Permit Number 4421A

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	Source Name (2)	Air	Emissio	n Rates (6)
No. (1)		Contaminant Name (3)	lbs/hour	TPY (4)
	Scenario 1: Post-F	Project Emission F	Rates (8)	
T-2	Flux Tank 1 (DFTO Downtime)	VOC	0.54	0.14
	Fume Filter Stack	СО	<0.01	<0.01
		РМ	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01
T-2	Flux Tank 2 (DFTO Downtime)	VOC	0.54	0.14
	Fume Filter Stack	СО	<0.01	<0.01
		РМ	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01
T-1	Coating Tank 2 (DFTO Downtime) Fume Filter Stack	VOC	0.12	0.03
		СО	<0.01	<0.01
		РМ	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01
T-2	Coating Tank 1 (DFTO Downtime)	VOC	0.12	0.03
	Fume Filter Stack	СО	<0.01	<0.01
		РМ	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01

T-1	Vertical Oil Tank 1 (DFTO	VOC	<0.01	<0.01
-----	---------------------------	-----	-------	-------

ı	,	T-		
		СО	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01
T-4	Sealant Tank (DFTO Downtime)	VOC	0.02	<0.01
	Stack	СО	<0.01	<0.01
		PM	0.01	<0.01
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.01	<0.01
		HAPs	<0.01	<0.01
T-5	Laminant Tank (DFTO Downtime)	VOC	<0.01	<0.01
	Stack	СО	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01
KOTL	Knockout Oil Truck Loading	VOC	0.52	0.01
		СО	0.08	<0.01
		PM	0.15	<0.01
		PM ₁₀	0.15	<0.01
		PM _{2.5}	0.15	<0.01
		HAPs	0.02	<0.01
F-15	DFTO Stack (Blowing Stills, Flux	VOC	0.39	1.11
	Storage Tanks, Coating Storage Tanks, Laminant Storage Tank,	NOx	1.93	6.64
	Sealant Storage Tank, and Vertical Oil Tank)	СО	9.40	27.34
	,	PM	1.52	4.34
		PM ₁₀	1.44	4.14
		PM _{2.5}	1.21	3.52
		SO ₂	14.46	38.71
		HCI	0.18	0.48
		HAPs	0.33	0.87
I .	ı	1	ı	1

T-6	Laminators Fume Filter Stack	VOC	0.04	0.04
		со	<0.01	<0.01
		РМ	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01
T-3a or T-3b	Sealant Vertical Mixer	VOC	0.05	0.04
		СО	0.01	0.01
		HCI	<0.01	<0.01
T-3a or T-3b	No. 1 Surge Tank Vertical Mixer	VOC	0.27	0.70
		СО	0.06	0.14
		HCI	<0.01	<0.01
T-3a or T-3b	No. 2 Surge Tank Vertical Mixer	VOC	0.27	0.70
		СО	0.06	0.14
		HCI	<0.01	<0.01
T-3a or T-3b	No. 3 Surge Tank Vertical Mixer	VOC	0.37	0.97
		СО	0.08	0.20
		HCI	<0.01	<0.01
T-6	Asphalt Use Tank	voc	0.05	0.09
		со	0.01	0.02
		HCI	<0.01	<0.01
MIXERS	Mixers Cap	РМ	0.07	0.18
		PM ₁₀	0.07	0.18
		PM _{2.5}	0.07	0.17
T-3a	Line 1 Coater	voc	1.61	3.96
		со	0.16	0.38
		РМ	0.22	0.53
		PM ₁₀	0.22	0.53
		PM _{2.5}	0.03	0.08
		H ₂ S	<0.01	0.01
		SO ₂	0.06	0.15
		HAPs	0.13	0.32

T-3b	Line 2 Coater	VOC	2.13	5.47
		СО	0.21	0.53
		РМ	0.29	0.74
		PM ₁₀	0.29	0.74
		PM _{2.5}	0.04	0.11
		H ₂ S	<0.01	0.01
		SO ₂	0.08	0.21
		HAPs	0.17	0.45
MFGBLDG	Line 1 and Line 2 Coaters	VOC	0.21	0.52
	(Uncaptured) (5)	СО	0.02	0.05
		РМ	0.12	0.30
		PM ₁₀	0.12	0.30
		PM _{2.5}	0.12	0.30
		H ₂ S	<0.01	0.01
		SO ₂	0.01	0.02
		HAPs	0.02	0.04
MFGBLDG	Line 1 and Line 2 Laminators (Uncaptured) (5)	VOC	<0.01	<0.01
		СО	<0.01	<0.01
		РМ	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01
MFGBLDG	Line 1 and Line 2 Aggregate	PM	0.01	0.05
	Application (Uncaptured) (5)	PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
MFGBLDG	Line 1 and Line 2 Sand Brushes (5)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
MFGBLDG	Line 1 and Line 2 Sealant Pans (5)	VOC	0.04	0.02
		СО	<0.01	<0.01
		РМ	<0.01	<0.01
		PM ₁₀	<0.01	<0.01

		PM _{2.5}	<0.01	<0.01
		HAPs	<0.01	<0.01
MFGBLDG	Line 1 and Line 2 Cooling Section	VOC	0.15	0.68
WII OBLOO	(Uncaptured) (5)			
		PM	0.59	1.51
		PM ₁₀	0.32	0.82
		PM _{2.5}	0.05	0.13
MFGBLDG	Line 1 and Line 2 Ink (5)	VOC	1.00	0.79
MFGBLDG	Line 1 and Line 2 Paint (5)	VOC	0.11	0.17
MFGBLDG	Line 1 and Line 2 Unwind Stands (5)	PM	0.59	2.45
		PM ₁₀	0.06	0.27
		PM _{2.5}	0.01	0.03
MFGBLDG	Line 1 and Line 2 Printers (5)	VOC	0.15	0.65
COOL-1	Line No. 1 Cooling Vent	VOC	0.46	2.03
		РМ	1.47	3.61
		PM ₁₀	0.79	1.95
		PM _{2.5}	0.12	0.30
COOL-2	Line No. 2 Cooling Vent	VOC	0.41	1.81
		РМ	1.73	4.43
		PM ₁₀	0.93	2.39
		PM _{2.5}	0.15	0.37
C-1	No. 3 Limestone Silo Dust Collector	РМ	0.05	0.03
	Stack	PM ₁₀	0.05	0.03
		PM _{2.5}	0.05	0.03
C-2	Line 1 Aggregate Application	VOC	0.09	0.22
	Process Dust Collector Stack	РМ	0.02	0.11
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
C-3	Line 2 Aggregate Application	voc	0.12	0.30
	Process Dust Collector Stack	PM	0.02	0.11
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
C-4	Sand Silo Dust Collector Stack	РМ	0.26	1.14

L1-a	No. 1 Limestone Dust Collector	РМ	0.05	0.23
	Stack	PM ₁₀	0.05	0.23
		PM _{2.5}	0.05	0.23
L-2	No. 2 Limestone Dust Collector	PM	0.05	0.12
	Stack	PM ₁₀	0.05	0.12
		PM _{2.5}	0.05	0.12
L-3/H-5	Horizontal Limestone Run Tank Dust	РМ	0.11	0.49
	Collector Stack	PM ₁₀	0.11	0.49
		PM _{2.5}	0.11	0.49
L-3/H-5	Limestone Filler Heater	VOC	0.03	0.14
		NOx	0.58	2.53
		СО	0.49	2.13
		РМ	0.04	0.19
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.04	0.19
		SO ₂	0.09	0.38
		HAPs	0.01	0.05
B-1	No. 1 Boiler	VOC	0.08	0.34
		NO _x	0.39	1.70
		СО	0.50	2.18
		РМ	0.08	0.34
		PM ₁₀	0.08	0.34
		PM _{2.5}	0.08	0.34
		SO ₂	0.22	0.98
		HAPs	0.02	0.10
B-2	No. 2 Boiler	VOC	0.07	0.29
		NO _x	1.22	5.32
		NO _x (7)	0.83	3.63
		СО	1.02	4.47
		РМ	0.09	0.40
		PM ₁₀	0.09	0.40
		PM _{2.5}	0.09	0.40

		SO ₂	0.18	0.80
		HAPs	0.02	0.10
H-1	No. 2 Born Coating Heater	VOC	0.05	0.23
		NO _x	0.12	0.53
		СО	0.81	3.55
		РМ	0.07	0.32
		PM ₁₀	0.07	0.32
		PM _{2.5}	0.07	0.32
		SO ₂	0.14	0.63
		HAPs	0.02	0.08
H-2	No. 3 Born Coating Heater	VOC	0.05	0.23
		NO _x	0.12	0.53
		СО	0.81	3.55
		РМ	0.07	0.32
		PM ₁₀	0.07	0.32
		PM _{2.5}	0.07	0.32
		SO ₂	0.14	0.63
		HAPs	0.02	0.08
H-3	No. 2 Cutler Coating Heater	VOC	0.03	0.14
		NO _x	0.58	2.53
		СО	0.49	2.13
		РМ	0.04	0.19
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.04	0.19
		SO ₂	0.09	0.38
		HAPs	0.01	0.05
H-4	Hot Oil Heater No. 1	VOC	0.02	0.09
		NO _x	0.39	1.69
		СО	0.32	1.42
		РМ	0.03	0.13
		PM ₁₀	0.03	0.13

		PM _{2.5}	0.03	0.13
		SO ₂	0.06	0.25
		HAPS	0.01	0.03
H-9	Hot Oil Heater No. 2	VOC	0.01	0.03
		NO _x	0.13	0.55
		СО	0.11	0.46
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
		SO ₂	0.02	0.08
		HAPS	<0.01	0.01
E-1	Emergency Generator	VOC	0.25	0.01
		NO _x	3.13	0.16
		СО	0.67	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		SO ₂	<0.01	<0.01
		HAPs	<0.01	<0.01
CT-1	Process Cooling Tower	PM	0.02	0.08
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
CT-2	Compressor Cooling Tower	PM	<0.01	0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
CT-3	Coater Cooling System Tower 1	PM	<0.01	0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
CT-4	Coater Cooling System Tower 2	РМ	<0.01	0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
G-1b	Batch House Granules (5)	PM	1.22	0.08

İ	I			
		PM ₁₀	0.03	<0.01
		PM _{2.5}	<0.01	<0.01
G-2a	Intermediate Granule Handling Vents	PM	1.03	0.66
	vents	PM ₁₀	0.03	0.03
		PM _{2.5}	<0.01	<0.01
G-2b	Intermediate Granule Handling Vents	PM	1.73	1.19
	vents	PM ₁₀	0.04	0.03
		PM _{2.5}	<0.01	<0.01
G-3	Railcar Granule Unloading Facility	PM	2.45	0.87
	(5)	PM ₁₀	0.05	0.02
		PM _{2.5}	<0.01	<0.01
G-4	Headlap/Granules Unloading Facility	PM	1.22	0.60
	(5)	PM ₁₀	0.03	0.01
		PM _{2.5}	<0.01	<0.01
	•			<u></u>
G-5	Mix/Production Buildings Vents (5)	PM	0.72	3.64
		PM ₁₀	0.08	0.53
		PM _{2.5}	0.02	0.16
G-6	Roll-Off Boxes (5)	PM	<0.01	0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
F-1	Stillyard Fugitives (5)	VOC	1.90	8.31
F-2	Maintenance Fugitives (5)	VOC	<0.01	<0.01
		NO _x	0.04	<0.01
		СО	<0.01	<0.01
		PM	0.01	<0.01
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.01	<0.01
		SO ₂	0.11	0.01
		Total HAPs	<0.01	<0.01
HAP	Hazardous Air Pollutants (Individual)	HAP	-	<10
HAP	Hazardous Air Pollutants (Total)	HAP	-	<25

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emissio	n Rates (6)
No. (1)		Name (3)	lbs/hour	TPY (4)
	Scenario 2: Pre-	Project Emission Ra	tes (8)	
B-1	No. 1 Boiler Stack	NO _x	0.39	1.69
		СО	0.50	2.16
		voc	0.08	0.34
		PM	0.08	0.34
		PM ₁₀	0.08	0.34
		PM _{2.5}	0.08	0.34
		SO ₂	0.01	0.04
		Total HAPs	0.02	0.10
B-2	No. 2 Boiler Stack	NO _x	1.26	5.26
		СО	1.06	4.42
		VOC	0.07	0.40
		РМ	0.10	0.40
		PM ₁₀	0.10	0.40
		PM _{2.5}	0.10	0.40
		SO ₂	0.01	0.04
		Total HAPs	0.02	0.10
F-14	Afterburner Stack	NO _x	4.62	5.78
	(Blowstill No. 1 and No. 3 and Knockout Tank)	СО	49.80	62.25
		voc	1.20	1.50
		РМ	6.60	8.25
		PM ₁₀	6.60	8.25
		PM _{2.5}	6.60	8.25
		SO ₂	69.60	87.00
		Total HAPs	0.34	0.42
		HCI	0.34	0.42
C-1	No. 3 Limestone Dust Collector	PM	0.26	0.13
	Stack	PM ₁₀	0.26	0.13
		PM _{2.5}	0.26	0.13

C-2	Line 1 Aggregate Application	DM	0.40	1 70
U-2	Line 1 Aggregate Application Process Dust Collector Stack	PM	0.43	1.72
	(Granule Run Tank and Sand Run Tank)	PM ₁₀	0.10	0.43
	<u> </u>	PM _{2.5}	0.01	0.06
C-3	Line 2 Aggregate Application Process Dust Collector Stack	РМ	0.43	1.72
	(Granule Run Tank and Sand Run	PM ₁₀	0.10	0.43
	Tank)	PM _{2.5}	0.01	0.06
C-4	Sand Silo Dust Collector Stack	PM	0.03	0.13
		PM ₁₀	0.03	0.13
		PM _{2.5}	0.03	0.13
H-1	No. 2 Born Coating Heater Stack	NO _x	1.40	5.85
		СО	1.18	4.92
		VOC	0.08	0.33
		PM	0.11	0.45
		PM ₁₀	0.11	0.45
		PM _{2.5}	0.11	0.45
		SO ₂	0.01	0.04
		Total HAPs	0.03	0.11
H-2	No. 3 Born Coating Heater Stack	NO _x	1.40	5.85
		СО	1.18	4.92
		VOC	0.08	0.33
		PM	0.11	0.45
		PM ₁₀	0.11	0.45
		PM _{2.5}	0.11	0.45
		SO ₂	0.01	0.04
		Total HAPs	0.03	0.11
H-3	No. 2 Cutler Coating Heater Stack	NO _x	0.60	2.51
		СО	0.51	2.11
		VOC	0.04	0.14
		PM	0.05	0.19
		PM ₁₀	0.05	0.19
		PM _{2.5}	0.05	0.19
		SO ₂	<0.01	0.02
		L	L	

		Total HAPS	0.01	0.05
H-4	Hot Oil Heater No. 1 Stack	NO _x	0.40	1.67
		СО	0.34	1.41
		VOC	0.03	0.10
		PM	0.03	0.13
		PM ₁₀	0.03	0.13
		PM _{2.5}	0.03	0.13
		SO ₂	<0.01	0.01
		Total HAPS	0.01	0.03
H-9	Hot Oil Heater No. 2 Stack	NO _x	0.13	0.55
İ		СО	0.11	0.46
		VOC	0.01	0.03
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
		SO ₂	<0.01	0.01
		Total HAPS	<0.01	0.01
T-1	No. 1 Tank Fume Filter Vent	VOC	1.90	8.82
T-2	No. 2 Tank Fume Filter Vent	VOC	1.90	8.82
	(Coating Tank No. 1 and Flux Tanks No. 1 and No. 2)	СО	<0.01	<0.01
		PM	<0.01	0.01
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	0.01
		HAPs	<0.01	<0.01
T-3	Large Coater/Surge Tank Fume Filter Vent	СО	0.68	3.00
		VOC	6.01	24.04
		РМ	0.17	0.75
		PM ₁₀	0.17	0.75
		PM _{2.5}	0.17	0.75
T-4	Sealant Storage Tank Vent	VOC	0.03	0.05
T-5	Laminant Storage Tank Vent	VOC	0.03	0.11
T-6 Proiect Numb	Fume Filter Vent (Line 1 Laminator, Line 2 Laminator,	VOC	0.39	1.73

		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
L-1a	No. 1 Limestone Dust Collector	PM	0.26	1.14
		PM ₁₀	0.26	1.14
		PM _{2.5}	0.26	1.14
L-2	No. 2 Limestone Dust Collector	PM	0.26	0.59
		PM ₁₀	0.26	0.59
		PM _{2.5}	0.26	0.59
L-3	Horizon Limestone Dust Collector	PM	0.69	3.01
	Vent (Limestone Filler Heater and	PM ₁₀	0.69	3.01
	Limestone Run Tank)	PM _{2.5}	0.69	3.01
		NO _x	0.70	3.05
		СО	0.28	1.20
		VOC	0.04	0.18
		SO ₂	0.01	0.02
		Total HAPs	0.01	0.06
F-1	Stillyard Fugitives (5)	VOC	1.90	8.31
F-2	Maintenance Fugitives (5)	NO _x	0.04	<0.01
		СО	<0.01	<0.01
		VOC	<0.01	<0.01
		PM	0.01	<0.01
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.01	<0.01
		SO ₂	0.11	<0.01
		Total HAPs	<0.01	<0.01
F-5	Line 2 Sealant Applicator System Vent (5)	VOC	0.03	0.10
MFGBLDG	Manufacturing Building Fugitives (Paint and Ink Jet Printer) (5)	voc	0.27	1.12
E-1	Emergency Generator Stack	NO _x	3.13	0.16
		СО	0.67	0.03
		VOC	0.25	0.01

		DM	0.00	0.04
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		SO ₂	<0.01	<0.01
		Total HAPs	<0.01	<0.01
G-1	Batch House (Granule Silos and Granule Truck	PM	2.62	2.62
	and Rail Unloading) (5)	PM ₁₀	2.62	2.62
		PM _{2.5}	2.62	2.62
G-2	Intermediate Granule Handling	PM	2.55	2.55
	Building Vent	PM ₁₀	2.55	2.55
COOL-1	Line No. 1 Cooling Vent	PM	0.10	0.44
		PM ₁₀	0.10	0.44
		PM _{2.5}	0.10	0.44
COOL-2	Line No. 2 Cooling Vent	РМ	0.10	0.44
		PM ₁₀	0.10	0.44
		PM _{2.5}	0.10	0.44
KOTL	Knockout Oil Truck Loading	VOC	0.52	0.01
		СО	0.08	<0.01
		PM	0.15	<0.01
		PM ₁₀	0.15	<0.01
		PM _{2.5}	0.15	<0.01
		HAPs	0.02	<0.01
CT-1	Process Cooling Tower	PM	0.35	1.5
		PM ₁₀	0.35	1.5
		PM _{2.5}	0.35	1.5
CT-2	Compressor Cooling Tower	PM	0.07	0.3
		PM ₁₀	0.07	0.3
		PM _{2.5}	0.07	0.3
G-3	Railcar Granule Unloading Facility	PM	4.37	3.82
		PM ₁₀	4.37	3.82
		PM _{2.5}	4.37	3.82
G-4	Headlap/Granules Unloading Facility	PM	0.02	0.04

		PM ₁₀	0.01	0.02
		PM _{2.5}	0.01	0.01
G-6	Roll-Off Boxes	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
G-5	Mix/Production Buildings Vents	PM	0.72	3.64
		PM ₁₀	0.08	0.53
		PM _{2.5}	0.02	0.16

- (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
 - SO₂ sulfur dioxide
 - PM total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented 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 HCI - hydrogen chloride
 - HAP hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal
 - Regulations Part 63, Subpart C
- (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) Planned startup and shutdown emissions are included. Planned maintenance emissions resulting from the cleaning of asphalt from piping and from tool cleaning using heating (EPN F-2) are authorized by this permit and other planned maintenance emissions are authorized under PBR 106.263.
- (7) NO_x emission rate effective upon installation and operation of the replacement burner represented in the permit amendment dated November 8, 2019.
- (8) Scenario 1 emission rates are effective upon completion and startup of the project represented in the permit amendment application, PI-1 dated November 8, 2019. Scenario 2 emission rates are effective until the startup of the project.

Date:	August 7 2020	