EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

EMISSION CAPS

Permit Numbers 21262 and PSDTX928

This table lists the maximum allowable emission caps 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	Source	Air Contaminant	<u>Emiss</u>	ion Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
A213	CR3 Recycle Gas SG Analyzer	Benzene		
A214	CR3 Recycle Gas Moisture Analyzer	Benzene		
A298	CR3 Regen Gas O ₂ Analyzer	Benzene		
A300	CR3 Regen Gas Comb. Analyzer	Benzene		
AP16	AP16 Storage Tank	Benzene		
AP17	AP17 Storage Tank	Benzene		
AP6	AP6 Storage Tank	Benzene		
AP8	AP8 Storage Tank	Benzene		
AYARDOWS	WW - Sewer A Yard Oily Water	Benzene		
BARGE	Marine Loading - Barge Docks	Benzene		
BENZENE1	Marine Loading - Benzene Dock 1	Benzene		
BENZENE2	Marine Loading - Benzene Dock 2	Benzene		
BENZENE4	Marine Loading - Benzene Dock 4	Benzene		
BYARDOWS	WW - Sewer B Yard Oily Water	Benzene		
CCLP	WW - Cat Cracker Lube Plant	Benzene		
CPI1	WW- CPI Oil Water Separator	Benzene		

CPI2	WW- CPI Oil Water Separator	Benzene
CRUDE	Marine Loading - Crude Docks	Benzene
CYARDOWS	Wastewater Fugitives (4)	Benzene
DAOWS	WW - Sewer DA Oily Water	Benzene
DD2	WW - Dispatching Distilling 2	Benzene
DOCK1	Marine Loading - Dock 1	Benzene
DOCK2	Marine Loading - Dock 2	Benzene
DOCK4	Marine Loading - Dock 4	Benzene
DOCKS	Dock Wastewater Collection	Benzene
DYARDOWS	WW - Sewer D Yard Oily	Benzene
	Water	
F314	F314 Storage Tank	Benzene
F315	F315 Storage Tank	Benzene
F316	F316 Storage Tank	Benzene
F317	F317 Storage Tank	Benzene
F338	F338 Storage Tank	Benzene
FUGCCU	FCCU Fugitives (4)	Benzene
FUGCCUSCR	FCCU SCR Fugitives (4)	Benzene
FUGCOKER	Coke Handling Fugitives (4)	Benzene
FUGCR3	CR3 Fugitives (4)	Benzene
FUGCR3TF	Hydroprocessing Tank Farm	Benzene
	Fugitives (4)	
FUGDHT	DHT Fugitives (4)	Benzene
FUGDISP	DISP Fugitive	Benzene
FUGDOCK	Dock Fugitives (4)	Benzene
FUGDU1	DU1 Fugitives (4)	Benzene
FUGDU2	DU2 Fugitives (4)	Benzene
FUGDU2B	DU3 Fugitives (4)	Benzene
FUGENVN	Environmental North	Benzene
	Fugitives (4)	
FUGGFRAC	GFRAC Fugitives (4)	Benzene
FUGGOHT	GOHT Fugitives (4)	Benzene
FUGGR	GR Fugitives (4)	Benzene
FUGHDU1	HDU1 Fugitives (4)	Benzene
FUGHP1	HP1 Fugitives (4)	Benzene
FUGLHT2	LHT2 Fugitives (4)	Benzene
FUGPLAT2	PLAT2 Fugitives (4)	Benzene
FUGPSA	PSA Fugitives (4)	Benzene
FUGSGP	SGP Fugitives (4)	Benzene
FUGSHCU	SHCU Fugitives (4)	Benzene

		_
FUGTHCR	Thermal Cracking Fugitives	Benzene
	(4)	_
G308	G308 Storage Tank	Benzene
G309	G309 Storage Tank	Benzene
G310	G310 Storage Tank	Benzene
G311	G311 Storage Tank	Benzene
G313	G313 Storage Tank	Benzene
G315	G315 Storage Tank	Benzene
G316	G316 Storage Tank	Benzene
G320	G320 Storage Tank	Benzene
G322	G322 Storage Tank	Benzene
G323	G323 Storage Tank	Benzene
G326	G326 Storage Tank	Benzene
G327	G327 Storage Tank	Benzene
G328	G328 Storage Tank	Benzene
G329	G329 Storage Tank	Benzene
G332	G332 Storage Tank	Benzene
G342	G342 Storage Tank	Benzene
G346	G346 Storage Tank	Benzene
G348	G348 Storage Tank	Benzene
G355	G355 Storage Tank	Benzene
G356	G356 Storage Tank	Benzene
G357	G357 Storage Tank	Benzene
G358	G358 Storage Tank	Benzene
G360	G360 Storage Tank	Benzene
GIRBOTWW	WW Collection in Girbitol	Benzene
HVIOWS	WW - Sewer HVI Oily Water	Benzene
J303B	J303B Storage Tank	Benzene
J304	J304 Storage Tank	Benzene
J308	J308 Storage Tank	Benzene
J309	J309 Storage Tank	Benzene
J311	J311 Storage Tank	Benzene
J312	J312 Storage Tank	Benzene
J315	J315 Storage Tank	Benzene
J316	J316 Storage Tank	Benzene
J317	J317 Storage Tank	Benzene
J320	J320 Storage Tank	Benzene
J322	J322 Storage Tank	Benzene
J323	J323 Storage Tank	Benzene
J324	J324 Storage Tank	Benzene
J326	J326 Storage Tank	Benzene
J327	J327 Storage Tank	Benzene
J328	J328 Storage Tank	Benzene
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J336 J337 J338 J348 J349 K303 K304 LEUOWS LHT1OWS	J336 Storage Tank J337 Storage Tank J338 Storage Tank J348 Storage Tank J349 Storage Tank K303 Storage Tank K304 Storage Tank WW - Sewer LEU Oily Water WW - Sewer LHT1 Oily	Benzene Benzene Benzene Benzene Benzene Benzene Benzene Benzene
LHT2OWS	Water WW - Sewer LHT2 Oily Water	Benzene
LOADOWS MANHOLE4 MVIDEASS MVIOWS NAB NDAF OWATCTF	WW - Sewer Loading Racks WW - Manhole 4 WW - Sewer DEA WW - Sewer MVI Oily Water North Aeration Basin WW - North DAF Unit WW - Alky Tank Farm Oily	Benzene Benzene Benzene Benzene Benzene Benzene
OWDU1 S412 SAB SDAF SR3/4WW SS376 SS377 SS378 SS379 SS403 T1F323 T1F324 T1F329 T1F329 T1F330 T301	Water WW - Sewer Oily Water HUB S412 Storage Tank South Aeration Basin WW - South DAF Unit SR3/4 Wastewater Collection SS376 Storage Tank SS377 Storage Tank SS378 Storage Tank SS379 Storage Tank SS403 Storage Tank T1F323 Storage Tank T1F324 Storage Tank T1F329 Storage Tank T1F329 Storage Tank T1F330 Storage Tank T301 Storage Tank T301 Storage Tank T302 EXTFLT Refinery WW Storage Tank	Benzene
TA301 TA305 TA306 TA307 TA308 TA309	TA301 Storage Tank TA305 Storage Tank TA306 Storage Tank TA307 Storage Tank TA308 Storage Tank TA309 Storage Tank	Benzene Benzene Benzene Benzene Benzene

TA310	TA310 Storage Tank	Benzene
TA312	TA312 Storage Tank	Benzene
TA313	TA313 Storage Tank	Benzene
TA315	TA315 Storage Tank	Benzene
TA316	TA316 Storage Tank	Benzene
TA317	TA317 Storage Tank	Benzene
TA318	TA318 Storage Tank	Benzene
TA319	TA319 Storage Tank	Benzene
TA320	TA320 Storage Tank	Benzene
TA321	TA321 Storage Tank	Benzene
TA322	TA322 Storage Tank	Benzene
TA324	TA324 Storage Tank	Benzene
TA325	TA325 Storage Tank	Benzene
TA326	TA326 Storage Tank	Benzene
TA329	TA329 Storage Tank	Benzene
TA330	TA330 Storage Tank	Benzene
TA331	TA331 Storage Tank	Benzene
TA332	TA332 Storage Tank	Benzene
TA334	TA334 Storage Tank	Benzene
TC and G	WW - Thermal Cracking and	Benzene
	Gas Treating	
TG324	TG324 Storage Tank	Benzene
TG362	TG362 Storage Tank	Benzene
TJ333	TJ333 Storage Tank	Benzene
TJ334	TJ334 Storage Tank	Benzene
TJ335	TJ335 Storage Tank	Benzene
TJ339R1	TJ339R1 Storage Tank	Benzene
TK305	TK305 Storage Tank	Benzene
TRKLFIL	WW - Trickle Filter	Benzene
TRKLSMP	WW - Trickle Sump	Benzene
WAXPTOWS	WW - Sewer Wax Plant Oily	Benzene
	Water	
WAXPTWAX	WW - Sewer Wax Plant Wax	Benzene
X311	INTFLT/Amine Solutions	Benzene
	Storage Tank	
X312	INTFLT/Amine Solutions	Benzene
	Storage Tank	
X313	INTFLT/Slop Oil Storage	Benzene
	Tank	
X315	Ballast Water Storage Tank	Benzene
X316	WW - DAF Float	Benzene
X320	Ballast Water O/S Storage	Benzene
	Tank	

X321	Slop Oil Storage Tank	Benzene		
X322	X322 Storage Tank	Benzene		
X323	X323 Storage Tank	Benzene		
X324	FXTNK2/Misc Organic	Benzene		
A324	Storage Tank	Delizerie		
Vaae		Donzono		
X325	FXTNK2/Misc Organic	Benzene		
V000	Storage Tank	D		
X326	FXTNK2/DAF Float Storage	Benzene		
\\00 7	Tank	_		
X327	FXTNK2/DAF Float Storage	Benzene		
	Tank	_		
X328	FXTNK2/Misc Organic	Benzene		
	Storage Tank			
X330	WW - Equalization Tank	Benzene		
X330SM	WW - Sump	Benzene		
	FINAL EMISSIONS CAP	Benzene	10.96	30.36
A1006	H₂S 4 Point Analyzer	СО		
A10823	CCU CO Analyzer	CO		
A10824	CO Analyzer	CO		
A10825	O ₂ Analyzer	CO		
A10502	CCU SNCR NO _x /SO ₂ /O ₂	CO		
A10302	Analyzer	66		
A162	-	СО		
	H5301 O₂ Analyzer			
A180	H5302 O ₂ Analyzer	CO		
A236	H5305 O₂ Analyzer	CO		
A34160	CR-3 Furnaces CEMS	CO		
	Analyzer			
A785	H5303 O₂ Analyzer	CO		
A786	H5304 O ₂ Analyzer	CO		
AE2340	Octane Testing Engine	CO		
AE2636	Octane Testing Engine	CO		
AE2650	Octane Testing Engine	CO		
AE348	On-line Knock Engine	CO		
AE349	On-line Knock Engine	CO		
AE388	On-line Knock Engine	CO		
AE389	On-line Knock Engine	CO		
AE700	Octane Testing Engine	CO		
AE768	Octane Testing Engine	CO		
FLARECCU	CCU Flare	CO		
FLARECOKE	Coker Flare	CO		
FLAREEP	East Property Flare	CO		
	East i Topolty I laic			

FLAREGIRB FLARELHT FLARENP FLARESOUTH FLAREWP H1000 H1001 H1010 H1011 H1170 H31001/2	EP (Girbitol) Flare LHT Flare North Property Flare South Property Flare West Property Flare PLAT2 Heater Guard Bed Start-up Heater HDU-1 Charge Heater HDU-1 Reboiler Heater DHT Heater CFH Charge Heater Coker Heaters No. 1 and 2	CO CO CO CO CO CO CO CO
H31003	Coker Heater No. 3	CO
H3300	DHT H ₂ Heater	CO
H36100	CGHT Heater	CO
H5100	DU-2 South Crude Heater	CO
H5101	DU-2 North Crude Heater	CO
H5102	DU-2 South Flasher Charge	CO
H5103	Heater DU-2 North Flasher Charge Heater	СО
H5104	DU-2 Preflash Heater	СО
H5105	DU-2 Preflash2 Heater	CO
H5200	HDU-2 Charge Heater	CO
H53NN	Catalytic Reformer SCR	CO
H5400	SHCÚ South Charge Heater	CO
H5402	SHCU Reboiler Heater	CO
H5403	SHCU North Charge Heater	CO
H5404	SHCU Post-Frac Heater	CO
H5500A	SMR Heater A	CO
H5500B	SMR Heater B	CO
H5500C	SMR Heater C	CO
H5600	SGP Heat Medium Heater	CO
H613	DU-1 Secondary Pre-Heater	CO
H63000	HVI Column Charge Heater	CO
H70001/2	GOHT Recycle Gas and	CO
1105004	Frac. Reboiler Heaters	
H850S1	PERC Heater - North Stack	CO
H850S2	PERC Heater - South Stack	CO
H9150R1	Heater	CO
SR3/4STACK	SR-3/4 Incinerator SR5 Tail Gas Incinerator	CO
SR5STACK SR6STACK		CO
SKUSTACK	SR6 Tail Gas Incinerator	

SR7STACK SR8STACK	SR7 Tail Gas Incinerator SR8 Tail Gas Incinerator	CO CO		
	FINAL EMISSIONS CAP	CO (5)	777.95	2688.22
A1284	Debut. Tops Analyzer	H₂S		
A1760	H₂S Analyzer	H₂S		
AP16	Storage Tank	H ₂ S		
AP17	Storage Tank	H₂S		
BARGE	Marine Loading - Barge Docks	H₂S		
BENZENE1	Marine Loading - Benzene Dock 1	H₂S		
BENZENE2	Marine Loading - Benzene Dock 2	H₂S		
BENZENE4	Marine Loading - Benzene Dock 4	H ₂ S		
BYARDOWS	WW - Sewer B Yard Oily Water	H ₂ S		
C9150/51	C9150/51 Vent	H₂S		
C9152/53	C9152/53 Vent	H ₂ S		
CRUDE	Marine Loading - Crude Docks	H ₂ S		
DOCK1	Marine Loading - Dock 1	H ₂ S		
DOCK2	Marine Loading - Dock 2	H ₂ S		
DOCK4	Marine Loading - Dock 4	H₂S		
F338	F338 Storage Tank	H₂S		
FLARECCU	CCU Flare	H ₂ S		
FLARECOKE	Coker Flare	H₂S		
FLAREEP	East Property Flare	H₂S		
FLAREGIRB	EP (Girbitol) Flare	H₂S		
FLARELHT	LHT Flare	H ₂ S		
FLARENP	North Property Flare	H_2S		
FLARESOUTH	South Property Flare	H_2S		
FLAREWP	West Property Flare	H ₂ S		
FUGALKY	Alky Fugitives (4)	H₂S		
FUGAYARD	Fugitives (4)	H₂S		
FUGCCU	FCCU Fugitives (4)	H ₂ S		
FUGCEH	CFH Fugitives (4)	H ₂ S		
FUGCOKER	Coke Handling Fugitives (4)	H ₂ S		
FUGCPU FUGCR3	CPU Fugitives (4)	H ₂ S ⊔.s		
FUGURO	CR3 Fugitives (4)	H₂S		

FUGCR3TF	Hydroprocessing Tank Farm Fugitives (4)	H ₂ S
FUGDHT	DHT Fugitives (4)	H_2S
FUGDISP	DISP Fugitive	H ₂ S
FUGDUSP FUGDU1	•	
	DU1 Fugitives (4)	H ₂ S
FUGDU2	DU2 Fugitives (4)	H ₂ S
FUGGFRAC	GFRAC Fugitives (4)	H ₂ S
FUGGIRBIT	Girbitol Fugitives (4)	H ₂ S
FUGGOHT	GOHT Fugitives (4)	H ₂ S
FUGGR	GR Fugitives (4)	H ₂ S
FUGHDU1	DU1 Fugitives (4)	H_2S
FUGHP1	HP1 Fugitives (4)	H_2S
FUGLHT2	LHT2 Fugitives (4)	H_2S
FUGPLAT2	PLAT2 Fugitives (4)	H_2S
FUGSGP	SGP Fugitives (4)	H_2S
FUGSHCU	SHCU Fugitives (4)	H_2S
FUGSR5	SR5 Fugitives (4)	H_2S
FUGSR6	SR6 Fugitives (4)	H_2S
FUGSR7	SR7 Fugitives (4)	H_2S
FUGSR8	SR8 Fugitives (4)	H_2S
FUGTHCR	Thermal Cracking Fugitives	H_2S
	(4)	
G332	G332 Storage Tank	H_2S
J317	J317 Storage Tank	H_2S
J318B	J318B Storage Tank	H_2S
J325	J325 Storage Tank	H_2S
J326	J326 Storage Tank	H_2S
J327	J327 Storage Tank	H₂S
J328	J328 Storage Tank	H₂S
J331	J331 Storage Tank	H_2S
J332	J332 Storage Tank	H_2S
J348	J348 Storage Tank	H_2S
J349	J349 Storage Tank	H_2S
L2COMPVT	L2COMPVT Vent	H_2S
LDSULF67	SR6 and SR7 Loading Rack	H_2S
LHT10WS	WW - Sewer LHT1 Oily	H_2S
	Water	
LHT2OWS	WW - Sewer LHT2 Oily	H_2S
	Water	
MVIDEASS	WW - Sewer DEA	H_2S
RKLTC/TT	Load	H_2S
S429	S429 Storage Tank	H_2S
SR3/4PIT	SR3/4 Sulfur Pit	H_2S

SR3/4STACK	SR-3/4 Incinerator	H_2S
SR5L01	SR5 Loading Rack	H_2S
SR5L02	SR5 Loading Rack	H_2S
SR5STACK	SR5 Tail Gas Incinerator	H_2S
SR6STACK	SR6 Tail Gas Incinerator	H_2S
SR7STACK	SR7 Tail Gas Incinerator	H ₂ S
SR8STACK	SR8 Tail Gas Incinerator	H_2S
SRTT	SR3/4 Loading Rack	H_2S
SS343	SS343 Storage Tank	H ₂ S
SULFUR	SR5 Sulfur Pit	H_2S
TA301	TA301 Storage Tank	H ₂ S
TA305	TA305 Storage Tank	H ₂ S
TA306	TA306 Storage Tank	H₂S
TA307	TA307 Storage Tank	H ₂ S
TA310	TA310 Storage Tank	H ₂ S
TA312	TA312 Storage Tank	H ₂ S
TA313	TA313 Storage Tank	H₂S
TA315	TA315 Storage Tank	H ₂ S
TA316	TA316 Storage Tank	H ₂ S
TA317	TA317 Storage Tank	H_2S
TA318	TA318 Storage Tank	H ₂ S
TA319	TA319 Storage Tank	H_2S
TA320	TA320 Storage Tank	H_2S
TA321	TA321 Storage Tank	H_2S
TA322	TA322 Storage Tank	H_2S
TA324	TA324 Storage Tank	H_2S
TA325	TA325 Storage Tank	H_2S
TA326	TA326 Storage Tank	H_2S
TA329	TA329 Storage Tank	H_2S
TA330	TA330 Storage Tank	H_2S
TA331	TA331 Storage Tank	H_2S
TA332	TA332 Storage Tank	H_2S
TA334	TA334 Storage Tank	H_2S
TG324	TG324 Storage Tank	H_2S
TG362	TG362 Storage Tank	H_2S
TJ339R1	TJ339R1 Storage Tank	H_2S
TSR67	Molten Sulfur Tank	H_2S
VA03	VA03 Storage Tank	H_2S
VA04	VA04 Storage Tank	H_2S
X313	INTFLT/Slop Oil Storage	H_2S
	Tank	

	FINAL EMISSIONS CAP	H ₂ S	29.61	85.77
AYARDOWS	WW - Sewer A Yard Oily Water	NH ₃		
BYARDOWS	WW - Sewer B Yard Oily Water	NH ₃		
CCLP	WW - Cat Cracker Lube Plant	NH ₃		
CPI1	WW- CPI Oil Water Separator	NH ₃		
CPI2	WW- CPI Oil Water Separator	NH ₃		
CYARDOWS	Wastewater Fugitives (4)	NH₃		
DAOWS	WW - Sewer DA Oily Water	NH₃		
DD2	WW - Dispatching Distilling 2	NH ₃		
DOCKS	Dock Wastewater Collection	NH ₃		
DYARDOWS	WW - Sewer D Yard Oily	NH ₃		
	Water			
FUGCCU	FCCU Fugitives (4)	NH₃		
FUGCCUSCR	FCCU SCR Fugitives (4)	NH ₃		
FUGCOKER	Coke Handling Fugitives (4)	NH ₃		
FUGCR3SCR	CR3 SCR Fugitives (4)	NH ₃		
FUGDHT	DHT Fugitives (4)	NH ₃		
FUGDISP	DISP Fugitive	NH ₃		
FUGDOCK	Dock Fugitives (4)	NH ₃		
FUGDU2	DU2 Fugitives (4)	NH₃		
FUGHDU1	DU1 Fugitives (4)	NH₃		
FUGSR6	SR6 Fugitives (4)	NH₃		
FUGSR7	SR7 Fugitives (4)	NH ₃		
FUGSR8	SR8 Fugitives (4)	NH ₃		
GIRBOTWW	WW Collection in Girbitol	NH ₃		
H53NN	Catalytic Reformer SCR	NH ₃		
J318B	J318B Storage Tank	NH ₃		
LEUOWS	WW - Sewer LEU Oily Water	NH ₃		
LHT10WS	WW - Sewer LHT1 Oily Water	NH ₃		
LHT2OWS	WW - Sewer LHT2 Oily Water	NH ₃		
LOADOWS	WW - Sewer Loading Racks	NH_3		
MANHOLE4	WW - Manhole 4	NH_3		
MVIDEASS	WW - Sewer DEA	NH_3		
MVIOWS	WW - Sewer MVI Oily Water	NH_3		
NAB	North Aeration Basin	NH_3		

NDAF	WW - North DAF Unit	NH_3		
OWDU1	WW - Sewer Oily Water HUB	NH ₃		
S429	S429 Storage Tank	NH ₃		
	South Aeration Basin			
SAB		NH ₃		
SDAF	WW - South DAF Unit	NH_3		
SR3/4WW	SR3/4 Wastewater Collection	NH ₃		
T301	T301 Storage Tank	NH₃		
T302	T302 EXTFLT Refinery WW	NH ₃		
	Storage Tank			
TC and G	WW - Thermal Cracking and	NH₃		
ro and o	Gas Treating	14113		
TDVI FII	WW - Trickle Filter	NILI		
TRKLFIL		NH ₃		
TRKLSMP	WW - Trickle Sump	NH ₃		
WAXPTOWS	WW - Sewer Wax Plant Oily	NH₃		
	Water			
WAXPTWAX	WW - Sewer Wax Plant Wax	NH_3		
X311	INTFLT/Amine Solutions	NH_3		
	Storage Tank	· ·		
X312	INTFLT/Amine Solutions	NH₃		
NOIL	Storage Tank	14113		
V016	<u> </u>	NILL		
X316	WW - DAF Float	NH ₃		
X330	WW - Equalization Tank	NH₃		
X330SM	WW - Sump	NH ₃		
X330SM	·			
X330SM	WW - Sump FINAL EMISSIONS CAP	NH ₃	5.44	23.74
X330SM	FINAL EMISSIONS CAP		5.44	23.74
X330SM A10823	·		5.44	23.74
	FINAL EMISSIONS CAP CCU CO Analyzer	NH ₃	5.44	23.74
A10823 A10824	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer	NH ₃ NO _x NO _x	5.44	23.74
A10823 A10824 A10825	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer	NH ₃ NO _x NO _x NO _x	5.44	23.74
A10823 A10824	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂	NH ₃ NO _x NO _x	5.44	23.74
A10823 A10824 A10825 A10502	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer	NH ₃ NO _x NO _x NO _x NO _x NO _x	5.44	23.74
A10823 A10824 A10825 A10502	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer	NH ₃ NO _x NO _x NO _x NO _x NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer	NH ₃ NO _x NO _x NO _x NO _x NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer	NH ₃ NO _x NO _x NO _x NO _x NO _x NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer	NH ₃ NO _x NO _x NO _x NO _x NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer	NH ₃ NO _x NO _x NO _x NO _x NO _x NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236 A34160	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer CR-3 Furnaces CEMS Analyzer	NH ₃ NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236 A34160	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer CR-3 Furnaces CEMS Analyzer H5303 O ₂ Analyzer	NH ₃ NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236 A34160 A785 A786	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer CR-3 Furnaces CEMS Analyzer H5303 O ₂ Analyzer H5304 O ₂ Analyzer	NH ₃ NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236 A34160 A785 A786 AE2340	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer CR-3 Furnaces CEMS Analyzer H5303 O ₂ Analyzer H5304 O ₂ Analyzer Octane Testing Engine	NH ₃ NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236 A34160 A785 A786 AE2340 AE2636	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer CR-3 Furnaces CEMS Analyzer H5303 O ₂ Analyzer H5304 O ₂ Analyzer Octane Testing Engine Octane Testing Engine	NH ₃ NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236 A34160 A785 A786 AE2340 AE2636 AE2650	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer CR-3 Furnaces CEMS Analyzer H5303 O ₂ Analyzer H5304 O ₂ Analyzer Octane Testing Engine Octane Testing Engine Octane Testing Engine	NH ₃ NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236 A34160 A785 A786 AE2340 AE2636 AE2650 AE348	CCU CO Analyzer CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer CR-3 Furnaces CEMS Analyzer H5303 O ₂ Analyzer H5304 O ₂ Analyzer Octane Testing Engine Octane Testing Engine On-line Knock Engine	NH ₃ NO _x	5.44	23.74
A10823 A10824 A10825 A10502 A162 A180 A236 A34160 A785 A786 AE2340 AE2636 AE2650	FINAL EMISSIONS CAP CCU CO Analyzer CO Analyzer O ₂ Analyzer CCU SNCR NO _x /SO ₂ /O ₂ Analyzer H5301 O ₂ Analyzer H5302 O ₂ Analyzer H5305 O ₂ Analyzer CR-3 Furnaces CEMS Analyzer H5303 O ₂ Analyzer H5304 O ₂ Analyzer Octane Testing Engine Octane Testing Engine Octane Testing Engine	NH ₃ NO _x	5.44	23.74

AE388	On-line Knock Engine	NO_x
AE389	On-line Knock Engine	NO_x
AE700	Octane Testing Engine	NO_x
AE768	Octane Testing Engine	NO_x
FLARECCU	CCU Flare	NO_x
FLARECOKE	Coker Flare	NO_x
FLAREEP	East Property Flare	NO_x
FLAREGIRB	EP (Girbitol) Flare	NO_x
FLARELHT	LHT Flare	NO_x
FLARENP	North Property Flare	NO_x
FLARESOUTH	South Property Flare	NO_x
FLAREWP	West Property Flare	NO_x
H1000	PLAT2 Heater	NO_x
H1001	Guard Bed Start-up Heater	NO_x
H1010	HDU-1 Charge Heater	NO_x
H1011	HDU-1 Reboiler Heater	NO_x
H1100	DHT Heater	NO_x
H1170	CFH Charge Heater	NO _x
H31001/2	Coker Heaters No. 1 and 2	NO_x
H31003	Coker Heater No. 3	NO_x
H3300	DHT H ₂ Heater	NO _x
H36100	CGHT Heater	NO _x
H5100	DU-2 South Crude Heater	NO_x
H5101	DU-2 North Crude Heater	NO _x
H5102	DU-2 South Flasher Charge	NO_x
	Heater	- X
H5103	DU-2 North Flasher Charge	NO_x
	Heater	
H5104	DU-2 Preflash Heater	NO_x
H5105	DU-2 Preflash2 Heater	NO_x
H5200	HDU-2 Charge Heater	NO_x
H53NN	Catalytic Reformer SCR	NO_x
H5400	SHCU South Charge Heater	NO _x
H5402	SHCU Reboiler Heater	NO_x
H5403	SHCU North Charge Heater	NO_x
H5404	SHCU Post-Frac Heater	NO_x
H5500A	SMR Heater A	NO _x
H5500B	SMR Heater B	NO _x
H5500C	SMR Heater C	NO _x
H5600	SGP Heat Medium Heater	NO _x
H613	DU-1 Secondary Pre-Heater	NO _x
H63000	HVI Column Charge Heater	NO _x
	3. 3.	- ^

H70001/2	GOHT Recycle Gas and Frac. Reboiler Heaters	NO_x
H850S1	PERC Heater - North Stack	NO_x
H850S2	PERC Heater - South Stack	NO_x
H9150R1	Heater	NO_x
SR3/4STACK	SR-3/4 Incinerator	NO_x
SR5STACK	SR5 Tail Gas Incinerator	NO_x
SR6STACK	SR6 Tail Gas Incinerator	NO_x
SR7STACK	SR7 Tail Gas Incinerator	NO_x
SR8STACK	SR8 Tail Gas Incinerator	NO _x

	FINAL EMISSIONS CAP	NO _x	495.45	1825.00
A10823	CCU CO Analyzer	PM		
A10824	CO Analyzer	PM		
A10825	O₂ Analyzer	PM		
A10502	CCU SNCR NO _x /SO ₂ /O ₂ Analyzer	PM		
A162	H5301 O ₂ Analyzer	PM		
A180	H5302 O₂ Analyzer	PM		
A236	H5305 O₂ Analyzer	PM		
A34160	CR-3 Furnaces CEMS Analyzer	PM		
A785	H5303 O₂ Analyzer	PM		
A786	H5304 O ₂ Analyzer	PM		
AE2340	Octane Testing Engine	PM		
AE2636	Octane Testing Engine	PM		
AE2650	Octane Testing Engine	PM		
AE348	On-line Knock Engine	PM		
AE349	On-line Knock Engine	PM		
AE388	On-line Knock Engine	PM		
AE389	On-line Knock Engine	PM		
AE700	Octane Testing Engine	PM		
CWT10	Cooling Tower No.10 (4)	PM		
CWT11	Cooling Tower No.11 (4)	PM		
CWT12	Cooling Tower No.12 (4)	PM		
CWT14	Cooling Tower No.14 (4)	PM		
CWT15	Cooling Tower No.15 (4)	PM		
CWT16/16A	Cooling Tower No.16/16A (4)	PM		
CWT17	Cooling Tower No.17 (4)	PM		
CWT6	Cooling Tower No.6 (4)	PM		
CWT7	Cooling Tower No.7 (4)	PM		

CWT8 CWT9	Cooling Tower No.8 (4) Cooling Tower No.9 (4)	PM PM
FUGCOKEPM1	Coke Pile Wind Erosion Fugitives (4)	PM
FUGCOKEPM1 A	Coke Pile 2 Fugitives (4)	PM
FUGCOKEPM2	Coke Pile Crane Fugitives (4)	РМ
FUGCOKEPM3	Coke Crusher Fugitives (4)	РМ
FUGCOKEPM4	Coke Crusher Discharge Fugitives (4)	PM
FUGCOKEPM5	Coke Transfer Conveyor Fugitives (4)	PM
FUGCOKEPM6	Coke Conveyor Discharge Fugitives (4)	PM
FUGCOKEPM7	Coke Barge Loading Fugitives (4)	PM
H1000	PLAT2 Heater	РМ
H1001	Guard Bed Start-up Heater	РМ
H1010	HDU-1 Charge Heater	РМ
H1011	HDU-1 Reboiler Heater	РМ
H1100	DHT Heater	РМ
H1170	CFH Charge Heater	РМ
H31001/2	Coker Heaters No. 1 and 2	РМ
H31003	Coker Heater No. 3	РМ
H3300	DHT H ₂ Heater	РМ
H36100	CGHT Heater	РМ
H5100	DU-2 South Crude Heater	РМ
H5101	DU-2 North Crude Heater	РМ
H5102	DU-2 South Flasher Charge Heater	PM
H5103	DU-2 North Flasher Charge Heater	PM
H5104	DU-2 Preflash Heater	РМ
H5105	DU-2 Preflash2 Heater	РМ
H5200	HDU-2 Charge Heater	РМ
H53NN	Catalytic Reformer SCR	РМ
H5400	SHCU South Charge Heater	РМ
H5402	SHCU Reboiler Heater	РМ
H5403	SHCU North Charge Heater	РМ
H5404	SHCU Post-Frac Heater	PM
H5500A	SMR Heater A	PM
H5500B	SMR Heater B	PM
H5500C	SMR Heater C	РМ

H5600 H613 H63000 H70001/2 H850S1 H850S2 H9150R1	SGP Heat Medium Heater DU-1 Secondary Pre-Heater HVI Column Charge Heater GOHT Recycle Gas and Frac. Reboiler Heaters PERC Heater - North Stack PERC Heater - South Stack Heater	PM PM PM PM PM PM PM		
PAINTFE SR3/4STACK	Miscellaneous Painting Fugitives SR-3/4 Incinerator	PM PM		
	SR5 Tail Gas Incinerator	PM		
SR5STACK SR6STACK	SR6 Tail Gas Incinerator	PM		
SR7STACK	SR7 Tail Gas Incinerator	PM		
SR8STACK	SR8 Tail Gas Incinerator	PM		
SKOSTACK	Sito rail Gas memerator	1 141		
	FINAL EMISSIONS CAP	PM	77.13	272.80
A1745	SR-3/4 SO ₂ CEMS Analyzer	SO ₂		
A10823	CCU CO Analyzer	SO_2		
A10824	CO Analyzer	SO_2		
A10825	O_2 Analyzer	SO_2		
A10502	CCU SNCR NO _x /SO ₂ /O ₂ Analyzer	SO ₂		
A162	H5301 O₂ Analyzer	SO_2		
A180	H5302 O₂ Analyzer	SO ₂		
A236	H5305 O₂ Analyzer	SO_2		
A34160	CR-3 Furnaces CEMS Analyzer	SO ₂		
A785	H5303 O₂ Analyzer	SO ₂		
A786	H5304 O₂ Analyzer	SO_2		
AE2340	Octane Testing Engine	SO ₂		
AE2636	Octane Testing Engine	SO_2		
AE2650	Octane Testing Engine	SO ₂		
AE348	On-line Knock Engine	SO ₂		
AE349	On-line Knock Engine	SO_2		
AE388	On-line Knock Engine	SO_2		
AE389	On-line Knock Engine	SO ₂		
AE700	Octane Testing Engine	SO ₂		
FLARECOKE	Coker Flare	SO ₂		
FLAREEP	East Property Flare	SO ₂		
FLAREGIRB	EP (Girbitol) Flare	SO ₂		
FLARELHT	LHT Flare	SO ₂		

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2
Heater	
H5103 DU-2 North Flasher Charge SO ₂	:
Heater H5104 DU-2 Preflash Heater SO ₂	
H5105 DU-2 Preflash2 Heater SO ₂	
H5200 HDU-2 Charge Heater SO ₂	
H53NN Catalytic Reformer SCR SO ₂	
H5400 SHCU South Charge Heater SO ₂	
H5402 SHCU Reboiler Heater SO ₂	
H5403 SHCU North Charge Heater SO ₂	
H5404 SHCU Post-Frac Heater SO ₂	
H5500A SMR Heater A SO ₂	
H5500B SMR Heater B SO ₂	
H5500C SMR Heater C SO ₂	
H5600 SGP Heat Medium Heater SO ₂	
H613 DU-1 Secondary Pre-Heater SO ₂	
H63000 HVI Column Charge Heater SO ₂	
H70001/2 GOHT Recycle Gas and SO ₂	
Frac.Reboiler Heaters	
H850S1 PERC Heater - North Stack SO ₂	
H850S2 PERC Heater - South Stack SO ₂	
H9150R1 Heater SO ₂	
SR3/4STACK SR-3/4 Incinerator SO ₂	,
SR5STACK SR5 Tail Gas Incinerator SO ₂	
SR6STACK SR6 Tail Gas Incinerator SO ₂	
SR7STACK SR7 Tail Gas Incinerator SO ₂	
SR8STACK SR8 Tail Gas Incinerator SO ₂	

	FINAL EMISSIONS CAP	SO ₂	2050.72	5259.84
A1006	H₂S 4 Point Analyzer	VOC		
A102	Analyzer	VOC		
A1284	Analyzer	VOC		
A1745	SR3/4 SO ₂ CEMS Analyzer	VOC		
A1760	Analyzer	VOC		
A213	CR3 Recycle Gas SG	VOC		
AZIO	Analyzer	V		
A214	CR3 Recycle Gas Moisture Analyzer	VOC		
A298	CR3 Regen Gas O₂ Analyzer	VOC		
A300	CR3 Regen Gas Comb.	VOC		
	Analyzer			
A329	CR3 Reactor Inlet O ₂	VOC		
	- Analyzer			
A553	Plat2 Rec. Gas Moisture	VOC		
	Analyzer			
A554	Plat2 Rec. Gas Gravity	VOC		
	Analyzer			
A10823	CCÚ CO Analyzer	VOC		
A10824	CO Analyzer	VOC		
A10825	O ₂ Analyzer	VOC		
A1301	PSA Product H₂ Analyzer	VOC		
A1905/6	A 1905/6 Analyzer	VOC		
A89128	Tank SS307 Blanket O ₂	VOC		
	Analyzer			
A842	Tank SS314 Blanket O₂	VOC		
	Analyzer			
A10502	CCU SNCR NO _x /SO ₂ /O ₂	VOC		
	Analyzer			
A162	H5301 O₂ Analyzer	VOC		
A180	H5302 O ₂ Analyzer	VOC		
A236	H5305 O₂ Analyzer	VOC		
A34160	CR-3 Furnaces CEMS	VOC		
7101200	Analyzer	, 33		
A785	H5303 O₂ Analyzer	VOC		
A786	H5304 O ₂ Analyzer	VOC		
AE2340	Octane Testing Engine	VOC		
AE2636	Octane Testing Engine	VOC		
AE2650	Octane Testing Engine	VOC		
AE348	On-line Knock Engine	VOC		
AL340	On-line Knock Engine	VOC		

AE349 AE388 AE389 AE700 AE768 AP1 AP16 AP17 AP2 AP4 AP5	On-line Knock Engine On-line Knock Engine On-line Knock Engine Octane Testing Engine Octane Testing Engine AP1 Storage Tank AP16 Storage Tank AP17 Storage Tank AP2 Storage Tank AP4 Storage Tank AP5 Storage Tank	VOC VOC VOC VOC VOC VOC VOC VOC VOC
AP6	AP6 Storage Tank	VOC
AP7	AP7 Storage Tank	VOC
AP8	AP8 Storage Tank	VOC
AYARDOWS	WW - Sewer A Yard Oily	VOC
	Water	
BARGE	Marine Loading - Barge Docks	VOC
BENZENE1	Marine Loading - Benzene Dock 1	VOC
BENZENE2	Marine Loading - Benzene Dock 2	VOC
BENZENE4	Marine Loading - Benzene Dock 4	VOC
BYARDOWS	WW - Sewer B Yard Oily Water	VOC
C9150/51	C9150/51 Vent	VOC
C9152/53	C9152/53 Vent	VOC
CCLP	WW - Cat Cracker Lube	VOC
CPI1	Plant WW- CPI Oil Water	VOC
	Separator	
CPI2	WW- CPI Oil Water	VOC
CRUDE	Separator Marine Loading - Crude Docks	VOC
CWT10	Cooling Tower No. 10 (4)	VOC
CWT11	Cooling Tower No. 11 (4)	VOC
CWT12	Cooling Tower No. 12 (4)	VOC
CWT14	Cooling Tower No. 14 (4)	VOC
CWT15	Cooling Tower No. 15 (4)	VOC
CWT16/16A	Cooling Tower No. 16/16A (4)	VOC

CWT17 CWT6 CWT7 CWT8 CWT9 CYARDOWS D363	Cooling Tower No. 17 (4) Cooling Tower No. 6 (4) Cooling Tower No. 7 (4) Cooling Tower No. 8 (4) Cooling Tower No. 9 (4) Wastewater Fugitives (4) FTXNK2/ANTIICANT StorageTank	VOC VOC VOC VOC VOC VOC
DAOWS DD2 DOCK1 DOCK2 DOCK4 DOCKS DW103 DW104 DYARDOWS	WW - Sewer DA Oily Water WW - Dispatching Distilling 2 Marine Loading - Dock 1 Marine Loading - Dock 2 Marine Loading - Dock 4 Dock Wastewater Collection DW103 Storage Tank DW104 Storage Tank WW - Sewer D Yard Oily Water	VOC VOC VOC VOC VOC VOC VOC VOC
F314 F315 F316 F317 F325 F326 F338 F364 F365 F366 F367 FLARECCU FLARECOKE FLAREGIRB FLAREGIRB FLARELHT FLARENP FLARESOUTH FLAREWP FP182 FP190 FP194 FP195 FP200 FUGALKY	F314 Storage Tank F315 Storage Tank F316 Storage Tank F317 Storage Tank F325 Storage Tank F326 Storage Tank F338 Storage Tank F364 Storage Tank F365 Storage Tank F367 Storage Tank CCU Flare Coker Flare East Property Flare EP (Girbitol) Flare LHT Flare North Property Flare South Property Flare South Property Flare FP182 Storage Tank FP190 Storage Tank FP194 Storage Tank FP195 Storage Tank FP200 Storage Tank Alky Fugitives (4)	VOC VOC VOC VOC VOC VOC VOC VOC VOC VOC

FUGAYARD FUGCCU FUGCFH FUGCGHT FUGCOKER FUGCPU FUGCR3 FUGCR3TF	Fugitives (4) FCCU Fugitives (4) CFH Fugitives (4) CGHT Fugitives (4) Coke Handling Fugitives (4) CPU Fugitives (4) CR3 Fugitives (4) Hydroprocessing Tank Farm Fugitives (4)	VOC VOC VOC VOC VOC VOC VOC
FUGDHT FUGDISP FUGDOCK FUGDU1 FUGDU2 FUGDU2B FUGENVN	DHT Fugitives (4) DISP Fugitive Dock Fugitives (4) DU1 Fugitives (4) DU2 Fugitives (4) DU3 Fugitives (4) Environmental North Fugitives (4)	VOC VOC VOC VOC VOC VOC
FUGGASTR FUGGFRAC FUGGIRBIT FUGGOHT FUGGR FUGGR200 FUGHDU1 FUGHP1 FUGLHT2 FUGMTBE FUGPLAT2 FUGPOSTFRA C	GASTR Fugitives (4) GFRAC Fugitives (4) Girbitol Fugitives (4) GOHT Fugitives (4) GR Fugitives (4) GR200 Fugitives (4) HDU1 Fugitives (4) HP1 Fugitives (4) LHT2 Fugitives (4) MTBE Fugitives (4) PLAT2 Fugitives (4) POSTFRAC Fugitives (4)	VOC VOC VOC VOC VOC VOC VOC VOC VOC VOC
FUGPSA FUGSGP FUGSHCU FUGSR3/4 FUGSR5 FUGSR6 FUGSR7 FUGSR8 FUGTHCR	PSA Fugitives (4) SGP Fugitives (4) SHCU Fugitives (4) SR3/4 Fugitives (4) SR5 Fugitives (4) SR6 Fugitives (4) SR7 Fugitives (4) SR8 Fugitives (4) Thermal Cracking Fugitives	VOC VOC VOC VOC VOC VOC VOC VOC
FUGWBT	(4) West Blend Tank Fugitives (4)	VOC
G308	G308 Storage Tank	VOC

G309	G309 Storage Tank	VOC
G310	G310 Storage Tank	VOC
G311	G311 Storage Tank	VOC
G313	G313 Storage Tank	VOC
G314	G314 Storage Tank	VOC
G315	G315 Storage Tank	VOC
G316	G316 Storage Tank	VOC
G317	G317 Storage Tank	VOC
G319	G319 Storage Tank	VOC
G320	G320 Storage Tank	VOC
G322	G322 Storage Tank	VOC
G323	G323 Storage Tank	VOC
G326	G326 Storage Tank	VOC
G327	G327 Storage Tank	VOC
G328	G328 Storage Tank	VOC
G329	G329 Storage Tank	VOC
G332	G332 Storage Tank	VOC
G342	G342 Storage Tank	VOC
G345	G345 Storage Tank	VOC
G346	G346 Storage Tank	VOC
G347	G347 Storage Tank	VOC
G348	G348 Storage Tank	VOC
G352	G352 Storage Tank	VOC
G354	G354 Storage Tank	VOC
G355	G355 Storage Tank	VOC
G356	G356 Storage Tank	VOC
G357	G357 Storage Tank	VOC
G358	G358 Storage Tank	VOC
G360	G360 Storage Tank	VOC
G361	G361 Storage Tank	VOC
GIRBOTWW	WW Collection in Girbitol	VOC
H1000	PLAT2 Heater	VOC
H1001	Guard Bed Start-up Heater	VOC
H1010	HDU-1 Charge Heater	VOC
H1011	HDU-1 Reboiler Heater	VOC
H1100	DHT Heater	VOC
H1170	CFH Charge Heater	VOC
H31001/2	Coker Heaters No. 1 and 2	VOC
H31003	Coker Heater No. 3	VOC
H3300	DHT H ₂ Heater	VOC
H36100	CGHT Heater	VOC
H5100	DU-2 South Crude Heater	VOC
H5101	DU-2 North Crude Heater	VOC

H5102	DU-2 South Flasher Charge Heater	VOC
H5103	DU-2 North Flasher Charge Heater	VOC
H5104	DU-2 Preflash Heater	VOC
H5105	DU-2 Preflash2 Heater	VOC
H5200	HDU-2 Charge Heater	VOC
H53NN	Catalytic Reformer SCR	VOC
H5400	SHCÚ South Charge Heater	VOC
H5402	SHCU Reboiler Heater	VOC
H5403	SHCU North Charge Heater	VOC
H5404	SHCU Post-Frac Heater	VOC
H5500A	SMR Heater A	VOC
H5500B	SMR Heater B	VOC
H5500C	SMR Heater C	VOC
H5600	SGP Heat Medium Heater	VOC
H613	DU-1 Secondary Pre-Heater	VOC
H63000	HVI Column Charge Heater	VOC
H70001/2	GOHT Recycle Gas and	VOC
	Frac. Reboiler Heaters	
H850S1	PERC Heater - North Stack	VOC
H850S2	PERC Heater - South Stack	VOC
H9150R1	Heater	VOC
HVIOWS	WW - Sewer HVI Oily Water	VOC
J301B	J301B Storage Tank	VOC
J302B	J302B Storage Tank	VOC
J303B	J303B Storage Tank	VOC
J304	J304 Storage Tank	VOC
J305B	J305B Storage Tank	VOC
J306	J306 Storage Tank	VOC
J308	J308 Storage Tank	VOC
J309	J309 Storage Tank	VOC
J311	J311 Storage Tank	VOC
J312	J312 Storage Tank	VOC
J315	J315 Storage Tank	VOC
J316	J316 Storage Tank	VOC
J317 J318B	J317 Storage Tank	VOC
	J318B Storage Tank J320 Storage Tank	VOC
J320 J322	J322 Storage Tank	VOC
J323	J323 Storage Tank	VOC
J324	J324 Storage Tank	VOC
J325	J325 Storage Tank	VOC
0020	3323 Storage Talik	v OC

J326 J327 J328 J329 J330 J331 J332 J336 J337 J338 J340 J348 J349 K301 K302 K303 K304 K306 K310 K311 L2COMPVT LEUOWS	J326 Storage Tank J327 Storage Tank J328 Storage Tank J329 Storage Tank J330 Storage Tank J331 Storage Tank J332 Storage Tank J336 Storage Tank J337 Storage Tank J338 Storage Tank J348 Storage Tank J349 Storage Tank J349 Storage Tank K301 Storage Tank K301 Storage Tank K302 Storage Tank K303 Storage Tank K304 Storage Tank K304 Storage Tank K305 Storage Tank K306 Storage Tank K310 Storage Tank K311 Storage Tank C2COMPVT Vent WW - Sewer LEU Oily Water	VOC VOC VOC VOC VOC VOC VOC VOC VOC VOC
LHT10WS LHT20WS	WW - Sewer LHT1 Oily Water WW - Sewer LHT2 Oily	VOC
LOADOWS M301 M302 MANHOLE4 MVIDEASS MVIOWS N92252 NAB NDAF NONE2 NONE3	Water WW - Sewer Loading Racks Marine Fuel Oil Storage Tank Marine Diesel Storage Tank WW - Manhole 4 WW - Sewer DEA WW - Sewer MVI Oily Water X4HDU1 Storage Tank North Aeration Basin WW - North DAF Unit FXTNK2/Amine Neutralizer Storage Tank FXTNK2/Filmer Storage	VOC VOC VOC VOC VOC VOC VOC VOC
OWATCTF	Tank WW - Alky Tank Farm Oily	voc
OWDU1	Water WW - Sewer Oily Water HUB	VOC

OWFLEX	Wastewater Collection System	VOC
PAINTFE	Miscellaneous Painting Fugitives	VOC
RKLBLEND	Load	VOC
RKLDIALA	Load	VOC
RKLTC	Load	VOC
RKLTC/TT	Load	VOC
RKLTCTTU	Load	VOC
S302	S302 Storage Tank	VOC
S305	S305 Storage Tank	VOC
S306	S306 Storage Tank	VOC
S307	S307 Storage Tank	VOC
S310	S310 Storage Tank	VOC
S312	S312 Storage Tank	VOC
S313	S313 Storage Tank	VOC
S318	S318 Storage Tank	VOC
S325	S325 Storage Tank	VOC
S326	S326 Storage Tank	VOC
S339	S339 Storage Tank	VOC
S348	S348 Storage Tank	VOC
S359	S359 Storage Tank	VOC
S360	S360 Storage Tank	VOC
S395	S395 Storage Tank	VOC
S401	S401 Storage Tank	VOC
S402	S402 Storage Tank	VOC
S412	S412 Storage Tank	VOC
S429	S429 Storage Tank	VOC
S430	S430 Storage Tank	VOC
SAB	South Aeration Basin	VOC
SDAF SD3/4DIT	WW - South DAF Unit	VOC
SR3/4PIT	SR3/4 Sulfur Pit	VOC
SR3/4STACK SR3/4WW	SR3/4 Incinerator SR3/4 Wastewater Collection	VOC
SR5L01	SR5 Loading rack	VOC
SR5L02	SR5 Loading rack	VOC
SR5STACK	SR5 Tail Gas Incinerator	VOC
SR6STACK	SR6 Tail Gas Incinerator	VOC
SR7STACK	SR7 Tail Gas Incinerator	VOC
SR8STACK	SR8 Tail Gas Incinerator	VOC
SRTT	SR3/4 Loading Rack	VOC
SS306	SS306 Storage Tank	VOC
SS307	SS307 Storage Tank	VOC
	3 · · · ·	

SS308	SS308 Storage Tank	VOC
SS312	SS312 Storage Tank	VOC
SS314	SS314 Storage Tank	VOC
SS316	SS316 Storage Tank	VOC
SS324	SS324 Storage Tank	VOC
SS325	SS325 Storage Tank	VOC
SS335	SS335 Storage Tank	VOC
SS339	SS339 Storage Tank	VOC
SS341	SS341 Storage Tank	VOC
SS343	SS343 Storage Tank	VOC
SS344	SS344 Storage Tank	VOC
SS348	SS348 Storage Tank	VOC
SS364	SS364 Storage Tank	VOC
SS375	SS375 Storage Tank	VOC
SS376	SS376 Storage Tank	VOC
SS377	SS377 Storage Tank	VOC
SS378	SS378 Storage Tank	VOC
SS379	SS379 Storage Tank	VOC
SS388	SS388 Storage Tank	VOC
SS396	SS396 Storage Tank	VOC
SS403	SS403 Storage Tank	VOC
SS425	SS425 Storage Tank	VOC
ST1400	X2HDU1 Storage Tank	VOC
SULFUR	SR5 Sulfur Pit	VOC
T1211	T1211 Storage Tank	VOC
T1212	T1212 Storage Tank	VOC
T1710	T1710 Storage Tank	VOC
T1F323	T1F323 Storage Tank	VOC
T1F324	T1F324 Storage Tank	VOC
T1F329	T1F329 Storage Tank	VOC
T1F330	T1F330 Storage Tank	VOC
T1F348	T1F348 Storage Tank	VOC
T301	T301 Storage Tank	VOC
T302	T302 EXTFLT Refinery WW	VOC
	Storage Tank	
T315	T315 Storage Tank	VOC
T316	Methanol Storage Tank	VOC
T59	T59 FXTNK2/SOAP Storage	VOC
	Tank	
T93002	T93002 DEA Storage Tank	VOC
T93402	T93402 MDEA Storage Tank	VOC
TA301	TA301 Storage Tank	VOC
TA305	TA305 Storage Tank	VOC

TA306	TA306 Storage Tank	VOC
TA307	TA307 Storage Tank	VOC
TA308	TA308 Storage Tank	VOC
TA309	TA309 Storage Tank	VOC
TA310	TA310 Storage Tank	VOC
TA312	TA312 Storage Tank	VOC
TA313	TA313 Storage Tank	VOC
TA315	TA315 Storage Tank	VOC
TA316	TA316 Storage Tank	VOC
TA317	TA317 Storage Tank	VOC
TA318	TA318 Storage Tank	VOC
TA319	TA319 Storage Tank	VOC
TA320	TA320 Storage Tank	VOC
TA321	TA321 Storage Tank	VOC
TA322	TA322 Storage Tank	VOC
TA324	TA324 Storage Tank	VOC
TA325	TA325 Storage Tank	VOC
TA326	TA326 Storage Tank	VOC
TA329	TA329 Storage Tank	VOC
TA330	TA330 Storage Tank	VOC
TA331	TA331 Storage Tank	VOC
TA332	TA332 Storage Tank	VOC
TA334	TA334 Storage Tank	VOC
TC and G	WW - Thermal Cracking and	VOC
	Gas Treating	
TCACIDLOAD	Acid Tank Car Loading	VOC
TG324	TG324 Storage Tank	VOC
TG362	TG362 Storage Tank	VOC
TJ333	TJ333 Storage Tank	VOC
TJ334	TJ334 Storage Tank	VOC
TJ335	TJ335 Storage Tank	VOC
TJ339R1	TJ339R1 Storage Tank	VOC
TK305	TK305 Storage Tank	VOC
TRKLFIL	WW - Trickle Filter	VOC
TRKLSMP	WW - Trickle Sump	VOC
U301	U301 Storage Tank	VOC
U302	U302 Storage Tank	VOC
V1111	V1111 Storage Tank	VOC
V54	Vessel/Regen Gas KO Pot	VOC
V5527	Column in HP1	VOC
V9160	Vent V9160	VOC
VA03	VA03 Storage Tank	VOC
VA04	VA04 Storage Tank	VOC

WAXPTOWS	WW - Sewer Wax Plant Oily	VOC		
WAXPTWAX	Water WW - Sewer Wax Plant Wax	VOC		
WX285	WX285 Storage Tank	VOC		
X2HDU1	FXTNK2/X2HDU1 Storage	VOC		
7211001	Tank	, 33		
X311	INTFLT/Amine Solutions	VOC		
/ 10==	Storage Tank			
X312	INTFLT/Amine Solutions	VOC		
/ to	Storage Tank			
X313	INTFLT/Slop Oil Storage	VOC		
	Tank			
X315	Ballast Water Storage Tank	VOC		
X316	WW - DAF Float	VOC		
X320	Ballast Water O/S Storage	VOC		
	Tank			
X321	Slop Oil Storage Tank	VOC		
X322	X322 Storage Tank	VOC		
X323	X323 Storage Tank	VOC		
X324	FXTNK2/Misc Organic	VOC		
	Storage Tank			
X325	FXTNK2/Misc Organic	VOC		
	Storage Tank			
X326	FXTNK2/DAF Float Storage	VOC		
	Tank			
X327	FXTNK2/DAF Float Storage	VOC		
	Tank			
X328	FXTNK2/Misc Organic	VOC		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Storage Tank			
X330	WW - Equalization Tank	VOC		
X330SM	WW - Sump	VOC		
	FINAL EMISSIONS CAP	VOC	1877.69	2846.90
V5518	Hydrogen Plant Vent	CO (5)	22.14	96.98
		VOC	14.79	53.98
H600	CCU CO Boiler	CO	346.32	1402.62
		NH₃	5.25	23.02
		NO _X	56.88	124.56
		PM	66.00	289.08
		SO ₂	593.48	216.62
		VOC	3.20	14.02

Planned Maintenance, Startup, and Shutdown (MSS) Emission Rate Limits

RUDESD	Shutdown of DU-2, VF-3, VF-	Ponzono
	4, HDU-2	Benzene
COKERSD	Shutdown of Cokers, GOHT	Benzene
SGPSD	Shutdown of SGP	Benzene
SULFURSD	Shutdown of Sulfur Block	Benzene
SHCUSD	Shutdown of SHCU	Benzene
HP1SDSU	Shutdown/Startup of HP-1 Shutdown/Startup of Other	Benzene
DPREFSDSU	Units	Benzene
FLNFLARE	North Property Flare	Benzene
COKE FLARE	Coker Flare	Benzene
WP FLARE	West Property Flare	Benzene
EP FLARE	East Property Flare	Benzene
TA324	MAYA Crude	Benzene
TA325	DU1 Crude	Benzene
TA326	DU1 Crude	Benzene
F364	MTBE, 100%	Benzene
TG362	MAYA Crude	Benzene
TA329	MAYA Crude	Benzene
TA330	MAYA Crude	Benzene
TA331	MAYA Crude	Benzene
TA332	MAYA Crude	Benzene
TA334	MAYA Crude	Benzene
G313	Gasoline (RU2000)	Benzene
G315	Gasoline (RU2000)	Benzene
G323	Gasoline (RU2000)	Benzene
G326	Gasoline (RU2000)	Benzene
G327	Gasoline (RU2000)	Benzene
FUGABRBLST	Abrasive Blasting: Sitewide	Benzene
.=======	Aerosol Can Crushing and	_
AEROSDISP	Disposal	Benzene +
AEROSAPPL	Aerosol Can Application: Pain and Solvents	t Benzene
ALKOOAITE	Chemical Cleaning -	Bonzono
DEGREAS01	Degreaser Units	Benzene

FUGSMPDPR FUGMSSDPR	Process Sampling Fugitive Components	Benzene		
FUGINISSUPK	Associated with Maintenance	Benzene		
	Vacuum Truck Loading &			
FUGVACDPR	Unloading	Benzene		
PAINTFE	Painting Emissions Sitewide	Benzene		
	Combustion Device Decoking	Benzene		
MSSDECNDPR	Pump and Minor Process Decontamination	Benzene		
WOODEONDI K	Forced Ventilation of Tank	Benzene		
TNKVENT	w/Residual	Benzene		
	MSS-CAP	Benzene	19.80	0.78
	Shutdown of DU-2, VF-3, VF-			
CRUDESD	4, HDU-2	СО		
COKERSD	Shutdown of Cokers, GOHT	СО		
SGPSD	Shutdown of SGP	CO		
SULFURSD	Shutdown of Sulfur Block	CO		
SHCUSD	Shutdown of SHCU	CO		
HP1SDSU	Shutdown/Startup of HP-1	CO		
DDDEECDCH	Shutdown/Startup of Other	CO		
DPREFSDSU FLNFLARE	Units	CO		
COKE FLARE	North Property Flare Coker Flare	CO		
WP FLARE	West Property Flare	CO		
EP FLARE	East Property Flare	CO		
TA324	MAYA Crude	CO		
TA325	DU1 Crude	CO		
TA326	DU1 Crude	СО		
F364	MTBE, 100%	CO		
TG362	MAYA Crude	CO		
TA329	MAYA Crude	CO		
TA330	MAYA Crude	CO		
TA331	MAYA Crude	CO		
TA332	MAYA Crude	CO		
TA334	MAYA Crude	CO		
G313	Gasoline (RU2000)	CO		

G315	Gasoline (RU2000)	CO		
G323	Gasoline (RU2000)	CO		
G326	Gasoline (RU2000)	CO		
G327	Gasoline (RU2000)	CO		
FUGABRBLST	Abrasive Blasting: Sitewide	CO		
	Aerosol Can Crushing and			
AEROSDISP	Disposal	CO		
AEROSAPPL	Aerosol Can Application: Paint and Solvents	CO		
AEROSAPPL	Chemical Cleaning -	CO		
DEGREAS01	Degreaser Units	СО		
FUGSMPDPR	Process Sampling	СО		
FUGMSSDPR	Fugitive Components			
	Associated with Maintenance	CO		
5110) /4 0DDD	Vacuum Truck Loading &	20		
FUGVACDPR	Unloading	CO		
PAINTFE	Painting Emissions Sitewide	CO		
	Combustion Device Decoking	CO		
MSSDECNDPR	Pump and Minor Process Decontamination	СО		
Weep Letter IX				
	Forced ventilation of Tank			
TNKVENT	Forced Ventilation of Tank w/Residual	СО		
TNKVENT		СО		
TNKVENT		со	199.70	11.46
TNKVENT	w/Residual MSS-CAP		199.70	11.46
	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-	СО	199.70	11.46
CRUDESD	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2	CO H ₂ S	199.70	11.46
CRUDESD COKERSD	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT	CO H ₂ S H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP	CO H ₂ S H ₂ S H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block	CO H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD SHCUSD	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU	CO H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1	CO H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD SHCUSD HP1SDSU	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other	CO H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units	CO H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare	CO H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare	CO H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE WP FLARE	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare West Property Flare	CO H ₂ S H ₂ S	199.70	11.46
CRUDESD COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE	w/Residual MSS-CAP Shutdown of DU-2, VF-3, VF-4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare	CO H ₂ S	199.70	11.46

TA325	DU1 Crude	H ₂ S		
TA326	DU1 Crude	H_2S		
F364	MTBE, 100%	H_2S		
TG362	MAYA Crude	H_2S		
TA329	MAYA Crude	H_2S		
TA330	MAYA Crude	H_2S		
TA331	MAYA Crude	H_2S		
TA332	MAYA Crude	H_2S		
TA334	MAYA Crude	H ₂ S		
G313	Gasoline (RU2000)	H ₂ S		
G315	Gasoline (RU2000)	H_2S		
G323	Gasoline (RU2000)	H ₂ S		
G326	Gasoline (RU2000)	H ₂ S		
G327	Gasoline (RU2000)	H ₂ S		
FUGABRBLST	Abrasive Blasting: Sitewide	H_2S		
	Aerosol Can Crushing and			
AEROSDISP	Disposal	H ₂ S		
AEROSAPPL	Aerosol Can Application: Paint and Solvents	H ₂ S		
ALITOSALIE	Chemical Cleaning -	1120		
DEGREAS01	Degreaser Units	H ₂ S		
FUGSMPDPR	Process Sampling	H ₂ S		
FUGMSSDPR	Fugitive Components			
T OOMSSDI TO	Associated with Maintenance	H ₂ S		
	Vacuum Truck Loading &	шс		
FUGVACDPR PAINTFE	Unloading Dainting Emissions Sitowide	H ₂ S		
PAINTE	Painting Emissions Sitewide Combustion Device	П23		
	Decoking	H ₂ S		
	Pump and Minor Process	-		
MSSDECNDPR	Decontamination	H ₂ S		
Thus (ENIT	Forced Ventilation of Tank			
TNKVENT	w/Residual	H ₂ S		
	MCC CAD	11.0	E0.06	2 42
	MSS-CAP	H ₂ S	59.86	2.43
	Shutdown of DU-2, VF-3, VF-	_		
CRUDESD	4, HDU-2	NO _x		
COKERSD	Shutdown of Cokers, GOHT			
		^		

SGPSD	Shutdown of SGP	NO_x
SULFURSD	Shutdown of Sulfur Block	NO_x
SHCUSD	Shutdown of SHCU	NO_x
HP1SDSU	Shutdown/Startup of HP-1	NO_x
	Shutdown/Startup of Other	
DPREFSDSU	Units	NO_x
FLNFLARE	North Property Flare	NO_x
COKE FLARE	Coker Flare	NO_x
WP FLARE	West Property Flare	NO_x
EP FLARE	East Property Flare	NO_{x}
TA324	MAYA Crude	NO_{x}
TA325	DU1 Crude	NO_{x}
TA326	DU1 Crude	NO_{x}
F364	MTBE, 100%	NO_x
TG362	MAYA Crude	NO_x
TA329	MAYA Crude	NO_x
TA330	MAYA Crude	NO_x
TA331	MAYA Crude	NO_x
TA332	MAYA Crude	NO_x
TA334	MAYA Crude	NO_x
G313	Gasoline (RU2000)	NO_x
G315	Gasoline (RU2000)	NO_x
G323	Gasoline (RU2000)	NO_x
G326	Gasoline (RU2000)	NO_x
G327	Gasoline (RU2000)	NO_x
FUGABRBLST	Abrasive Blasting: Sitewide	NO_x
	Aerosol Can Crushing and	
AEROSDISP	Disposal	NO_x
AFDOCADDI	Aerosol Can Application:	NO
AEROSAPPL	Paint and Solvents	NO _x
DEGREAS01	Chemical Cleaning - Degreaser Units	NO _x
FUGSMPDPR	Process Sampling	NO _x
	Fugitive Components	NO _X
FUGMSSDPR	Associated with Maintenance	NO_x
	Vacuum Truck Loading &	
FUGVACDPR	Unloading	NO_x
PAINTFE	Painting Emissions Sitewide	NO_x

MSSDECNDPR TNKVENT	Combustion Device Decoking Pump and Minor Process Decontamination Forced Ventilation of Tank w/Residual	NO _x NO _x		
	MSS-CAP	NO _x	14.77	0.70
CRUDESD COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE WP FLARE EP FLARE TA324 TA325 TA326 F364 TG362 TA326 F364 TG362 TA329 TA330 TA331 TA332 TA334 G313 G315 G323 G326 G327 FUGABRBLST	Shutdown of DU-2, VF-3, VF 4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare West Property Flare East Property Flare MAYA Crude DU1 Crude DU1 Crude DU1 Crude MTBE, 100% MAYA Crude MAYA Crude MAYA Crude MAYA Crude MAYA Crude MAYA Crude Gasoline (RU2000) Gasoline (RU2000) Gasoline (RU2000) Gasoline (RU2000) Gasoline (RU2000) Abrasive Blasting: Sitewide	PM P		
	ac c ziacinigi Citomido			

AEROSDISP	Aerosol Can Crushing and Disposal	PM		
	Aerosol Can Application:			
AEROSAPPL	Paint and Solvents	PM		
DEGREAS01	Chemical Cleaning - Degreaser Units	PM		
FUGSMPDPR	•	PM		
FUGSIVIPDPR	Process Sampling Fugitive Components	PIVI		
FUGMSSDPR	Associated with Maintenance	PM		
	Vacuum Truck Loading &			
FUGVACDPR	Unloading	PM		
PAINTFE	Painting Emissions Sitewide	PM		
	Combustion Device			
	Decoking	PM		
MCCDECNIDDD	Pump and Minor Process	DM		
MSSDECNDPR	Decontamination Forced Ventilation of Tank	PM		
TNKVENT	w/Residual	PM		
	Wi toolada			
	MSS-CAP	PM	18.31	12.43
	Shutdown of DU-2, VF-3, VF	-		
CRUDESD	Shutdown of DU-2, VF-3, VF 4, HDU-2	- SO ₂		
CRUDESD COKERSD				
	4, HDU-2	SO ₂		
COKERSD	4, HDU-2 Shutdown of Cokers, GOHT	SO ₂ SO ₂		
COKERSD SGPSD	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP	SO ₂ SO ₂ SO ₂		
COKERSD SGPSD SULFURSD	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block	SO ₂ SO ₂ SO ₂		
COKERSD SGPSD SULFURSD SHCUSD	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU	SO ₂ SO ₂ SO ₂ SO ₂		
COKERSD SGPSD SULFURSD SHCUSD	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1	SO ₂ SO ₂ SO ₂ SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other	SO ₂ SO ₂ SO ₂ SO ₂ SO ₂ SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units	SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare	SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare	SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE WP FLARE	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare West Property Flare	SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE WP FLARE EP FLARE	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare West Property Flare East Property Flare	SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE WP FLARE EP FLARE TA324	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare West Property Flare East Property Flare MAYA Crude	SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE WP FLARE EP FLARE TA324 TA325	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare West Property Flare East Property Flare MAYA Crude DU1 Crude	SO ₂		
COKERSD SGPSD SULFURSD SHCUSD HP1SDSU DPREFSDSU FLNFLARE COKE FLARE WP FLARE EP FLARE TA324 TA325 TA326	4, HDU-2 Shutdown of Cokers, GOHT Shutdown of SGP Shutdown of Sulfur Block Shutdown of SHCU Shutdown/Startup of HP-1 Shutdown/Startup of Other Units North Property Flare Coker Flare West Property Flare East Property Flare East Property Flare MAYA Crude DU1 Crude DU1 Crude	SO ₂		

TA329	MAYA Crude	SO ₂		
TA330	MAYA Crude	SO ₂		
TA331	MAYA Crude	SO ₂		
TA332	MAYA Crude	SO ₂		
TA334	MAYA Crude	SO ₂		
G313	Gasoline (RU2000)	SO ₂		
G315	Gasoline (RU2000)	SO ₂		
G323	Gasoline (RU2000)	SO ₂		
G326	Gasoline (RU2000)	SO ₂		
G327	Gasoline (RU2000)	SO ₂		
FUGABRBLST	Abrasive Blasting: Sitewide	SO ₂		
AFROCRICE	Aerosol Can Crushing and	60		
AEROSDISP	Disposal Aerosol Can Application:	SO_2		
AEROSAPPL	Paint and Solvents	SO ₂		
	Chemical Cleaning -	-		
DEGREAS01	Degreaser Units	SO ₂		
FUGSMPDPR	Process Sampling	SO ₂		
FUGMSSDPR	Fugitive Components	- 60		
	Associated with Maintenance Vacuum Truck Loading &	e SO ₂		
FUGVACDPR	Unloading	SO_2		
PAINTFE	Painting Emissions Sitewide	_		
	Combustion Device	<u>-</u>		
	Decoking	SO ₂		
MCCDECNDDD	Pump and Minor Process	00		
MSSDECNDPR	Decontamination Forced Ventilation of Tank	SO_2		
TNKVENT	w/Residual	SO_2		
		-		
	MSS-CAP	SO ₂	1560.81	46.29
CRUDESD	Shutdown of DU-2, VF-3, VF	·- VOC		
COKERSD	4, HDU-2 Shutdown of Cokers, GOHT	VOC		
SGPSD	Shutdown of SGP	VOC		
SULFURSD	Shutdown of Sulfur Block	VOC		
SHCUSD	Shutdown of SHCU	VOC		
HP1SDSU	Shutdown/Startup of HP-1	VOC		
LILTODOO	Shutuowii/Startup Of HP-1	VOC		

	Shutdown/Startup of Other	
DPREFSDSU	Units	VOC
FLNFLARE	North Property Flare	VOC
COKE FLARE	Coker Flare	VOC
WP FLARE	West Property Flare	VOC
EP FLARE	East Property Flare	VOC
TA324	MAYA Crude	VOC
TA325	DU1 Crude	VOC
TA326	DU1 Crude	VOC
F364	MTBE, 100%	VOC
TG362	MAYA Crude	VOC
TA329	MAYA Crude	VOC
TA330	MAYA Crude	VOC
TA331	MAYA Crude	VOC
TA332	MAYA Crude	VOC
TA334	MAYA Crude	VOC
G313	Gasoline (RU2000)	VOC
G315	Gasoline (RU2000)	VOC
G323	Gasoline (RU2000)	VOC
G326	Gasoline (RU2000)	VOC
G327	Gasoline (RU2000)	VOC
FUGABRBLST	Abrasive Blasting: Sitewide	VOC
	Aerosol Can Crushing and	
AEROSDISP	Disposal	VOC
4 ED00 4 DD1	Aerosol Can Application:	\
AEROSAPPL	Paint and Solvents	VOC
DEGREAS01	Chemical Cleaning - Degreaser Units	VOC
FUGSMPDPR	Process Sampling	VOC
1 OOSIVII DI TO	Fugitive Components	VOO
FUGMSSDPR	Associated with Maintenance	VOC
	Vacuum Truck Loading &	
FUGVACDPR	Unloading	VOC
PAINTFE	Painting Emissions Sitewide	VOC
	Combustion Device	VOC
	Decoking Pump and Minor Process	VOC
MSSDECNDPR	Decontamination	VOC
TNKVENT	Forced Ventilation of Tank	VOC
	Total Control of Control	

w/Residual

MSS-CAP VOC 2588.61 61.08

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources use area name or fugitive source name.
- (3) CO carbon monoxide

H₂S - hydrogen sulfide

NH₃ - ammonia

NO_x - nitrogen oxides

PM - particulate matter, suspended in the atmosphere, including PM₁₀

PM₁₀ - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.

SO₂ - sulfur dioxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) In the Amendment submitted June 23, 2009, existing CO emissions from EPN V5518 were permitted and offset by a decrease in the EPN H600 long-term CO cap contribution. For normal operational requirements, the short-term cap was left unchanged. The remainder of the CO limit from H600 was removed from the cap and added as an individual limit.

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

Hrs/day	_ Days/week _	Weeks/year	or Hrs/year <u>8,760</u>
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** Compliance with annual emission limits is based on a rolling 12-month period.

Dated: January 27, 2011