Permit Numbers 164137 and PSDTX1594

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	Emission Rates	
(1)		Name (3)	lbs/hour	TPY (4)
STCK01	Fired Process Heater - Natural Gas	voc	2.01	-
		PM	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-
		NO _x (MSS)	6.71	-
		со	13.78	-
		SO ₂	0.81	-
		NH ₃	1.67	-
		Pb	<0.01	-
STCK01	Fired Process Heater – Fuel Gas	VOC	2.01	-
		PM	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-
		NO _x (MSS)	8.95	-
		со	13.78	-
		SO ₂	0.84	-
		NH ₃	1.67	-
		Pb	<0.01	-
STCK01	Fired Process Heater – Annual Emissions	VOC	-	8.81
	Lilioolulo	PM	-	12.17
		PM ₁₀	-	12.17
		PM _{2.5}	-	12.17

		NO _X	-	16.48
		СО	-	60.37
		SO ₂	-	3.68
		NH ₃	-	7.33
		Pb	-	<0.01
		HAPs		3.50
STCK02	Fired Steam Superheater – Natural Gas	voc	2.09	-
	Gas	PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	6.97	-
		СО	14.32	-
		SO ₂	0.84	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK02	Fired Steam Superheater – Fuel Gas	voc	2.09	-
		PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	9.30	-
		СО	14.32	-
		SO ₂	0.87	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK02	Fired Steam Superheater – Annual Emissions	VOC	-	9.15
	Emissions	PM	-	12.64
		PM ₁₀	-	12.64

		PM _{2.5}	-	12.64
		NO _X	-	17.11
		СО	-	62.71
		SO ₂	-	3.82
		NH ₃	-	7.61
		Pb		<0.01
		HAPs	-	3.64
STCK03	Gasoline Splitter Reboiler – Natural Gas	voc	0.20	-
	Gas	PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.12	-
		СО	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK03	Gasoline Splitter Reboiler – Fuel Gas	voc	0.20	-
		PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.49	-
		со	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK03	Gasoline Splitter Reboiler – Annual Emissions	VOC	-	0.88
	LITHOUTIO	PM	-	1.22
		PM ₁₀	-	1.22
		PM _{2.5}	-	1.22
		NO _X	-	6.55
		СО	-	6.05

		SO ₂	-	0.37
		Pb	-	<0.01
		HAPs		0.35
STCK04	Gasoline Loop SU Heater	VOC	0.32	0.69
		PM	0.44	0.96
		PM ₁₀	0.44	0.96
		PM _{2.5}	0.44	0.96
		NO _X	1.76	3.86
		CO	2.17	4.75
		SO ₂	0.13	0.27
		Pb	<0.01	<0.01
			-	0.24
STCK05	Regeneration Heater A	HAPs	0.06	0.28
310103	Regeneration realer A	VOC	0.09	0.39
		PM	~	
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NO _X	0.36	1.56
		СО	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01
		HAPs	-	0.10
STCK06	Regeneration Heater B	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NO _X	0.36	1.56
		СО	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01

		HAPs	-	0.10
STCK07	Fired Process Heater - Natural Gas	VOC	2.01	-
		РМ	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-
		NOX (MSS)	6.71	-
		СО	13.78	-
		SO ₂	0.81	-
		NH ₃	1.67	-
		Pb	<0.01	-
STCK07	Fired Process Heater - Fuel Gas	VOC	2.01	-
		PM	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-
		NOX (MSS)	8.95	-
		СО	13.78	-
		SO ₂	0.84	-
		NH₃	1.67	-
		Pb	<0.01	-
STCK07	Fired Process Heater – Annual Emissions	VOC	-	8.81
	Littissions	PM	-	12.17
		PM ₁₀	-	12.17
		PM _{2.5}	-	12.17
		NO _X	-	16.48
		СО	-	60.37
		SO ₂	-	3.68
		NH ₃	-	7.33

		Pb	-	<0.01
		HAPs	-	3.50
STCK08	Fired Steam Superheater – Natural Gas	VOC	2.09	-
	Gas	PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	6.97	-
		СО	14.32	-
		SO ₂	0.84	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK08	Fired Steam Superheater – Fuel Gas	VOC	2.09	-
		PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	9.30	-
		со	14.32	-
		SO ₂	0.87	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK08	Fired Steam Superheater – Annual Emissions	VOC	-	9.15
	Emissions	PM	-	12.64
		PM ₁₀	-	12.64
		PM _{2.5}	-	12.64
		NO _x	-	17.11
		со	-	62.71
		SO ₂	-	3.82

		NH ₃	-	7.61
		Pb	-	<0.01
		HAPs	-	3.64
STCK09	Gasoline Splitter Reboiler – Natural	VOC	0.20	-
	Gas	PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.12	-
		СО	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK09	Gasoline Splitter Reboiler – Fuel Gas	voc	0.20	-
		PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.49	-
		со	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK09	Gasoline Splitter Reboiler – Annual	VOC	-	0.88
	Emissions	PM	-	1.22
		PM ₁₀	-	1.22
		PM _{2.5}	-	1.22
		NO _X	-	6.55
		СО	-	6.05
		SO ₂	-	0.37
		Pb	-	<0.01
		HAPs	-	0.35
STCK10	Gasoline Loop SU Heater	VOC	0.32	0.69

		PM	0.44	0.96
		PM ₁₀	0.44	0.96
		PM _{2.5}	0.44	0.96
		NO _X	1.76	3.86
		СО	2.17	4.75
		SO ₂	0.13	0.27
		Pb	<0.01	<0.01
		HAPs	-	0.24
STCK11	Regeneration Heater A	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NO _X	0.36	1.56
		СО	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01
		HAPs	-	0.10
STCK12	Regeneration Heater B	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NO _X	0.36	1.56
		СО	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01
		HAPs	-	0.10
STCK13	Fired Process Heater - Natural Gas	VOC	2.01	-
		PM	2.78	-
		PM ₁₀	2.78	-

		PM _{2.5}	2.78	-
			5.59	
		NO _X		-
		NOX (MSS)	6.71	-
		СО	13.78	-
		SO ₂	0.81	-
		NH₃	1.67	-
		Pb	<0.01	-
STCK13	Fired Process Heater - Fuel Gas	VOC	2.01	-
		PM	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-
		NOX (MSS)	8.95	-
		СО	13.78	-
		SO ₂	0.84	-
		NH₃	1.67	-
		Pb	<0.01	-
STCK13	Fired Process Heater – Annual Emissions	VOC	-	8.81
		PM	-	12.17
		PM ₁₀	-	12.17
		PM _{2.5}	-	12.17
		NO _X		16.48
		СО	-	60.37
		SO ₂	-	3.68
		NH ₃	-	7.33
		Pb	-	<0.01
		HAPs	-	3.50
STCK14	Fired Steam Superheater – Natural	VOC	2.09	-
	Gas	PM	2.89	-

1	1			
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	6.97	-
		СО	14.32	-
		SO ₂	0.84	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK14	Fired Steam Superheater – Fuel Gas	VOC	2.09	-
		PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NOx	5.81	-
		NOX (MSS)	9.30	-
		со	14.32	-
		SO ₂	0.87	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK14	Fired Steam Superheater – Annual Emissions	VOC	-	9.15
	Lillissions	PM	-	12.64
		PM ₁₀	-	12.64
		PM _{2.5}	-	12.64
		NO _X	-	17.11
		СО	-	62.71
		SO ₂	-	3.82
		NH₃	-	7.61
		Pb	-	<0.01
		HAPs	-	3.64
STCK15	Gasoline Splitter Reboiler – Natural Gas	VOC	0.20	-

PM ₁₀ 0.28 PM ₂₅ 0.28 - PM ₂₅ 0.28 - NO _X 1.12 - CO 1.38 - SO ₂ 0.08 - Pb <0.01 - STCK15 Gasoline Splitter Reboiler − Fuel Gas PM 0.28 - PM ₁₀ 0.28 - PM ₁₀ 0.28 - PM ₁₀ 0.28 - PM ₁₀ 0.28 - PM ₂₅ 0.28 - PM ₂₅ 0.28 - NO _X 1.49 - CO 1.38 - SO ₂ 0.08 - Pb <0.01 - STCK15 Gasoline Splitter Reboiler − Annual Emissions PM 0.01 - STCK15 PM ₁₀ - 1.22 PM ₁₀ - 0.37 Pb - 0.01 HAPs - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM ₁₀	I	I		<u> </u>	
PMc5 0.28 -			PM	0.28	-
NO _x 1.12			PM ₁₀	0.28	-
CO			PM _{2.5}	0.28	-
SO2			NO _X	1.12	-
Pb			СО	1.38	-
STCK15 Gasoline Splitter Reboiler – Fuel Gas PM 0.28 PM 0.28 PM25 0.28 NO. 1.49 CO 1.38 SO: 0.08 Pb <0.01 - PM - 0.28 NO. 1.49 CO 1.38 SO: 0.08 Pb <0.01 - PM - 1.22 PM25 PM25 NO. 1.22 PM25 PM - 1.22 PM25 NO 6.55 CO - 6.05 SO: 0.37 Pb - 0.01 HAPS - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 PM 0.44 0.96 PM25 O.44 O.96 PM25 O.44 O.96 PM25 O.44 O.96 PM25 O.44 O.96			SO ₂	0.08	-
PM			Pb	<0.01	-
PM10	STCK15	Gasoline Splitter Reboiler – Fuel Gas	voc	0.20	-
PM _{2.5} 0.28			PM.	0.28	-
NOx 1.49 -			PM ₁₀	0.28	-
CO 1.38 - SO ₂ 0.08 - Pb < 0.01 - STCK15 Gasoline Splitter Reboiler – Annual Emissions PM - 0.88 PM - 1.22 PM ₁₀ - 1.22 PM ₂₅ - 1.22 NO _X - 6.55 CO - 6.05 SO ₂ - 0.37 Pb - <0.01 HAPS - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM ₁₀ 0.44 0.96 PM ₁₀ 0.44 0.96 PM ₁₀ 0.44 0.96			PM _{2.5}	0.28	-
SO2 0.08 - Pb <0.01 - STCK15 Gasoline Splitter Reboiler - Annual Emissions PM - 0.88 PM - 1.22 PM ₁₀ - 1.22 PM ₂₅ - 1.22 NOx - 6.55 CO - 6.05 SO2 - 0.37 Pb - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM ₁₀ 0.44 0.96 PM ₁₀ 0.44 0.96			NO _X	1.49	-
STCK15 Gasoline Splitter Reboiler - Annual Emissions PM			СО	1.38	-
STCK15 Gasoline Splitter Reboiler – Annual Emissions PM - 1.22 PM ₁₀ - 1.22 PM _{2.5} - 1.22 NO _x - 6.55 CO - 6.05 SO ₂ - 0.37 Pb - <0.01 HAPs - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96			SO ₂	0.08	-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Pb	<0.01	-
PM - 1.22 PM ₁₀ - 1.22 PM _{2.5} - 1.22 NO _X - 6.55 CO - 6.05 SO ₂ - 0.37 Pb - <0.01 HAPS - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96	STCK15	Gasoline Splitter Reboiler – Annual	voc	-	0.88
PM _{2.5} - 1.22 NO _X - 6.55 CO - 6.05 SO ₂ - 0.37 Pb - <0.01 HAPs - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96			PM	-	1.22
NOx - 6.55 CO - 6.05 SO ₂ - 0.37 Pb - <0.01 HAPs - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM ₂₅ 0.44 0.96			PM ₁₀	-	1.22
CO - 6.05 SO ₂ - 0.37 Pb - <0.01 HAPs - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96			PM _{2.5}	-	1.22
SO ₂ - 0.37 Pb - <0.01 HAPs - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96			NO _X	-	6.55
Pb - <0.01 HAPS - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96			СО	-	6.05
HAPS - 0.35 STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96			SO ₂	-	0.37
STCK16 Gasoline Loop SU Heater VOC 0.32 0.69 PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96			Pb	-	<0.01
PM 0.44 0.96 PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96			HAPs	-	0.35
PM ₁₀ 0.44 0.96 PM _{2.5} 0.44 0.96	STCK16	Gasoline Loop SU Heater	VOC	0.32	0.69
PM _{2.5} 0.44 0.96			PM	0.44	0.96
			PM ₁₀	0.44	0.96
176 206			PM _{2.5}	0.44	0.96
NO_{χ}			NO _X	1.76	3.86

CO 2.17 4.75 SO ₂ 0.13 0.27 Pb < <0.01		·		0.47	4.75
Pb <0.01 <0.01 HAPS - 0.24 STCK17 Regeneration Heater A VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93 SO ₂ 0.03 0.11 Pb <0.01 <0.01 HAPS - 0.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93					
TCK17 Regeneration Heater A VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM ₂₅ 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93 SO ₂ 0.03 0.11 Pb <0.01 HAPS CO 0.06 0.28 PM 0.09 0.39 O.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM ₁₀ 0.09 0.39 PM ₂₅ 0.09 0.39 PM ₂₅ 0.09 0.39 PM ₂₅ 0.09 0.39 PM ₂₅ 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93			SO ₂		
STCK17 Regeneration Heater A VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NOx 0.36 1.56 CO 0.44 1.93 SO ₂ 0.03 0.11 Pb <0.01 CO.01 HAPS 0.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 PM _{2.5} 0.09 0.39 PM _{2.5} 0.09 0.39 PM _{2.5} 0.09 0.39 NOx 0.36 1.56 CO 0.44 1.93			Pb	<0.01	<0.01
PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _x 0.36 1.56 CO 0.44 1.93 SO ₂ 0.03 0.11 Pb <0.01 <0.01 HAPS - 0.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _x 0.36 1.56 CO 0.44 1.93			HAPs	-	0.24
PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NOx 0.36 1.56 CO 0.44 1.93 SO ₂ 0.03 0.11 Pb <0.01 <0.01 HAPS - 0.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93	STCK17	Regeneration Heater A	voc	0.06	0.28
PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93 SO ₂ 0.03 0.11 Pb <0.01 <0.01 HAPS - 0.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93			PM	0.09	0.39
NOx 0.36 1.56 CO 0.44 1.93 SO ₂ 0.03 0.11 Pb < 0.01			PM ₁₀	0.09	0.39
CO			PM _{2.5}	0.09	0.39
SO ₂ 0.03 0.11 Pb <0.01 <0.01 HAPs - 0.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _x 0.36 1.56 CO 0.44 1.93			NO _X	0.36	1.56
Pb < <0.01 <0.01 HAPS - 0.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93			со	0.44	1.93
HAPS - 0.10 STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93			SO ₂	0.03	0.11
STCK18 Regeneration Heater B VOC 0.06 0.28 PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93			Pb	<0.01	<0.01
PM 0.09 0.39 PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93			HAPs		0.10
PM ₁₀ 0.09 0.39 PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93	STCK18	Regeneration Heater B	voc	0.06	0.28
PM _{2.5} 0.09 0.39 NO _X 0.36 1.56 CO 0.44 1.93			РМ	0.09	0.39
NO _x 0.36 1.56 CO 0.44 1.93			PM ₁₀	0.09	0.39
CO 0.44 1.93			PM _{2.5}	0.09	0.39
			NO _X	0.36	1.56
0.03 0.11			со	0.44	1.93
502			SO ₂	0.03	0.11
Pb <0.01 <0.01			Pb	<0.01	<0.01
HAPs - 0.10			HAPs	-	0.10
STCK19 Fired Process Heater - Natural Gas VOC 2.01 -	STCK19	Fired Process Heater - Natural Gas	voc	2.01	-
PM 2.78 -			PM	2.78	-
PM ₁₀ 2.78 -			PM ₁₀	2.78	-
PM _{2.5} 2.78 -			PM _{2.5}	2.78	-
NO _X 5.59 -			NO _X	5.59	-
NOX (MSS) 6.71 -		,	NOV (NACC)	6 71	_
CO 13.78 -			NOX (MSS)	0.71	_

		SO ₂	0.81	-
		NH ₃	1.67	-
		Pb	<0.01	-
STCK19	Fired Process Heater - Fuel Gas	voc	2.01	-
		PM	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-
		NOX (MSS)	8.95	-
		со	13.78	-
		SO ₂	0.84	-
		NH ₃	1.67	-
		Pb	<0.01	-
	Fired Process Heater – Annual Emissions	VOC	-	8.81
	Ellissions	РМ	-	12.17
		PM ₁₀	-	12.17
		PM _{2.5}	-	12.17
		NO _X	-	16.48
		со	-	60.37
		SO ₂	-	3.68
		NH ₃	-	7.33
		Pb	-	<0.01
		HAPs	-	3.50
STCK20	Fired Steam Superheater – Natural Gas	VOC	2.09	-
	Gas	PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	6.97	-

			1	T
		со	14.32	-
		SO ₂	0.84	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK20	Fired Steam Superheater – Fuel Gas	VOC	2.09	-
		PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	9.30	-
		со	14.32	-
		SO ₂	0.87	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK20	Fired Steam Superheater – Annual Emissions	voc	-	9.15
	LIIIISSIOIIS	РМ	-	12.64
		PM ₁₀	-	12.64
		PM _{2.5}	-	12.64
		NOx	-	17.11
		со	-	62.71
		SO ₂	-	3.82
		NH ₃	-	7.61
		Pb	-	<0.01
		HAPs	-	3.64
STCK21	Gasoline Splitter Reboiler – Natural	VOC	0.20	-
	Gas	PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.12	-

1	1		T	1
		СО	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK21	Gasoline Splitter Reboiler – Fuel Gas	voc	0.20	-
		PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.49	-
		СО	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK21	Gasoline Splitter Reboiler – Annual Emissions	voc	-	0.88
		PM	-	1.22
		PM ₁₀	-	1.22
		PM _{2.5}	-	1.22
		NO _X	-	6.55
		со	-	6.05
		SO ₂	-	0.37
		Pb	-	<0.01
		HAPs	-	0.35
STCK22	Gasoline Loop SU Heater	VOC	0.32	0.69
		PM	0.44	0.96
		PM ₁₀	0.44	0.96
		PM _{2.5}	0.44	0.96
		NO _X	1.76	3.86
		со	2.17	4.75
		SO ₂	0.13	0.27
		Pb	<0.01	<0.01
		HAPs	-	0.24

Emission Sources - Maximum Allowable Emission Rates

STCK23	Regeneration Heater A	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NO _X	0.36	1.56
		СО	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01
		HAPs	-	0.10
STCK24	Regeneration Heater B	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NOx	0.36	1.56
		со	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01
		HAPs	-	0.10
STCK25	Fired Process Heater - Natural Gas	VOC	2.01	-
		PM	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NOx	5.59	-
		NOX (MSS)	6.71	-
		со	13.78	-
		SO ₂	0.81	-
		NH ₃	1.67	-
		Pb	<0.01	-
STCK25	Fired Process Heater - Fuel Gas	VOC	2.01	-

I	1		<u> </u>	<u> </u>
		PM	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-
		NOX (MSS)	8.95	-
		СО	13.78	-
		SO ₂	0.84	-
		NH ₃	1.67	-
		Pb	<0.01	-
STCK25	Fired Process Heater – Annual Emissions	voc	-	8.81
	Lillissions	PM	-	12.17
		PM ₁₀	-	12.17
		PM _{2.5}	2	12.17
		NOx	-	16.48
		со	-	60.37
		SO ₂	-	3.68
		NH ₃	-	7.33
		Pb	-	<0.01
		HAPs	-	3.50
STCK26	Fired Steam Superheater – Natural	VOC	2.09	-
	Gas	PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	6.97	-
		СО	14.32	-
		SO ₂	0.84	-
		NH ₃	1.74	-
		Pb	<0.01	-

		1	1	
STCK26	Fired Steam Superheater – Fuel Gas	VOC	2.09	-
		РМ	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	9.30	-
		СО	14.32	-
		SO ₂	0.87	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK26	Fired Steam Superheater – Annual Emissions	VOC	-	9.15
	Ellissions	PM	-	12.64
		PM ₁₀	2	12.64
		PM _{2.5}	-	12.64
		NO _X	-	17.11
		СО	-	62.71
		SO ₂	-	3.82
		NH ₃	-	7.61
		Pb	-	<0.01
		HAPs	-	3.64
STCK27	Gasoline Splitter Reboiler – Natural Gas	VOC	0.20	-
	Gas	PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.12	-
		СО	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK27	Gasoline Splitter Reboiler – Fuel Gas	voc	0.20	-

			0.00	
		PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.49	-
		СО	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK27	Gasoline Splitter Reboiler – Annual Emissions	voc	-	0.88
	Littissions	PM	-	1.22
		PM10	-	1.22
		PM2.5	-	1.22
		NOX	-	6.55
		СО	2	6.05
		SO2	-	0.37
		Pb	-	<0.01
		HAPs	-	0.35
STCK28	Gasoline Loop SU Heater	voc	0.32	0.69
		PM	0.44	0.96
		PM ₁₀	0.44	0.96
		PM _{2.5}	0.44	0.96
		NO _X	1.76	3.86
		СО	2.17	4.75
		SO ₂	0.13	0.27
		Pb	<0.01	<0.01
		HAPs	-	0.24
STCK29	Regeneration Heater A	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39

		NO _X	0.36	1.56
		СО	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01
		HAPs	-	0.10
STCK30	Regeneration Heater B	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NOx	0.36	1.56
		СО	0.44	1.93
		SO ₂	0.03 0.	0.11
		Pb	<0.01	<0.01
		HAPs	-	0.10
STCK31	Fired Process Heater - Natural Gas	voc	2.01	-
		РМ	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-
		NOX (MSS)	6.71	-
		со	13.78	-
		SO ₂	0.81	-
		NH ₃	1.67	-
		Pb	<0.01	-
STCK31	Fired Process Heater - Fuel Gas	VOC	2.01	-
		PM	2.78	-
		PM ₁₀	2.78	-
		PM _{2.5}	2.78	-
		NO _X	5.59	-

		NOV (MCC)	8.95	
		NOX (MSS)		-
		СО	13.78	-
		SO ₂	0.84	-
		NH ₃	1.67	-
		Pb	<0.01	-
STCK31	Fired Process Heater – Annual Emissions	voc		8.81
		PM	-	12.17
		PM ₁₀	-	12.17
		PM _{2.5}	-	12.17
		NO _X	-	16.48
		СО	-	60.37
		SO ₂	-	3.68
		NH ₃	-	7.33
		Pb	-	<0.01
		HAPs	-	3.50
STCK32	Fired Steam Superheater – Natural Gas	voc	2.09	-
		РМ	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-
		NO _X	5.81	-
		NOX (MSS)	6.97	-
		СО	14.32	-
		SO ₂	0.84	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK32	Fired Steam Superheater – Fuel Gas	VOC	2.09	-
		PM	2.89	-
		PM ₁₀	2.89	-
		PM _{2.5}	2.89	-

		NO _X	5.81	-
			9.30	_
		NOX (MSS)		
		СО	14.32	-
		SO ₂	0.87	-
		NH ₃	1.74	-
		Pb	<0.01	-
STCK32	Fired Steam Superheater – Annual Emissions	voc	-	9.15
		PM	-	12.64
		PM ₁₀	-	12.64
		PM _{2.5}	-	12.64
		NO _X	-	17.11
		со	-	62.71
		SO ₂	2	3.82
		NH ₃	-	7.61
		Pb	-	<0.01
		HAPs	-	3.64
STCK33	Gasoline Splitter Reboiler – Natural Gas	voc	0.20	-
		PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.12	-
		СО	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK33	Gasoline Splitter Reboiler – Fuel Gas	VOC	0.20	-
		PM	0.28	-
		PM ₁₀	0.28	-
		PM _{2.5}	0.28	-
		NO _X	1.49	-

		СО	1.38	-
		SO ₂	0.08	-
		Pb	<0.01	-
STCK33	Gasoline Splitter Reboiler – Annual	VOC	_	0.88
	Emissions	PM	-	1.22
		PM ₁₀		1.22
		PM _{2.5}	-	1.22
		NO _X	-	6.55
		СО		6.05
		SO ₂		0.37
		Pb	-	<0.01
		HAPs	-	0.35
STCK34	Gasoline Loop SU Heater	VOC	0.32	0.69
		PM	0.44	0.96
		PM ₁₀	0.44	0.96
		PM _{2.5}	0.44	0.96
		NO _x	1.76	3.86
		СО	2.17	4.75
		SO ₂	0.13	0.27
		Pb	<0.01	<0.01
		HAPs	-	0.24
STCK35	Regeneration Heater A	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NO _X	0.36	1.56
		СО	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01

		HAPs	-	0.10
STCK36	Regeneration Heater B	VOC	0.06	0.28
		PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
		NO _X	0.36	1.56
		со	0.44	1.93
		SO ₂	0.03	0.11
		Pb	<0.01	<0.01
		HAPs	-	0.10
STCK37	HGU Tubular Reformer – Natural Gas	voc	1.97	-
		РМ	2.72	-
		PM ₁₀	2.72	-
		PM _{2.5}	2.72	-
		NO _X	5.48	-
		NOX (MSS)	6.58	-
		со	13.51	-
		SO ₂	0.79	-
		NH ₃	1.64	-
		Pb	<0.01	-
STCK37	HGU Tubular Reformer – Fuel Gas	VOC	1.97	-
		PM	2.72	-
		PM ₁₀	2.72	-
		PM _{2.5}	2.72	-
		NO _X	5.48	-
		NOX (MSS)	9.87	-
		СО	13.51	-
		SO ₂	-	-
		NH ₃	1.64	-

		Pb	<0.01	-
STCK37	HGU Tubular Reformer – Annual	voc	-	8.63
	Emissions	PM	-	11.93
		PM ₁₀	-	11.93
		PM _{2.5}	-	11.93
		NO _x		16.18
		СО	-	59.16
		SO ₂	-	3.46
		NH ₃	-	7.18
		Pb	-	<0.01
		HAPs	-	2.96
STCK38	Cooling Tower T1/T2 Cell 1	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK39	Cooling Tower T1/T2 Cell 2	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK40	Cooling Tower T1/T2 Cell 3	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK41	Cooling Tower T1/T2 Cell 4	VOC	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK42	Cooling Tower T1/T2 Cell 5	VOC	5.02	2.20
		PM	0.31	1.37

		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK43	Cooling Tower T1/T2 Cell 6	VOC	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK44	Cooling Tower T3/T4 Cell 1	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK45	Cooling Tower T3/T4 Cell 2	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK46	Cooling Tower T3/T4 Cell 3	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK47	Cooling Tower T3/T4 Cell 4	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK48	Cooling Tower T3/T4 Cell 5	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK49	Cooling Tower T3/T4 Cell 6	VOC	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42

		PM _{2.5}	<0.01	<0.01
STCK50	Cooling Tower T5/T6 Cell 1	VOC	5.02	2.20
	-	PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK51	Cooling Tower T5/T6 Cell 2	VOC	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK52	Cooling Tower T5/T6 Cell 3	voc	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK53	Cooling Tower T5/T6 Cell 4	VOC	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK54	Cooling Tower T5/T6 Cell 5	VOC	5.02	2.20
		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK55	Cooling Tower T5/T6 Cell 6	VOC	5.02	2.20
,		PM	0.31	1.37
		PM ₁₀	0.10	0.42
		PM _{2.5}	<0.01	<0.01
STCK56	Auxiliary Boiler T1/T2 - Natural Gas	VOC	1.82	-
		PM	2.51	-
		PM ₁₀	2.51	_
		PM _{2.5}	2.51	-

		NO _X	5.05	_
		NOX (MSS)	6.06	_
		CO	12.45	-
		SO ₂	0.73	_
		NH ₃	1.51	_
		Pb	<0.01	-
STCK56	Auxiliary Boiler T1/T2 - Fuel Gas	VOC	1.82	-
STORSO	Advillary Bollet 11/12 Tuel Gas		2.51	_
		PM	2.51	-
		PM ₁₀	· ·	
		PM _{2.5}	2.51	-
		NO _x	5.05	-
		NOX (MSS)	8.09	-
		СО	12.45	-
		SO ₂	0.74	-
		NH ₃	1.51	-
		Pb	<0.01	-
STCK56	Auxiliary Boiler T1/T2 – Annual Emissions	voc	-	7.96
	EITHISSIONS	PM	-	10.99
		PM ₁₀	-	10.99
		PM _{2.5}	-	10.99
		NO _X	-	14.88
		СО	-	54.53
		SO ₂	-	3.25
		NH ₃	-	6.62
		Pb	-	<0.01
		HAPs	-	3.01
STCK57	Auxiliary Boiler T3/T4 - Natural Gas	VOC	1.82	-
		PM	2.51	-
		PM ₁₀	2.51	-
_		4.10		

		DM	2.51	-
		PM _{2.5}		
		NO _X	5.05	-
		NOX (MSS)	6.06	-
		со	12.45	-
		SO ₂	0.73	-
		NH₃	1.51	-
		Pb	<0.01	-
STCK57	Auxiliary Boiler T3/T4 - Fuel Gas	voc	1.82	-
		PM	2.51	-
		PM ₁₀	2.51	-
		PM _{2.5}	2.51	-
		NO _X	5.05	-
		NOX (MSS)	8.09	-
		СО	12.45	-
		SO ₂	0.74	-
		NH₃	1.51	
		Pb	<0.01	-
STCK57	Auxiliary Boiler T3/T4 – Annual Emissions	VOC	-	7.96
	Emissions	PM	-	10.99
		PM ₁₀	-	10.99
		PM _{2.5}	-	10.99
		NOX	-	14.88
		СО	-	54.53
		SO ₂	-	3.25
		NH ₃	-	6.62
		Pb	-	<0.01
		HAPs	-	3.01
STCK58	Auxiliary Boiler T5/T6 - Natural Gas	VOC	1.82	-
		PM	2.51	-

		PM ₁₀	2.51	-
		PM _{2.5}	2.51	-
		NO _X	5.05	-
		NOX (MSS)	6.06	-
		CO (M33)	12.45	-
		SO ₂	0.73	_
			1.51	-
		NH ₃	<0.01	-
STCK58	Auxiliary Boiler T5/T6 - Fuel Gas	Pb	1.82	-
31CK36	Auxiliary Boller 15/10 - Fuel Gas	VOC	<u> </u>	
		PM	2.51	-
		PM ₁₀	2.51	-
		PM _{2.5}	2.51	-
		NOx	5.05	-
		NOX (MSS)	8.09	-
		со	12.45	-
		SO ₂	0.74	-
		NH ₃	1.51	-
		Pb	<0.01	-
STCK58	Auxiliary Boiler T5/T6 – Annual Emissions	voc	-	7.96
	EIIIISSIOIIS	РМ	-	10.99
		PM ₁₀	-	10.99
		PM _{2.5}	-	10.99
		NO _X	-	14.88
		со	-	54.53
		SO ₂	-	3.25
		NH ₃	-	6.62
		Pb	-	<0.01
		HAPs	-	3.01
STCK59	Loading/Unloading VCU	voc	35.46	155.32

		PM	0.59	2.59
		PM ₁₀	0.59	2.59
		PM _{2.5}	0.59	2.59
		NO _X	7.78	34.07
		СО	6.53	28.62
		SO ₂	0.17	0.75
		Pb	<0.01	<0.01
		HAPs	-	4.24
STCK60	Isomerization Heater T1/T2 - Natural Gas	VOC	0.02	-
	Gas	PM	0.03	-
		PM ₁₀	0.03	-
		PM _{2.5}	0.03	-
		NOx	0.11	-
		СО	0.14	-
		SO ₂	0.01	-
		Pb	<0.01	-
STCK60	Isomerization Heater T1/T2 - Fuel Gas	voc	0.02	-
		PM	0.03	-
		PM ₁₀	0.03	-
		PM _{2.5}	0.03	-
		NO _X	0.15	-
		СО	0.14	-
		SO ₂	0.01	-
		Pb	<0.01	-
STCK60	Isomerization Heater T1/T2 – Annual Emissions	VOC	-	0.09
		PM	-	0.12
		PM ₁₀	-	0.12
		PM _{2.5}	-	0.12
		NO _X	-	0.67

		СО	_	0.62
		SO ₂	-	0.04
		Pb	-	<0.01
		HAPs	-	0.04
STCK61	Hydrocracker Heater T1/T2 - Natural	VOC	0.04	-
	Gas	PM	0.05	-
		PM ₁₀	0.05	-
		PM _{2.5}	0.05	-
		NO _x	0.20	-
		СО	0.25	-
		SO ₂	0.01	-
		Pb	<0.01	-
STCK61	Hydrocracker Heater T1/T2 - Fuel Gas	VOC	0.04	-
		PM	0.05	-
		PM ₁₀	0.05	-
		PM _{2.5}	0.05	-
		NO _x	0.27	-
		СО	0.25	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK61	Hydrocracker Heater T1/T2 – Annual Emissions	VOC	-	0.16
	Lillissions	PM	-	0.22
		PM ₁₀	-	0.22
		PM _{2.5}	-	0.22
		NO _X	-	1.19
		СО	-	1.10
		SO ₂	-	0.07
		Pb	-	<0.01
		HAPs	-	0.06

STCK62	Iso. Eff. Stabilizer Reboiler T1/T2 -	voc	0.05	-
	Natural Gas	PM	0.07	-
		PM ₁₀	0.07	-
		PM _{2.5}	0.07	-
		NO _X	0.29	-
		СО	0.36	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK62	Iso. Eff. Stabilizer Reboiler T1/T2 - Fuel Gas	voc	0.05	-
	ruei Gas	PM	0.07	-
		PM ₁₀	0.07	-
		PM _{2.5}	0.07	-
		NOx	0.39	-
		со	0.36	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK62	Iso. Eff. Stabilizer Reboiler T1/T2 – Annual Emissions	voc	-	0.23
	Ailliuai Lillissions	PM	-	0.32
		PM ₁₀	-	0.32
		PM _{2.5}	-	0.32
		NO _X	-	1.72
		со	-	1.59
		SO ₂	-	0.10
		Pb	-	<0.01
		HAPs	-	0.09
STCK63	Isomerization Heater T3/T4 - Natural Gas	VOC	0.02	-
		РМ	0.03	-
		PM ₁₀	0.03	-
		PM _{2.5}	0.03	-

1			T	
		NO _X	0.11	-
		со	0.14	-
		SO ₂	0.01	-
		Pb	<0.01	-
STCK63	Isomerization Heater T3/T4 - Fuel Gas	VOC	0.02	-
		РМ	0.03	-
		PM ₁₀	0.03	-
		PM _{2.5}	0.03	-
		NO _X	0.15	-
		со	0.14	-
		SO ₂	0.01	-
		Pb	<0.01	-
	Isomerization Heater T3/T4 – Annual Emissions	VOC	2	0.09
	LINISSIONS	PM	-	0.12
		PM ₁₀	-	0.12
		PM _{2.5}	-	0.12
		NO _x	-	0.67
		со	-	0.62
		SO ₂	-	0.04
		Pb	-	<0.01
		HAPs	-	0.04
STCK64	Hydrocracker Heater T3/T4 - Natural Gas	voc	0.04	-
	Gas	PM	0.05	-
		PM ₁₀	0.05	-
		PM _{2.5}	0.05	-
		NO _X	0.20	-
		со	0.25	-
		SO ₂	0.01	-
		l		

	1	1		1
STCK64	Hydrocracker Heater T3/T4 - Fuel Gas	voc	0.04	-
		РМ	0.05	-
		PM ₁₀	0.05	-
		PM _{2.5}	0.05	-
		NO _X	0.27	-
		со	0.25	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK64	Hydrocracker Heater T3/T4 – Annual Emissions	VOC	-	0.16
	Lilliosions	PM	-	0.22
		PM ₁₀	-	0.22
		PM _{2.5}	-	0.22
		NOx	2	1.19
		СО	-	1.10
		SO ₂	-	0.07
		Pb	-	<0.01
		HAPs	-	0.06
STCK65	Iso. Eff. Stabilizer Reboiler T3/T4 - Natural Gas	VOC	0.05	-
	Tvaturai Gas	PM	0.07	-
		PM ₁₀	0.07	-
		PM _{2.5}	0.07	-
		NO _X	0.29	-
		СО	0.36	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK65	Iso. Eff. Stabilizer Reboiler T3/T4 - Fuel Gas	voc	0.05	-
	ruei Gas	PM	0.07	-
		PM ₁₀	0.07	-
		PM _{2.5}	0.07	-

		NO	0.39	
		NO _X		-
		СО	0.36	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK65	Iso. Eff. Stabilizer Reboiler T3/T4 – Annual Emissions	voc	-	0.23
	7a. <u>-</u> a.	PM		0.32
		PM ₁₀	-	0.32
		PM _{2.5}	-	0.32
		NO _X	-	1.72
		co	-	1.59
		SO ₂	-	0.10
		Pb	-	<0.01
		HAPs	2	0.09
STCK66	Isomerization Heater T5/T6 - Natural Gas	voc	0.02	-
		PM	0.03	-
		PM ₁₀	0.03	-
		PM _{2.5}	0.03	-
		NO _X	0.11	-
		со	0.14	-
		Pb	<0.01	-
		SO ₂	0.01	-
STCK66	Isomerization Heater T5/T6 - Fuel Gas	voc	0.02	-
		PM	0.03	-
		PM ₁₀	0.03	-
		PM _{2.5}	0.03	-
		NO _X	0.15	-
		со	0.14	-
		Pb	<0.01	-
		SO ₂	0.01	-

STCK66	Isomerization Heater T5/T6 – Annual	VOC	-	0.09
	Emissions	PM	-	0.12
		PM ₁₀	-	0.12
		PM _{2.5}	-	0.12
		NO _X	-	0.67
		СО		0.62
		SO ₂	-	0.04
		Pb	-	<0.01
		HAPs	-	0.04
STCK67	Hydrocracker Heater T5/T6 - Natural Gas	voc	0.04	-
	Gas	PM	0.05	-
		PM ₁₀	0.05	-
		PM _{2.5}	0.05	-
		NO _X	0.20	-
		со	0.25	-
		SO ₂	0.01	-
		Pb	<0.01	-
STCK67	Hydrocracker Heater T5/T6 - Fuel Gas	VOC	0.04	-
		РМ	0.05	-
		PM ₁₀	0.05	-
		PM _{2.5}	0.05	-
		NO _X	0.27	-
,		СО	0.25	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK67	Hydrocracker Heater T5/T6 – Annual Emissions	VOC	-	0.16
	Limosions	РМ	-	0.22
		PM ₁₀	-	0.22
		PM _{2.5}	-	0.22

I	ı		T	T
		NO _x	-	1.19
		со	-	1.10
		SO ₂	-	0.07
		Pb	-	<0.01
		HAPs	-	0.06
STCK68	Iso. Eff. Stabilizer Reboiler T5/T6 - Natural Gas	VOC	0.05	-
		PM	0.07	-
		PM ₁₀	0.07	-
		PM _{2.5}	0.07	-
		NO _X	0.29	-
		со	0.36	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK68	Iso. Eff. Stabilizer Reboiler T5/T6 - Fuel Gas	VOC	0.05	-
		РМ	0.07	-
		PM ₁₀	0.07	-
		PM _{2.5}	0.07	-
		NO _X	0.39	-
		СО	0.36	-
		SO ₂	0.02	-
		Pb	<0.01	-
STCK68	Iso. Eff. Stabilizer Reboiler T5/T6 – Annual Emissions	VOC	-	0.23
	Allitudi Ellissions	PM	-	0.32
		PM ₁₀	-	0.32
		PM _{2.5}	-	0.32
		NO _X	-	1.72
		СО	-	1.59
		SO ₂	-	0.10
		Pb	-	<0.01

		HAPs	-	0.09
STCK69	GTG Mobile Gas Generator	VOC	0.65	2.87
		PM	1.98	8.69
		PM ₁₀	1.98	8.69
		PM _{2.5}	1.98	8.69
		NO _X	9.96	43.63
		со	6.06	26.56
		SO ₂	0.65	2.83
		NH ₃	4.09	17.92
		HAPs -	-	1.35
STCK70	Gasoline Post-Treatment Unit - Natural	VOC	0.37	-
		РМ	0.50	-
		PM ₁₀	0.50	-
		PM _{2.5}	0.50	-
		NO _x	2.03	-
		со	2.50	-
		SO ₂	0.15	-
		Pb	<0.01	-
STCK70	Gas	VOC	0.37	-
		PM	0.50	-
		PM ₁₀	0.50	-
		PM _{2.5}	0.50	-
		NO _X	2.37	-
		со	2.50	-
		SO ₂	2.05	-
		Pb	<0.01	
STCK70	Gasoline Post-Treatment Unit – Annual Emissions	VOC	-	1.60
	LIII33IUII3	PM	-	2.21
		PM ₁₀	-	2.21

I	I			
		PM _{2.5}	-	2.21
		NO _X	-	10.38
		СО	-	10.96
		SO ₂	-	8.99
		Pb	-	<0.01
		HAPs		0.55
STCK71	SWGR/MCC Building T1 (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		со	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK72	SWGR/MCC Building T1 (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK73	SWGR/MCC Building T1 (500kW)	VOC	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01

		HAPs	-	<0.01
STCK74	SWGR/MCC Building T2 (500kW)	VOC	0.55	0.03
		РМ	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK75	SWGR/MCC Building T2 (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NOx	3.87	0.19
		со	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK76	SWGR/MCC Building T2 (500kW)	VOC	0.55	0.03
		РМ	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK77	SWGR/MCC Building T3 (500kW)	voc	0.55	0.03
		РМ	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01

		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK78	SWGR/MCC Building T3 (500kW)	VOC	0.55	0.03
		РМ	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		co	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK79	SWGR/MCC Building T3 (500kW)	VOC	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK80	SWGR/MCC Building T4 (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK81	SWGR/MCC Building T4 (500kW)	VOC	0.55	0.03

		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK82	SWGR/MCC Building T4 (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		CO 3.86	0.19	
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK83	SWGR/MCC Building T5 (500kW)	voc	0.55	0.03
		РМ	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		со	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK84	SWGR/MCC Building T5 (500kW)	VOC	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19

		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK85	SWGR/MCC Building T5 (500kW)	VOC	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _x	3.87	0.19
		со	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK86	SWGR/MCC Building T6 (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		со	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK87	SWGR/MCC Building T6 (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK88	SWGR/MCC Building T6 (500kW)	VOC	0.55	0.03
		РМ	0.22	0.01
		PM ₁₀	0.22	0.01

		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		CO	3.86	0.19
			0.01	<0.01
		SO ₂		<0.01
0.701/00	00RL 0	HAPs	-	
STCK89	OSBL Common Power Block (T1/T2) (500kW)	VOC	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK90	Cooling Tower Loads (T1/T2) (500kW)	VOC	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK91	WWTF/RWTF Instrument Room	VOC	0.55	0.03
	(T1/T2) (500kW)	PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
		1. " " 0		

Emission Sources - Maximum Allowable Emission Rates

STCK92	OSBL Common Power Block (T3/T4)	V00	0.55	0.03
31CK92	(500kW)	VOC		
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK93	Cooling Tower Loads (T3/T4) (500kW)	VOC	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK94	WWTF/RWTF Instrument Room (T3/T4) (500kW)	voc	0.55	0.03
	(13/14) (300kW)	PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK95	OSBL Common Power Block (T5/T6)	VOC	0.55	0.03
	(500kW)	PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19

		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK96	Cooling Tower Loads (T5/T6) (500kW)	VOC	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _x	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK97	WWTF/RWTF Instrument Room (T5/T6) (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		со	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK98	HGU, LPG, Control Room Area (500kW)	voc	0.55	0.03
		PM	0.22	0.01
		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		со	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK99	Tank Farm Instrument Room (500kW)	voc	0.55	0.03
		РМ	0.22	0.01

		PM ₁₀	0.22	0.01
		PM _{2.5}	0.22	0.01
		NO _X	3.87	0.19
		СО	3.86	0.19
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK100	Control Room Ops Office Bldg (1,000	voc	1.75	0.09
	kw)	PM	0.44	0.02
		PM ₁₀	0.44	0.02
		PM _{2.5}	0.44	0.02
		NO _X	12.36	0.62
		со	7.72	0.39
		SO ₂		<0.01
		HAPs	-	<0.01
STCK101	Office Building Engineering/Admin (750kW)	voc	1.31	0.07
		PM	0.33	0.02
		PM ₁₀	0.33	0.02
		PM _{2.5}	0.33	0.02
		NO _X	9.27	0.46
		со	5.79	0.29
		SO ₂	0.01	<0.01
		HAPs	-	<0.01
STCK102	Fire Water Pump Engine	voc	0.48	0.02
		PM	0.19	0.01
		PM ₁₀	0.19	0.01
		PM _{2.5}	0.19	0.01
		NO _X	3.38	0.17
		со	3.34	0.17
		SO ₂	0.01	<0.01

		HAPs	-	<0.01
STCK103	Catalyst Regen Process Vent A T1	РМ	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		СО	5.30	9.15
STCK104	Catalyst Regen Process Vent B T1	РМ	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _x	0.87	1.50
		СО	5.30	9.15
STCK105	Catalyst Regen Process Vent A T2	РМ	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		со	5.30	9.15
STCK106	Catalyst Regen Process Vent B T2	РМ	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		СО	5.30	9.15
STCK107	Catalyst Regen Process Vent A T3	РМ	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		СО	5.30	9.15
STCK108	Catalyst Regen Process Vent B T3	РМ	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18

		NO _X	0.87	1.50
		СО	5.30	9.15
STCK109	Catalyst Regen Process Vent A T4	РМ	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		СО	5.30	9.15
STCK110	Catalyst Regen Process Vent B T4	PM	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		со	5.30	9.15
STCK111	Catalyst Regen Process Vent A T5	PM	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		со	5.30	9.15
STCK112	Catalyst Regen Process Vent B T5	PM	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		СО	5.30	9.15
STCK113	Catalyst Regen Process Vent A T6	PM	0.10	0.18
		PM ₁₀	0.10	0.18
		PM _{2.5}	0.10	0.18
		NO _X	0.87	1.50
		СО	5.30	9.15
STCK114	Catalyst Regen Process Vent B T6	РМ	0.10	0.18
		PM ₁₀	0.10	0.18

1	1		I	T I
		PM _{2.5}	0.10	0.18
		NO _x	0.87	1.50
		со	5.30	9.15
GFLARE1	Flare T1 Continuous GF101-115	voc	4.29	-
		NOx	2.31	-
		со	9.51	-
		SO ₂	0.07	-
GFLARE1	Flare T1 MSS HGU Flaring GF101-115	voc	162.90	
		NOx	93.47	-
		со	360.71	-
GFLARE1	Flare T1 MSS Periodic Flaring GF101- 115	voc	260.52	
		NOx	46.44	-
		со	186.56	-
		SO ₂	2.00	-
GFLARE1	Flare T1 Continuous Annual Emissions GF101-115	voc	-	18.80
	01101-113	NO _x	-	10.12
		со	-	41.63
		SO ₂	-	0.32
		HAPs	-	0.28
GFLARE1	Flare T1 MSS All Periodic Flaring Annual Emissions - GF101-115	voc	-	2.22
	Ainuai Emissions - Or 101-113	NO _X	-	0.49
		со	-	1.95
		SO ₂	-	<0.01
		HAPs	-	1.07
GFLARE2	Flare T2 Continuous GF201-215	VOC	4.29	-
		NO _X	2.31	-
		СО	9.51	-
		SO ₂	0.07	
GFLARE2	Flare T2 MSS Periodic Flaring GF201-	VOC	260.52	-
	215	1	ı	1

	1		46.44	
		NOx	46.44	-
		СО	186.56	-
		SO ₂	2.00	-
GFLARE2	Flare T2 Continuous Annual Emissions GF201-215	VOC	-	18.80
	0.202220	NO _X	-	10.12
		со		41.63
		SO ₂	-	0.32
		HAPs	-	0.28
GFLARE2	Flare T2 MSS All Periodic Flaring Annual Emissions - GF201-215	VOC	-	1.80
	Allitual Ettilosiotis - GF201-213	NOx	-	0.25
		со	-	1.05
		SO ₂	-	<0.01
		HAPs	2	1.05
GFLARE3	Flare T3 Continuous GF301-315	voc	4.29	-
		NOx	2.31	-
		со	9.51	-
		SO ₂	0.07	-
GFLARE3	Flare T3 MSS Periodic Flaring GF301-315	VOC	260.52	-
	313	NOx	46.44	-
		СО	186.56	-
		SO ₂	2.00	-
GFLARE3	Flare T3 Continuous Annual Emissions	VOC	-	18.80
	GF301-315	NO _X	-	10.12
		СО	-	41.63
		SO ₂	-	0.32
		HAPs	-	0.28
GFLARE3	Flare T3 MSS All Periodic Flaring	VOC	-	1.80
	Annual Emissions - GF301-315	NOx	-	0.25
		СО	-	1.05

		SO ₂	_	<0.01
		HAPs		1.05
GFLARE4	Flare T4 Continuous GF401-415	VOC	4.29	-
	Thate 14 Continuous Ci 401 415		2.31	
		NO _X		-
		СО	9.51	-
		SO ₂	0.07	-
GFLARE4	Flare T4 MSS Periodic Flaring GF401- 415	voc	260.52	-
		NOx	46.44	-
		СО	186.56	-
		SO ₂	2.00	-
GFLARE4	Flare T4 Continuous Annual Emissions GF401-415	voc	-	18.80
	GF401-415	NO _X	-	10.12
		СО	2	41.63
		SO ₂	-	0.32
		HAPs	-	0.28
GFLARE4	Flare T4 MSS All Periodic Flaring Annual Emissions - GF401-415	voc	-	1.80
	Ailiuai Eliii33i0ii3 - 01 401-413	NO _X	-	0.25
		СО	-	1.05
		SO ₂	-	<0.01
		HAPs	-	1.05
GFLARE5	Flare T5 Continuous GF501-515	VOC	4.29	-
		NO _X	2.31	-
		СО	9.51	-
		SO ₂	0.07	-
GFLARE5	Flare T5 MSS Periodic Flaring GF501-	voc	260.52	
	515	NOx	46.44	-
		СО	186.56	-
		SO ₂	2.00	-
GFLARE5	Flare T5 Continuous Annual Emissions GF501-515	VOC	-	18.80

I	1		-	T
		NO _X	-	10.12
		СО	-	41.63
		SO ₂	-	0.32
		HAPs	-	0.28
GFLARE5	Flare T5 MSS All Periodic Flaring Annual Emissions - GF501-515	VOC	-	1.80
	Allida Ellissions of 301 313	NO _X		0.25
		со	-	1.05
		SO ₂	-	<0.01
		HAPs	-	1.05
GFLARE6	Flare T6 Continuous GF601-615	voc	4.29	-
		NO _X	2.31	-
		со	9.51	-
		SO ₂	0.07	-
GFLARE6	Flare T6 MSS Periodic Flaring GF601-615	VOC	260.52	-
	013	NOx	46.44	-
		со	186.56	-
		SO ₂	2.00	-
GFLARE6	Flare T6 Continuous Annual Emissions GF601-615	VOC	-	18.80
	GF001-015	NO _X	-	10.12
		СО	-	41.63
		SO ₂	-	0.32
		HAPs	-	0.28
GFLARE6	Flare T6 MSS All Periodic Flaring Annual Emissions - GF601-615	VOC	-	1.80
	Annual Eniissions - Geout-013	NO _X	-	0.25
		СО	-	1.05
		SO ₂	-	<0.01
		HAPs	-	1.05
TKMETH	Tank Farm Fugitives - Raw Methanol	VOC	1.77	3.11
	Storage Tanks	HAPs	-	3.11

TKALK	Tank Farm Fugitives - Alkylate Tanks	VOC	1.15	1.01
		HAPs	-	0.54
TKNAP	Tank Farm Fugitives - Naphtha Tanks	VOC	1.18	1.05
		HAPs	-	0.53
TKETH	Tank Farm Fugitives - Ethanol Tanks	VOC	0.85	0.25
		HAPs		<0.01
TKRUN	Tank Farm Fugitives - Gasoline Rundown Tanks	voc	6.42	10.71
	Rundown ranks	HAPs	-	0.30
TKOFF	Tank Farm Fugitives - Start-up/Off- Spec Gasoline Tanks	VOC	1.35	2.85
	Spec Gasonine Tariks	HAPs	-	0.05
TKGAS1	Tank Farm Fugitives - Finished Gasoline Tanks	VOC	2.61	2.95
	Gasullite Tatiks	HAPs	-	0.05
TKGAS2	Tank Farm Fugitives - Gasoline Tanks	VOC	8.23	14.29
		HAPs	-	0.28
FUG	Tank Farm Fugitives - Slop Oil Tanks	voc	0.93	1.22
		HAPs	-	0.02
FUG	Tank Farm Fugitives - Slop Methanol Tanks	voc	0.59	0.26
	Turks	HAPs	-	0.26
FUG	Tank Fugitives - Sulfuric Acid Tanks	VOC	<0.01	<0.01
		HAPs	<0.01	<0.01
FUG	Tank Fugitives - Urea Tanks	VOC	<0.01	<0.01
		HAPs	<0.01	<0.01
TKADD	Tank Farm Fugitives - Additives Tanks	VOC	4.19	0.01
		HAPs	-	0.01
FUG	Tank Fugitives - Emergency Generator Diesel Tanks	VOC	4.74	0.01
	Diesei Tains	HAPs	-	<0.01
FUG	Tank Fugitives - Fire Pump Diesel Tank	VOC	0.13	<0.01
	I WIK	HAPs	-	<0.01
RAIL	Rail Loading Fugitives	VOC	<0.01	<0.01

TRUCK	Truck Loading Fugitives	VOC	2.23	9.76
		HAPs	-	0.23
FUG	Fugitive Component Leaks - Facility-	VOC	13.93	61.03
	wide	СО	27.35	119.79
		NH ₃	0.40	1.76
		HAPs		14.49
AREA1	WWTP Fugitive Emissions T1/T2	voc	0.01	0.05
		NH ₃	0.04	0.19
		HAPs	-	0.02
AREA2	WWTP Fugitive Emissions T3/T4	voc	0.01	0.05
		NH ₃	0.04	0.19
		HAPs	-	0.02
AREA3	WWTP Fugitive Emissions T5/T6	VOC	0.01	0.05
		NH ₃	0.04	0.19
		HAPs	-	0.02
AMMONDRUM	Aqueous Ammonia Drum Diffusion Chamber	NH ₃	<0.01	0.00<0.01
MSTKMETH	MSS - Raw Methanol Storage Tanks	voc	95.69	0.38
		HAPs	-	0.38
MSTKRUN	MSS - Gasoline Rundown Tanks	VOC	127.35	0.76
		HAPs	-	0.04
MSTKOFF	MSS - Start-up/Off-Spec Gasoline Tanks	VOC	70.28	0.14
	Taliks	HAPs	-	<0.01
MSTKALK	MSS - Alkylate Tanks	VOC	11.47	0.02
	_	HAPs	-	0.02
MSTKNAP	MSS - Naphtha Tanks	VOC	11.47	0.02
		HAPs	-	0.02
MSTKETH	MSS - Ethanol Tanks	VOC	7.04	0.01
		HAPs	-	<0.01
MSTKGAS1	MSS - Finished Gasoline Tanks	VOC	33.68	0.07

		HAPs	-	<0.01
MSTKGAS2	MSS - Gasoline Tanks	voc	203.10	0.81
		HAPs	-	0.04
MSTKADD	MSS - Additives Tanks	voc	0.32	<0.01
		HAPs	-	<0.01
MSFUG	MSS - Methanol Shift Tanks	voc	132.25	0.79
		HAPs	-	0.79
MSFUG	MSS - Slop Oil Tanks	voc	0.94	<0.01
		HAPs		<0.01
MSFUG	MSS - Slop Methanol Tanks	voc	0.44	<0.01
		HAPs	-	<0.01
MSFUG	MSS - Fire Pump Diesel Tank	voc	0.09	<0.01
		HAPs		<0.01
VCUMSS1	VCU - Tank MSS	VOC	13.60	<0.01
		PM	0.52	<0.01
		PM ₁₀	0.52	<0.01
		PM _{2.5}	0.52	<0.01
		NO _X	6.86	0.02
		СО	5.76	0.02
		Pb	<0.01	<0.01
		HAPs	-	<0.01
FTMSS	Frac Tank MSS	VOC	93.42	0.94
VCMSS	Vac Truck MSS	VOC	20.55	1.03
SSCNTRL	Process Unit SU/SD Controlled MSS	VOC	662.60	7.64
		PM	35.50	0.47
		PM ₁₀	35.50	0.47
		PM _{2.5}	35.50	0.47
		NO _X	321.80	4.22
		СО	1,275.30	16.91

SSUNCTR	Process Unit SU/SD Uncontrolled MSS	СО	170.90	0.09
DEGASMSS	Process Unit Degassing Controlled MSS	VOC	1.24	0.44
	IWISS	PM	0.14	0.03
		PM ₁₀	0.14	0.03
		PM _{2.5}	0.14	0.03
		NO _X	1.27	0.23
		СО	5.28	0.95
EQUIPMSS	Equipment Opening Uncontrolled MSS	voc	0.60	0.22
CLYSTMSS	Catalyst Unloading and Loading MSS	PM	3.01	3.25
		PM ₁₀	3.01	3.25
		PM _{2.5}	3.01	3.25
ILEMSS	Inherently Low Emitting Activities MSS	voc	3.00	0.10
		PM	1.00	0.10
		PM ₁₀	1.00	0.10
		PM _{2.5}	1.00	0.10
		NO _x	1.00	0.10
		со	3.00	0.10
ACABS1	WWTP Controlled Emissions T1/T2	VOC	0.10	0.42
		NH ₃	<0.01	<0.01
		HAPs	-	0.07
ACABS2	WWTP Controlled Emissions T3/T4	VOC	0.10	0.42
		NH ₃	<0.01	<0.01
,		HAPs	-	0.07
ACABS3	WWTP Controlled Emissions T5/T6	voc	0.10	0.42
		NH ₃	<0.01	<0.01
		HAPs	-	0.07
VCUMSS2	VCU - Tank MSS	VOC	13.60	<0.01
		PM	0.52	<0.01
		PM ₁₀	0.52	<0.01

PM	M _{2.5}	0.52	<0.01	
NO	O _X	6.86	0.02	
СО	0	5.76	0.02	
Pb	b	<0.01	<0.01	
НА	APs	-	<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

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

PM₁₀ - 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

Pb - lead

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.

Date:	TBD	

Permit Number GHGPSDTX207

This table lists the maximum allowable emission rates of greenhouse gas (GHG) emissions, as defined in Title 30 Texas Administrative Code § 101.1, for all sources of GHG air contaminants on the applicant's property that are authorized 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 authorized by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates
			TPY (4)
STCK01	Fired Process Heater - Annual Emissions	CO₂e	309,896.68
STCK02	Fired Steam Superheater - Annual Emissions	CO₂e	321,911.91
STCK03	Gasoline Splitter Reboiler - Annual Emissions	CO₂e	31,046.67
STCK04	Gasoline Loop SU Heater	CO₂e	15,053.31
STCK05	Regeneration Heater A	CO ₂ e	6,103.39
STCK06	Regeneration Heater B	CO₂e	6,103.39
STCK07	Fired Process Heater - Annual Emissions	CO₂e	309,896.68
STCK08	Fired Steam Superheater - Annual Emissions	CO₂e	321,911.91
STCK09	Gasoline Splitter Reboiler - Annual Emissions	CO₂e	31,046.67
STCK10	Gasoline Loop SU Heater	CO₂e	15,053.31
STCK11	Regeneration Heater A	CO₂e	6,103.39
STCK12	Regeneration Heater B	CO₂e	6,103.39
STCK13	Fired Process Heater - Annual Emissions	CO₂e	309,896.68
STCK14	Fired Steam Superheater - Annual Emissions	CO₂e	321,911.91
STCK15	Gasoline Splitter Reboiler - Annual Emissions	CO₂e	31,046.67
STCK16	Gasoline Loop SU Heater	CO₂e	15,053.31
STCK17	Regeneration Heater A	CO₂e	6,103.39
STCK18	Regeneration Heater B	CO₂e	6,103.39
STCK19	Fired Process Heater - Annual Emissions	CO₂e	309,896.68
STCK20	Fired Steam Superheater - Annual Emissions	CO₂e	321,911.91
STCK21	Gasoline Splitter Reboiler - Annual Emissions	CO₂e	31,046.67
STCK22	Gasoline Loop SU Heater	CO₂e	15,053.31
STCK23	Regeneration Heater A	CO ₂ e	6,103.39
STCK24	Regeneration Heater B	CO₂e	6,103.39
STCK25	Fired Process Heater - Annual Emissions	CO₂e	309,896.68
STCK26	Fired Steam Superheater - Annual Emissions	CO₂e	321,911.91

STCK27	Gasoline Splitter Reboiler - Annual Emissions	CO ₂ e	31,046.67
STCK28	Gasoline Loop SU Heater	CO ₂ e	15,053.31
STCK29	Regeneration Heater A	CO₂e	6,103.39
STCK30	Regeneration Heater B	CO₂e	6,103.39
STCK31	Fired Process Heater - Annual Emissions	CO ₂ e	309,896.68
STCK32	Fired Steam Superheater - Annual Emissions	CO₂e	321,911.91
STCK33	Gasoline Splitter Reboiler - Annual Emissions	CO₂e	31,046.67
STCK34	Gasoline Loop SU Heater	CO₂e	15,053.31
STCK35	Regeneration Heater A	CO₂e	6,103.39
STCK36	Regeneration Heater B	CO₂e	6,103.39
STCK37	HGU Tubular Reformer - Annual Emissions	CO ₂ e	462,418.76
STCK56	Auxiliary Boiler T1/T2 - Annual Emissions	CO ₂ e	219,593.56
STCK57	Auxiliary Boiler T3/T4 - Annual Emissions	CO₂e	219,593.56
STCK58	Auxiliary Boiler T5/T6 - Annual Emissions	CO ₂ e	219,593.56
STCK59	Loading/Unloading VCU	CO ₂ e	53,988.36
STCK60	Isomerization Heater T1/T2 - Annual Emissions	CO₂e	3,162.28
STCK61	Hydrocracker Heater T1/T2 - Annual Emissions	CO₂e	5,621.84
STCK62	Iso. Eff. Stabilizer Reboiler T1/T2 - Annual Emis.	CO₂e	8,169.24
STCK63	Isomerization Heater T3/T4 - Annual Emissions	CO₂e	3,162.28
STCK64	Hydrocracker Heater T3/T4 - Annual Emissions	CO₂e	5,621.84
STCK65	Iso. Eff. Stabilizer Reboiler T3/T4 - Annual Emis.	CO₂e	8,169.24
STCK66	Isomerization Heater T5/T6 - Annual Emissions	CO₂e	3,162.28
STCK67	Hydrocracker Heater T5/T6 - Annual Emissions	CO ₂ e	5,621.84
STCK68	Iso. Eff. Stabilizer Reboiler T5/T6 - Annual Emis.	CO ₂ e	8,169.24
STCK69	GTG Mobile Gas Generator	CO₂e	154,103.08
STCK70	Gasoline Post-Treatment Unit - Annual Emissions	CO₂e	40,979.20
STCK71	SWGR/MCC Building T1 (500kW)	CO₂e	38.76
STCK72	SWGR/MCC Building T1 (500kW)	CO₂e	38.76
STCK73	SWGR/MCC Building T1 (500kW)	CO ₂ e	38.76
STCK74	SWGR/MCC Building T2 (500kW)	CO ₂ e	38.76
STCK75	SWGR/MCC Building T2 (500kW)	CO ₂ e	38.76
STCK76	SWGR/MCC Building T2 (500kW)	CO₂e	38.76

STCK77	SWGR/MCC Building T3 (500kW)	CO ₂ e	38.76
STCK78	SWGR/MCC Building T3 (500kW)	CO₂e	38.76
STCK79	SWGR/MCC Building T3 (500kW)	CO₂e	38.76
STCK80	SWGR/MCC Building T4 (500kW)	CO₂e	38.76
STCK81	SWGR/MCC Building T4 (500kW)	CO₂e	38.76
STCK82	SWGR/MCC Building T4 (500kW)	CO₂e	38.76
STCK83	SWGR/MCC Building T5 (500kW)	CO₂e	38.76
STCK84	SWGR/MCC Building T5 (500kW)	CO ₂ e	38.76
STCK85	SWGR/MCC Building T5 (500kW)	CO₂e	38.76
STCK86	SWGR/MCC Building T6 (500kW)	CO₂e	38.76
STCK87	SWGR/MCC Building T6 (500kW)	CO₂e	38.76
STCK88	SWGR/MCC Building T6 (500kW)	CO₂e	38.76
STCK89	OSBL Common Power Block (T1/T2) (500kW)	CO₂e	38.76
STCK90	Cooling Tower Loads (T1/T2) (500kW)	CO ₂ e	38.76
STCK91	WWTF/RWTF Instrument Room (T1/T2) (500kW)	CO ₂ e	38.76
STCK92	OSBL Common Power Block (T3/T4) (500kW)	CO₂e	38.76
STCK93	Cooling Tower Loads (T3/T4) (500kW)	CO ₂ e	38.76
STCK94	WWTF/RWTF Instrument Room (T3/T4) (500kW)	CO₂e	38.76
STCK95	OSBL Common Power Block (T5/T6) (500kW)	CO₂e	38.76
STCK96	Cooling Tower Loads (T5/T6) (500kW)	CO₂e	38.76
STCK97	WWTF/RWTF Instrument Room (T5/T6) (500kW)	CO₂e	38.76
STCK98	HGU, LPG, Control Room Area (500kW)	CO₂e	38.76
STCK99	Tank Farm Instrument Room (500kW)	CO₂e	38.76
STCK100	Control Room Ops Office Bldg (1000kW)	CO₂e	77.47
STCK101	Office Building Engineering/Admin (750kW)	CO₂e	58.12
STCK102	Fire Water Pump Engine	CO₂e	33.68
STCK103	Catalyst Regen Process Vent A T1	CO₂e	2,995.06
STCK104	Catalyst Regen Process Vent B T1	CO ₂ e	2,995.06
STCK105	Catalyst Regen Process Vent A T2	CO ₂ e	2,995.06
STCK106	Catalyst Regen Process Vent B T2	CO ₂ e	2,995.06
STCK107	Catalyst Regen Process Vent A T3	CO ₂ e	2,995.06
STCK108	Catalyst Regen Process Vent B T3	CO ₂ e	2,995.06
L	<u> </u>	<u> </u>	l

STCK109	Catalyst Regen Process Vent A T4	CO ₂ e	2,995.06
STCK110	Catalyst Regen Process Vent B T4	CO₂e	2,995.06
STCK111	Catalyst Regen Process Vent A T5	CO₂e	2,995.06
STCK112	Catalyst Regen Process Vent B T5	CO₂e	2,995.06
STCK113	Catalyst Regen Process Vent A T6	CO ₂ e	2,995.06
STCK114	Catalyst Regen Process Vent B T6	CO ₂ e	2,995.06
GFLARE1	Flare T1 Continuous Annual Emissions - GF101- 115	CO₂e	17,432.14
GFLARE1	Flare T1 MSS All Periodic Flaring Annual Emissions - GF101-115	CO₂e	518.17
GFLARE2	Flare T2 Continuous Annual Emissions - GF201- 215	CO ₂ e	17,432.14
GFLARE2	Flare T2 MSS All Periodic Flaring Annual Emissions - GF201-215	CO₂e	447.48
GFLARE3	Flare T3 Continuous Annual Emissions GF301- 315	CO₂e	17,432.14
GFLARE3	Flare T3 MSS All Periodic Flaring Annual Emissions - GF301-315	CO₂e	447.48
GFLARE4	Flare T4 Continuous Annual Emissions GF401- 415	CO₂e	17,432.14
GFLARE4	Flare T4 MSS All Periodic Flaring Annual Emissions - GF401-415	CO₂e	447.48
GFLARE5	Flare T5 Continuous Annual Emissions GF501- 515	CO ₂ e	17,432.14
GFLARE5	Flare T5 MSS All Periodic Flaring Annual Emissions - GF501-515	CO₂e	447.48
GFLARE6	Flare T6 Continuous Annual Emissions GF601- 615	CO₂e	17,432.14
GFLARE6	Flare T6 MSS All Periodic Flaring Annual Emissions - GF601-615	CO₂e	447.48
FUG	Fugitive Component Leaks - Facility-wide	CO ₂ e	3,381.69
AREA1	WWTP Fugitive Emissions T1/T2	CO ₂ e	23.93
AREA2	WWTP Fugitive Emissions T3/T4	CO ₂ e	23.93
AREA3	WWTP Fugitive Emissions T5/T6	CO ₂ e	23.93
ELECTRICLK	Electrical Equipment Fugitive Leaks	CO ₂ e	71.25
VCUMSS1	VCU - Tank MSS	CO ₂ e	31.28
VCUMSS2	VCU - Tank MSS	CO ₂ e	31.28

- (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) CO₂e carbon dioxide equivalents based on the following Global Warming Potentials (1/2015): CO₂ (1), N₂O (298), CH₄(25), SF₆ (22,800), HFC (various), PFC (various)
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.
- (5) Emission rate is given for informational purposes only and does not constitute enforceable limit.

