B	HAP	1.99	0.02 (8)
		HF	<0.01	
		HCI	0.03	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.15	0.06
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
3OX-1C	TDU Centrifuge Cake Rolloff 1C	VOC	5.57	0.83
	Cake Rullull 1C	НАР	1.99	0.02 (8)
		HF	<0.01	
		HCI	0.03	

		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.15	0.06
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
BOX-2	TDU Gas Treatment Cake	VOC	0.17	0.20
	Box	HAP	0.06	<0.01 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	<0.01	0.02
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
SHAKER	TDU Shaker Box	voc	0.22	0.07
		HAP	0.08	<0.01 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	<0.01	<0.01
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
DUTOTE	Tote Tank	voc	<0.01	<0.01
		HAP	<0.01	<0.01 (8)
		HF	<0.01	

		HCI	<0.01	
		H₂S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	<0.01	<0.01
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
BIN-FUG	Feed Bin Fugitives	VOC	6.71	4.28
	(5)	НАР	2.40	0.09 (8)
		HF	<0.01	
		HCI	0.03	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.18	0.33
		HNO ₃	<0.01	0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	0.02
FXBIN-FUG	Fixed Bin Fugitives	voc	4.58	3.07
		НАР	1.64	0.06 (8)
		HF	<0.01	
		HCI	0.02	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.13	0.24
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	0.01
CARBFLT1	Carbon Adsorption System 1	VOC	<0.01	0.07
	2,5.0 1	НАР	<0.01	0.07 (8)

				_
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	<0.01	<0.01
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
CARBFLT2	Carbon Adsorption System 2	voc	<0.01	0.06
	System 2	НАР	<0.01	0.06 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH₃	<0.01	<0.01
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
CARBFLT3	Carbon Adsorption System 3	voc	7.02	0.13
	System 5	НАР	7.02	0.13 (8)
		HF	<0.01	
		HCI	3.23	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.33	<0.01
		HNO ₃	0.44	0.16
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
	TDU Piping Fugitives (5)	VOC	0.16	0.70
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		HAP	0.03	0.14 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.02	0.42
		HNO ₃	<0.01	0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	0.17
FUG-DU	DU Piping	VOC	0.06	0.25
	Fugitives (5)	НАР	0.02	0.09 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	<0.01	0.15
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	0.06
PROD-LOAD	Reclaimed Oil Product Loadout	VOC	0.36	0.06
	Troddet Loadout	HAP	0.36	0.06 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.05	0.03
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	0.02	0.01

Emission Sources - Maximum Allowable Emission Rates

PROD-LOAD2	Distillate Product Loadout	voc	1.56	0.57
	Loudout	НАР	<0.01	<0.01
FUG-2	Cement Kiln Dust Stock Pile	PM	0.02	0.09
	Stock File	PM ₁₀	0.01	0.05
		PM _{2.5}	<0.01	<0.01
FUG-1	Stabilization Building 2	PM	0.04	0.21
	Process Fugitives	PM ₁₀	0.04	0.21
	(5)	PM _{2.5}	<0.01	<0.01
		voc	2.46	(6)
		HAP	2.46	(7) (8)
		HF	<0.01	
		HCI	0.21	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.18	0.14
		HNO ₃	0.14	0.05
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
BH1	Stabilization Building 2	PM	2.14	4.50
	Baghouse	PM ₁₀	2.14	4.50
		PM _{2.5}	2.14	4.50
		voc	46.76	(6)
		HAP	46.78	(7) (8)
		HF	<0.01	
		HCI	3.98	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	3.43	2.75
		HNO ₃	2.69	0.96

		H ₃ PO ₄	0.01	0.02
		H ₂ O ₂	0.18	0.14
BH2	Stabilization	PM	2.14	4.50
	Building 3 Baghouse	PM ₁₀	2.14	4.50
		PM _{2.5}	2.14	4.50
		voc	37.30	(6)
		НАР	37.32	(7) (8)
		HF	<0.01	
		HCI	2.22	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	2.51	2.30
		HNO ₃	2.26	0.80
		H ₃ PO ₄	<0.01	0.01
		H ₂ O ₂	0.15	0.12
ВН7	Stabilization Building 3	РМ	2.14	4.50
	Baghouse	PM ₁₀	2.14	4.50
		PM _{2.5}	2.14	4.50
		VOC	37.30	(6)
		НАР	37.32	(7) (8)
		HF	<0.01	
		HCI	2.22	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	2.51	2.30
		HNO ₃	2.26	0.80
		H ₃ PO ₄	<0.01	0.01
		H ₂ O ₂	0.15	0.12

FUG-3	Stabilization Building 3	РМ	<0.01	0.01
	Process Fugitives	PM ₁₀	<0.01	0.01
	(5)	PM _{2.5}	<0.01	<0.01
		VOC	3.93	(6)
		HAP	3.93	(7) (8)
		HF	<0.01	
		HCI	0.23	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.26	0.24
		HNO ₃	0.24	0.08
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	0.02	0.01
FUG-1, BH1, BH2, BH7, and FUG-3	Stabilization Buildings Annual Emission Caps	VOC		6.13
	Emission Caps	HAP		3.65 (8)
BH4	Catalyst Building Baghouse	PM	1.71	5.49
	Bagnoase	PM ₁₀	1.71	5.49
		PM _{2.5}	1.71	5.49
		HAP	0.02	0.05
CAT-FUG1	Drum Loading Fugitives 1 (from	PM	<0.01	0.01
	Catalyst Building) (5)	PM ₁₀	<0.01	<0.01
	(5)	PM _{2.5}	<0.01	<0.01
		HAP	<0.01	<0.01
CAT-FUG2	Drum Loading Fugitives 2 (from	PM	<0.01	<0.01
	outside) (5)	PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAP	<0.01	<0.01
ТО	Thermal Oxidizer -	PM	0.11	0.49
	Routine (15	PM ₁₀	0.11	0.49

		PM _{2.5}	0.11	0.49
		SO ₂	16.80	38.63
		NO _x	20.63	35.34
		СО	1.24	5.41
		VOC	2.21	2.05
		HAP	0.76	0.34 (8)
		Total As (9)	3.95	
		HF	15.61	
		HCI	34.57	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	0.03	<0.01
		HBr	19.04	34.76
		Total Iodine	18.20	33.43
		NH ₃	0.18	0.66
		HNO ₃	10.63	32.42
		H ₃ PO ₄	2.80	8.77
		H ₂ O ₂	0.10	0.31
Landfill	Landfill Emissions	voc	0.32	1.41
		HAP	0.17	0.73 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	<0.01	0.03
		HNO ₃	<0.01	0.02
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
TDU-TP1	Receiving Bins – Drop Point	РМ	<0.01	0.02
	Diop i onit	PM ₁₀	<0.01	<0.01

		PM _{2.5}	<0.01	<0.01
		НАР	<0.01	0.02
TDU-TP2	Fixed Bins – Drop Point	PM	<0.01	0.02
	l olik	PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		НАР	<0.01	0.02
TDU-TP3	TDU Dryer – Drop Point	PM	<0.01	0.02
	Polit	PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		НАР	<0.01	0.02
LANDFILLTP	Landfill – Drop Point	PM	<0.01	<0.01
) On it	PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		НАР	<0.01	<0.01

Maintenance, Startup, and Shutdown (MSS)

TANK-MSS	Tank MSS	VOC	3.95	0.15
WWTANK-MSS	Wastewater Tank MSS	VOC	0.43	0.01
	WISS	HAP	0.43	0.01 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.31	<0.01
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H_2O_2	<0.01	<0.01
CARB-VNTMSS	Carbon Vent MSS	VOC	1.89	0.03
		HAP	1.89	0.03 (8)
		HF	<0.01	
		HCI	0.02	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.01	<0.01
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H_2O_2	<0.01	<0.01
EQUIP-MSS	Equipment Purging and Opening	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		VOC	3.27	0.04
		HAP	0.44	0.01 (8)
		HF	<0.01	
		HCI	<0.01	

H ₂ S <0.01 <0.01				
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.05	0.02
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	0.02	<0.01
TPAINT-MSS	TDX Sitewide	PM	0.49	0.05
		PM ₁₀	0.49	0.05
		PM _{2.5}	0.49	0.05
		VOC	16.65	1.66
		НАР	0.40	0.04
UPAINT-MSS	USET Sitewide	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		voc	18.77	0.19
		НАР	0.80	<0.01
TBLAST-MSS	TDX Sitewide	PM	1.43	0.01
	Alliative Blatilli	PM ₁₀	0.17	<0.01
		PM _{2.5}	0.03	<0.01
UBLAST-MSS	USET Sitewide	PM	2.86	0.01
	ATHASIVE BIASHIM	PM ₁₀	0.34	<0.01
		PM _{2.5}	0.05	<0.01

TO-SRTMSS	Thermal Oxidizer Startup	PM	0.06	<0.01
	Startup	PM ₁₀	0.06	<0.01
		PM _{2.5}	0.06	<0.01
		SO ₂	<0.01	<0.01
		NO _x	0.45	<0.01
		со	3.09	0.06
		voc	0.04	<0.01
		НАР	0.01	<0.01
TO-VNTMSS	Thermal Oxidizer -	voc	0.80	<0.01
	NA S	НАР	0.80	<0.01
		HF	<0.01	
		HCI	4.04	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.04	<0.01
		HNO ₃	0.63	<0.01
		H₃PO₄	0.03	<0.01
		H ₂ O ₂	<0.01	<0.01
DWELL-MSS	Frac Tank - Deepwell	VOC	2.39	0.01
	Maintenance	НАР	2.39	0.01 (8)
		HF	<0.01	
		HCI	<0.01	
		H ₂ S	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.01	<0.01
		HNO ₃	<0.01	<0.01
		H ₃ PO ₄	<0.01	<0.01
		H ₂ O ₂	<0.01	<0.01
FLTCHG-MSS	Baghouse Filter	PM	0.17	<0.01

(4)				PM ₁₀	0.08	<0.01
(1) (2)				fic equipment designation or emissi pates, use area name or fugitive s		olot plan. <0.01
	VOC			s defined in Title 30 Texas Adminis		
(-)	NO _x	- total oxid	les of nitrogen	HAP	<0.01	<0.01
\\/:	SO ₂ ashout	- sulfur did	xide Washout	nde6 in the atmosphere, including I	70.71	1461
***		 total part 	iiculate matter, suspe	nded in the atmosphere, including I	PMid and PM _{2.5} , as rep	r est ented
	PM_{10}	 total part 	liculate matter equal i	to or less than 10 microns in diamet	ter, including $PM_{2.5}$, as	represented
	$PM_{2.5}$	- particula	ie matter equal to or	less than 2.5 microns in diameter	20.71	2.43 (0)
	CO	- carbon n	nonoxide	HE	0.06	
	HAP			HF ed in § 112(b) of the Federal Clean	Air Act or Title 40 Cod	e of Federal
		Regulation	s Part 63, Subpart C	нсі	0.12	
	H ₂ S	- hydroge	IS Part 63, Subpart C n sulfide (delisted HA HAP)	P)		
	As	arseriic (1/~1 <i> </i>	H ₂ S	<0.01	<0.01
	H₂SO₄	- sulfuric a				
	NH ₃	- ammonia		H ₂ SO ₄	<0.01	<0.01
	HNO₃	- nitric aci				
	H₃PO₄	- phospho		NH₃	2.03	0.77
	H ₂ O ₂ HCl	- hydroge	n chloride (HAP)		4.50	
	HF		n fluoride (HAP)	HNO₃	1.53	0.16
(4)				ਮ੍ਰਤਸ਼ਾਦਾ year) is based on a 12-mon	thandling period	
(4)	Emission	rate is an e	etimate and is enforce	eable through compliance with the	applicable special cond	150.01) and
(3)	nermit an	nlication re	presentations.	H ₂ O ₂	0.21	0.02
(6)				ce are included in the Stabilization	· · · · ·	
(0)	THE AITHU	ai voc eiii	13310113 110111 11113 30111	ce are included in the Stabilization	Dullulings Attitual VOC	Linission Cap of

6.13 tpy. (7) The annual H₂S, HF, and HCl emissions from this source are included in the Stabilization Buildings Annual HAP cap

of 3.65 tpy.

(8) Emission limit applies to the sum of total HAP emissions (including but not limited to HF and HCl).

(9) Total Arsenic includes elemental arsenic and arsenic compounds.

Date: July 23, 2021	
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