

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

EMISSION CAPS

Permit Numbers 21262 and PSD-TX-928

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 Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			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		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DOCK4	Marine Loading - Dock 4	Benzene		
DOCKS	Dock Wastewater Collection	Benzene		
DYARDOWS	WW - Sewer D Yard Oily Water	Benzene		
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 Fugitives (4)	Benzene		
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 Fugitives (4)	Benzene		
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 (4)	Benzene		
G308	G308 Storage Tank	Benzene		
G309	G309 Storage Tank	Benzene		
G310	G310 Storage Tank	Benzene		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
J326	J326 Storage Tank	Benzene		
J327	J327 Storage Tank	Benzene		
J328	J328 Storage Tank	Benzene		
J336	J336 Storage Tank	Benzene		
J337	J337 Storage Tank	Benzene		
J338	J338 Storage Tank	Benzene		
J348	J348 Storage Tank	Benzene		
J349	J349 Storage Tank	Benzene		
K303	K303 Storage Tank	Benzene		
K304	K304 Storage Tank	Benzene		
LEUOWS	WW - Sewer LEU Oily Water	Benzene		
LHT1OWS	WW - Sewer LHT1 Oily Water	Benzene		
LHT2OWS	WW - Sewer LHT2 Oily Water	Benzene		
LOADOWS	WW - Sewer Loading Racks	Benzene		
MANHOLE4	WW - Manhole 4	Benzene		
MVIDEASS	WW - Sewer DEA	Benzene		
MVIOWS	WW - Sewer MVI Oily Water	Benzene		
NAB	North Aeration Basin	Benzene		
NDAF	WW - North DAF Unit	Benzene		
OWATCTF	WW - Alky Tank Farm	Benzene		
	Oily Water			
OWDU1	WW - Sewer Oily Water HUB	Benzene		
S412	S412 Storage Tank	Benzene		
SAB	South Aeration Basin	Benzene		
SDAF	WW - South DAF Unit	Benzene		
SR3/4WW	SR3/4 Wastewater Collection	Benzene		
SS376	SS376 Storage Tank	Benzene		
SS377	SS377 Storage Tank	Benzene		
SS378	SS378 Storage Tank	Benzene		
SS379	SS379 Storage Tank	Benzene		
SS403	SS403 Storage Tank	Benzene		
T1F323	T1F323 Storage Tank	Benzene		
T1F324	T1F324 Storage Tank	Benzene		
T1F329	T1F329 Storage Tank	Benzene		
T1F330	T1F330 Storage Tank	Benzene		
T301	T301 Storage Tank	Benzene		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
T302	T302 EXTFLT Refinery WW Storage Tank	Benzene		
TA301	TA301 Storage Tank	Benzene		
TA305	TA305 Storage Tank	Benzene		
TA306	TA306 Storage Tank	Benzene		
TA307	TA307 Storage Tank	Benzene		
TA308	TA308 Storage Tank	Benzene		
TA309	TA309 Storage Tank	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 Gas Treating	Benzene		
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		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
TK305	TK305 Storage Tank	Benzene		
TRKLFIL	WW - Trickle Filter	Benzene		
TRKLSMP	WW - Trickle Sump	Benzene		
WAXPTOWS	WW - Sewer Wax Plant	Benzene		
	Oily 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 Tank	Benzene		
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 Storage	Benzene		
	Tank			
X325	FXTNK2/Misc Organic Storage	Benzene		
	Tank			
X326	FXTNK2/DAF Float Storage	Benzene		
	Tank			
X327	FXTNK2/DAF Float Storage	Benzene		
	Tank			
X328	FXTNK2/Misc Organic Storage	Benzene		
	Tank			
X330	WW - Equalization Tank	Benzene		
X330SM	WW - Sump	Benzene		
FINAL EMISSIONS CAP		Benzene	10.96	30.36

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
A1006	H ₂ S 4 Point Analyzer	CO		
A10823	CCU CO Analyzer	CO		
A10824	CO Analyzer	CO		
A10825	O ₂ Analyzer	CO		
A10502	CCU SNCR NO _x /SO ₂ /O ₂ Analyzer	CO		
A162	H5301 O ₂ Analyzer	CO		
A180	H5302 O ₂ Analyzer	CO		
A236	H5305 O ₂ Analyzer	CO		
A34160	CR-3 Furnaces CEMS Analyzer	CO		
A785	H5303 O ₂ 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		
FLAREGIRB	EP (Girbitol) Flare	CO		
FLARELHT	LHT Flare	CO		
FLARENP	North Property Flare	CO		
FLARESOUTH	South Property Flare	CO		
FLAREWP	West Property Flare	CO		
H1000	PLAT2 Heater	CO		
H1001	Guard Bed Start-up Heater	CO		
H1010	HDU-1 Charge Heater	CO		
H1011	HDU-1 Reboiler Heater	CO		
H1100	DHT Heater	CO		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
H1170	CFH Charge Heater	CO		
H31001/2	Coker Heaters No. 1 and 2	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 Heater	CO		
H5103	DU-2 North Flasher Charge Heater	CO		
H5104	DU-2 Preflash Heater	CO		
H5105	DU-2 Preflash2 Heater	CO		
H5200	HCU-2 Charge Heater	CO		
H53NN	Catalytic Reformer SCR	CO		
H5400	SHCU 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		
H600	FCCU CO Boiler	CO		
H613	DU-1 Secondary Pre-Heater	CO		
H63000	HVI Column Charge Heater	CO		
H70001/2	GOHT Recycle Gas and Frac. Reboiler Heaters	CO		
H850S1	PERC Heater - North Stack	CO		
H850S2	PERC Heater - South Stack	CO		
H9150R1	Heater	CO		
SR3/4STACK	SR-3/4 Incinerator	CO		
SR5STACK	SR5 Tail Gas Incinerator	CO		
SR6STACK	SR6 Tail Gas Incinerator	CO		
SR7STACK	SR7 Tail Gas Incinerator	CO		

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
SR8STACK	SR8 Tail Gas Incinerator	CO		
	FINAL EMISSIONS CAP	CO	1124.15	4204.57
A1284	Debut. Tops Analyzer	H ₂ S		
A1760	H ₂ S Analyzer	H ₂ S		
AP16	Storage Tank	H ₂ S		
AP17	Storage Tank	H ₂ S		
BARGE	Marine Loading - Barge Docks	H ₂ S		
BENZENE1	Marine Loading - Benzene Dock 1	H ₂ S		
BENZENE2	Marine Loading - Benzene Dock 2	H ₂ S		
BENZENE4	Marine Loading - Benzene Dock 4	H ₂ S		
BYARDOWS	WW - Sewer B Yard Oily Water	H ₂ S		
C9150/51	C9150/51 Vent	H ₂ S		
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	H ₂ S		
F338	F338 Storage Tank	H ₂ S		
FLARECCU	CCU Flare	H ₂ S		
FLARECOKE	Coker Flare	H ₂ S		
FLAREEP	East Property Flare	H ₂ S		
FLAREGIRB	EP (Girbitol) Flare	H ₂ S		
FLARELHT	LHT Flare	H ₂ S		
FLARENP	North Property Flare	H ₂ S		
FLARESOUTH	South Property Flare	H ₂ S		
FLAREWP	West Property Flare	H ₂ S		
FUGALKY	Alky Fugitives (4)	H ₂ S		
FUGAYARD	Fugitives (4)	H ₂ S		
FUGCCU	FCCU Fugitives (4)	H ₂ S		
FUGCFH	CFH Fugitives (4)	H ₂ S		
FUGCOKER	Coke Handling Fugitives (4)	H ₂ S		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
FUGCPU	CPU Fugitives (4)	H ₂ S		
FUGCR3	CR3 Fugitives (4)	H ₂ S		
FUGCR3TF	Hydroprocessing Tank Farm Fugitives (4)	H ₂ S		
FUGDHT	DHT Fugitives (4)	H ₂ S		
FUGDISP	DISP Fugitive	H ₂ S		
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		
FUGH DU1	DU1 Fugitives (4)	H ₂ S		
FUGHP1	HP1 Fugitives (4)	H ₂ S		
FUGLHT2	LHT2 Fugitives (4)	H ₂ S		
FUGPLAT2	PLAT2 Fugitives (4)	H ₂ S		
FUGSGP	SGP Fugitives (4)	H ₂ S		
FUGSHCU	SHCU Fugitives (4)	H ₂ S		
FUGSR5	SR5 Fugitives (4)	H ₂ S		
FUGSR6	SR6 Fugitives (4)	H ₂ S		
FUGSR7	SR7 Fugitives (4)	H ₂ S		
FUGSR8	SR8 Fugitives (4)	H ₂ S		
FUGTHCR	Thermal Cracking Fugitives (4)	H ₂ S		
G332	G332 Storage Tank	H ₂ S		
J317	J317 Storage Tank	H ₂ S		
J318B	J318B Storage Tank	H ₂ S		
J325	J325 Storage Tank	H ₂ S		
J326	J326 Storage Tank	H ₂ S		
J327	J327 Storage Tank	H ₂ S		
J328	J328 Storage Tank	H ₂ S		
J331	J331 Storage Tank	H ₂ S		
J332	J332 Storage Tank	H ₂ S		
J348	J348 Storage Tank	H ₂ S		
J349	J349 Storage Tank	H ₂ S		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
L2COMPVT	L2COMPVT Vent	H ₂ S		
LDSULF67	SR6 and SR7 Loading Rack	H ₂ S		
LHT1OWS	WW - Sewer LHT1 Oily Water	H ₂ S		
LHT2OWS	WW - Sewer LHT2 Oily Water	H ₂ S		
MVIDEASS	WW - Sewer DEA	H ₂ S		
RKLTC/TT	Load	H ₂ S		
S429	S429 Storage Tank	H ₂ S		
SR3/4PIT	SR3/4 Sulfur Pit	H ₂ S		
SR3/4STACK	SR-3/4 Incinerator	H ₂ S		
SR5L01	SR5 Loading Rack	H ₂ S		
SR5L02	SR5 Loading Rack	H ₂ S		
SR5STACK	SR5 Tail Gas Incinerator	H ₂ S		
SR6STACK	SR6 Tail Gas Incinerator	H ₂ S		
SR7STACK	SR7 Tail Gas Incinerator	H ₂ S		
SR8STACK	SR8 Tail Gas Incinerator	H ₂ S		
SRTT	SR3/4 Loading Rack	H ₂ S		
SS343	SS343 Storage Tank	H ₂ S		
SULFUR	SR5 Sulfur Pit	H ₂ S		
TA301	TA301 Storage Tank	H ₂ S		
TA305	TA305 Storage Tank	H ₂ S		
TA306	TA306 Storage Tank	H ₂ S		
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	H ₂ S		
TA315	TA315 Storage Tank	H ₂ S		
TA316	TA316 Storage Tank	H ₂ S		
TA317	TA317 Storage Tank	H ₂ S		
TA318	TA318 Storage Tank	H ₂ S		
TA319	TA319 Storage Tank	H ₂ S		
TA320	TA320 Storage Tank	H ₂ S		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
TA321	TA321 Storage Tank	H ₂ S		
TA322	TA322 Storage Tank	H ₂ S		
TA324	TA324 Storage Tank	H ₂ S		
TA325	TA325 Storage Tank	H ₂ S		
TA326	TA326 Storage Tank	H ₂ S		
TA329	TA329 Storage Tank	H ₂ S		
TA330	TA330 Storage Tank	H ₂ S		
TA331	TA331 Storage Tank	H ₂ S		
TA332	TA332 Storage Tank	H ₂ S		
TA334	TA334 Storage Tank	H ₂ S		
TG324	TG324 Storage Tank	H ₂ S		
TG362	TG362 Storage Tank	H ₂ S		
TJ339R1	TJ339R1 Storage Tank	H ₂ S		
TSR67	Molten Sulfur Tank	H ₂ S		
VA03	VA03 Storage Tank	H ₂ S		
VA04	VA04 Storage Tank	H ₂ S		
X313	INTFLT/Slop Oil Storage Tank	H ₂ S		

FINAL EMISSIONS CAPH₂S

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)	NH ₃
DAOWS	WW - Sewer DA Oily Water	NH ₃
DD2	WW - Dispatching Distilling 2	NH ₃
DOCKS	Dock Wastewater Collection	NH ₃

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
DYARDOWS	WW - Sewer D Yard Oily Water	NH ₃		
FUGCCU	FCCU Fugitives (4)	NH ₃		
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)	NH ₃		
FUGH DU1	DU1 Fugitives (4)	NH ₃		
FUGSR6	SR6 Fugitives (4)	NH ₃		
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		
H600	FCCU CO Boiler	NH ₃		
HVIOWS	WW - Sewer HVI Oily Water	NH ₃		
J318B	J318B Storage Tank	NH ₃		
LEUOWS	WW - Sewer LEU Oily Water	NH ₃		
LHT1OWS	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		
SAB	South Aeration Basin	NH ₃		
SDAF	WW - South DAF Unit	NH ₃		
SR3/4WW	SR3/4 Wastewater Collection	NH ₃		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
T301	T301 Storage Tank	NH ₃		
T302	T302 EXTFLT Refinery WW Storage Tank	NH ₃		
TC and G	WW - Thermal Cracking and Gas Treating	NH ₃		
TRKLFIL	WW - Trickle Filter	NH ₃		
TRKLSMP	WW - Trickle Sump	NH ₃		
WAXPTOWS	WW - Sewer Wax Plant Oily Water	NH ₃		
WAXPTWAX	WW - Sewer Wax Plant Wax	NH ₃		
X311	INTFLT/Amine Solutions Storage Tank	NH ₃		
X312	INTFLT/Amine Solutions Storage Tank	NH ₃		
X316	WW - DAF Float	NH ₃		
X330	WW - Equalization Tank	NH ₃		
X330SM	WW - Sump	NH ₃		
FINAL EMISSIONS CAP		NH ₃	10.69	46.76
A10823	CCU CO Analyzer	NO _x		
A10824	CO Analyzer	NO _x		
A10825	O ₂ Analyzer	NO _x		
A10502	CCU SNCR NO _x /SO ₂ /O ₂ Analyzer	NO _x		
A162	H5301 O ₂ Analyzer	NO _x		
A180	H5302 O ₂ Analyzer	NO _x		
A236	H5305 O ₂ Analyzer	NO _x		
A34160	CR-3 Furnaces CEMS Analyzer	NO _x		
A785	H5303 O ₂ Analyzer	NO _x		
A786	H5304 O ₂ Analyzer	NO _x		
AE2340	Octane Testing Engine	NO _x		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
AE2636	Octane Testing Engine	NO _x		
AE2650	Octane Testing Engine	NO _x		
AE348	On-line Knock Engine	NO _x		
AE349	On-line Knock Engine	NO _x		
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 Heater	NO _x		
H5103	DU-2 North Flasher Charge Heater	NO _x		
H5104	DU-2 Preflash Heater	NO _x		
H5105	DU-2 Preflash2 Heater	NO _x		
H5200	HDU-2 Charge Heater	NO _x		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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		
H600	FCCU CO Boiler	NO _x		
H613	DU-1 Secondary Pre-Heater	NO _x		
H63000	HVI Column Charge Heater	NO _x		
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	552.33	1949.56
A10823	CCU CO Analyzer	PM		
A10824	CO Analyzer	PM		
A10825	O ₂ Analyzer	PM		
A10502	CCU SNCR NO _x /SO ₂ /O ₂ Analyzer	PM		
A162	H5301 O ₂ Analyzer	PM		
A180	H5302 O ₂ Analyzer	PM		
A236	H5305 O ₂ Analyzer	PM		
A34160	CR-3 Furnaces CEMS Analyzer	PM		
A785	H5303 O ₂ Analyzer	PM		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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		
AE768	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	Cooling Tower No.8 (4)	PM		
CWT9	Cooling Tower No.9 (4)	PM		
FUGCOKEPM1	Coke Pile Wind Erosion Fugitives (4)	PM		
FUGCOKEPM1A	Coke Pile 2 Fugitives (4)	PM		
FUGCOKEPM2	Coke Pile Crane Fugitives (4)	PM		
FUGCOKEPM3	Coke Crusher Fugitives (4)	PM		
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	PM		
H1001	Guard Bed Start-up Heater	PM		
H1010	HDU-1 Charge Heater	PM		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
H1011	HDU-1 Reboiler Heater	PM		
H1100	DHT Heater	PM		
H1170	CFH Charge Heater	PM		
H31001/2	Coker Heaters No. 1 and 2	PM		
H31003	Coker Heater No. 3	PM		
H3300	DHT H ₂ Heater	PM		
H36100	CGHT Heater	PM		
H5100	DU-2 South Crude Heater	PM		
H5101	DU-2 North Crude Heater	PM		
H5102	DU-2 South Flasher Charge Heater	PM		
H5103	DU-2 North Flasher Charge Heater	PM		
H5104	DU-2 Preflash Heater	PM		
H5105	DU-2 Preflash2 Heater	PM		
H5200	HDU-2 Charge Heater	PM		
H53NN	Catalytic Reformer SCR	PM		
H5400	SHCU South Charge Heater	PM		
H5402	SHCU Reboiler Heater	PM		
H5403	SHCU North Charge Heater	PM		
H5404	SHCU Post-Frac Heater	PM		
H5500A	SMR Heater A	PM		
H5500B	SMR Heater B	PM		
H5500C	SMR Heater C	PM		
H5600	SGP Heat Medium Heater	PM		
H600	FCCU CO Boiler	PM		
H613	DU-1 Secondary Pre-Heater	PM		
H63000	HVI Column Charge Heater	PM		
H70001/2	GOHT Recycle Gas and Frac. Reboiler Heaters	PM		
H850S1	PERC Heater - North Stack	PM		
H850S2	PERC Heater - South Stack	PM		
H9150R1	Heater	PM		
PAINTFE	Miscellaneous Painting Fugitives	PM		
SR3/4STACK	SR-3/4 Incinerator	PM		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
SR5STACK	SR5 Tail Gas Incinerator	PM		
SR6STACK	SR6 Tail Gas Incinerator	PM		
SR7STACK	SR7 Tail Gas Incinerator	PM		
SR8STACK	SR8 Tail Gas Incinerator	PM		
FINAL EMISSIONS CAP		PM	143.13	561.88
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 O ₂ Analyzer	SO ₂		
A180	H5302 O ₂ Analyzer	SO ₂		
A236	H5305 O ₂ Analyzer	SO ₂		
A34160	CR-3 Furnaces CEMS Analyzer	SO ₂		
A785	H5303 O ₂ Analyzer	SO ₂		
A786	H5304 O ₂ 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		
AE768	Octane Testing Engine	SO ₂		
FLARECCU	CCU Flare	SO ₂		
FLARECOKE	Coker Flare	SO ₂		
FLAREEP	East Property Flare	SO ₂		
FLAREGIRB	EP (Girbitol) Flare	SO ₂		
FLARELHT	LHT Flare	SO ₂		
FLARENP	North Property Flare	SO ₂		
FLARESOUTH	South Property Flare	SO ₂		
FLAREWP	West Property Flare	SO ₂		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
H1000	PLAT2 Heater	SO ₂		
H1001	Guard Bed Start-up Heater	SO ₂		
H1010	HDU-1 Charge Heater	SO ₂		
H1011	HDU-1 Reboiler Heater	SO ₂		
H1100	DHT Heater	SO ₂		
H1170	CFH Charge Heater	SO ₂		
H31001/2	Coker Heaters No. 1 and 2	SO ₂		
H31003	Coker Heater No. 3	SO ₂		
H3300	DHT H ₂ Heater	SO ₂		
H36100	CGHT Heater	SO ₂		
H5100	DU-2 South Crude Heater	SO ₂		
H5101	DU-2 North Crude Heater	SO ₂		
H5102	DU-2 South Flasher Charge Heater	SO ₂		
H5103	DU-2 North Flasher Charge Heater	SO ₂		
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		
H600	FCCU CO Boiler	SO ₂		
H613	DU-1 Secondary Pre-Heater	SO ₂		
H63000	HVI Column Charge Heater	SO ₂		
H70001/2	GOHT Recycle Gas and Frac. Reboiler Heaters	SO ₂		
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		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY**</u>
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	2644.20	5476.46
A1006	H ₂ S 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 Analyzer	VOC		
A214	CR3 Recycle Gas Moisture Analyzer	VOC		
A298	CR3 Regen Gas O ₂ Analyzer	VOC		
A300	CR3 Regen Gas Comb. Analyzer	VOC		
A329	CR3 Reactor Inlet O ₂ Analyzer	VOC		
A553	Plat2 Rec. Gas Moisture Analyzer	VOC		
A554	Plat2 Rec. Gas Gravity Analyzer	VOC		
A10823	CCU CO Analyzer	VOC		
A10824	CO Analyzer	VOC		
A10825	O ₂ Analyzer	VOC		
A1301	PSA Product H ₂ Analyzer	VOC		
A1905/6	A 1905/6 Analyzer	VOC		
A89128	Tank SS307 Blanket O ₂ Analyzer	VOC		
A842	Tank SS314 Blanket O ₂ Analyzer	VOC		
A10502	CCU SNCR NO _x /SO ₂ /O ₂ Analyzer	VOC		
A162	H5301 O ₂ Analyzer	VOC		
A180	H5302 O ₂ Analyzer	VOC		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
A236	H5305 O ₂ Analyzer	VOC		
A34160	CR-3 Furnaces CEMS Analyzer	VOC		
A785	H5303 O ₂ 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		
AE349	On-line Knock Engine	VOC		
AE388	On-line Knock Engine	VOC		
AE389	On-line Knock Engine	VOC		
AE700	Octane Testing Engine	VOC		
AE768	Octane Testing Engine	VOC		
AP1	AP1 Storage Tank	VOC		
AP16	AP16 Storage Tank	VOC		
AP17	AP17 Storage Tank	VOC		
AP2	AP2 Storage Tank	VOC		
AP4	AP4 Storage Tank	VOC		
AP5	AP5 Storage Tank	VOC		
AP6	AP6 Storage Tank	VOC		
AP7	AP7 Storage Tank	VOC		
AP8	AP8 Storage Tank	VOC		
AYARDOWS	WW - Sewer A Yard Oily Water	VOC		
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		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
C9152/53	C9152/53 Vent	VOC		
CCLP	WW - Cat Cracker Lube Plant	VOC		
CPI1	WW- CPI Oil Water Separator	VOC		
CPI2	WW- CPI Oil Water Separator	VOC		
CRUDE	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	Cooling Tower No. 17 (4)	VOC		
CWT6	Cooling Tower No. 6 (4)	VOC		
CWT7	Cooling Tower No. 7 (4)	VOC		
CWT8	Cooling Tower No. 8 (4)	VOC		
CWT9	Cooling Tower No. 9 (4)	VOC		
CYARDOWS	Wastewater Fugitives (4)	VOC		
D363	FTXNK2/ANTIICANT Storage Tank	VOC		
DAOWS	WW - Sewer DA Oily Water	VOC		
DD2	WW - Dispatching Distilling 2	VOC		
DOCK1	Marine Loading - Dock 1	VOC		
DOCK2	Marine Loading - Dock 2	VOC		
DOCK4	Marine Loading - Dock 4	VOC		
DOCKS	Dock Wastewater Collection	VOC		
DW103	DW103 Storage Tank	VOC		
DW104	DW104 Storage Tank	VOC		
DYARDOWS	WW - Sewer D Yard Oily Water	VOC		
F314	F314 Storage Tank	VOC		
F315	F315 Storage Tank	VOC		
F316	F316 Storage Tank	VOC		
F317	F317 Storage Tank	VOC		
F325	F325 Storage Tank	VOC		
F326	F326 Storage Tank	VOC		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
F338	F338 Storage Tank	VOC		
F364	F364 Storage Tank	VOC		
F365	F365 Storage Tank	VOC		
F366	F366 Storage Tank	VOC		
F367	F367 Storage Tank	VOC		
FLARECCU	CCU Flare	VOC		
FLARECOKE	Coker Flare	VOC		
FLAREEP	East Property Flare	VOC		
FLAREGIRB	EP (Girbitol) Flare	VOC		
FLARELHT	LHT Flare	VOC		
FLARENP	North Property Flare	VOC		
FLARESOUTH	South Property Flare	VOC		
FLAREWP	West Property Flare	VOC		
FP182	FP182 Storage Tank	VOC		
FP190	FP190 Storage Tank	VOC		
FP194	FP194 Storage Tank	VOC		
FP195	FP195 Storage Tank	VOC		
FP200	FP200 Storage Tank	VOC		
FUGALKY	Alky Fugitives (4)	VOC		
FUGAYARD	Fugitives (4)	VOC		
FUGCCU	FCCU Fugitives (4)	VOC		
FUGCFH	CFH Fugitives (4)	VOC		
FUGCGHT	CGHT Fugitives (4)	VOC		
FUGCOKER	Coke Handling Fugitives (4)	VOC		
FUGCPU	CPU Fugitives (4)	VOC		
FUGCR3	CR3 Fugitives (4)	VOC		
FUGCR3TF	Hydroprocessing Tank Farm Fugitives (4)	VOC		
FUGDHT	DHT Fugitives (4)	VOC		
FUGDISP	DISP Fugitive	VOC		
FUGDOCK	Dock Fugitives (4)	VOC		
FUGDU1	DU1 Fugitives (4)	VOC		
FUGDU2	DU2 Fugitives (4)	VOC		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
FUGDU2B	DU3 Fugitives (4)	VOC		
FUGENVN	Environmental North Fugitives (4)	VOC		
FUGGASTR	GASTR Fugitives (4)	VOC		
FUGGFRAC	GFRAC Fugitives (4)	VOC		
FUGGIRBIT	Girbitol Fugitives (4)	VOC		
FUGGOHT	GOHT Fugitives (4)	VOC		
FUGGR	GR Fugitives (4)	VOC		
FUGGR200	GR200 Fugitives (4)	VOC		
FUGHDU1	HDU1 Fugitives (4)	VOC		
FUGHP1	HP1 Fugitives (4)	VOC		
FUGLHT2	LHT2 Fugitives (4)	VOC		
FUGMTBE	MTBE Fugitives (4)	VOC		
FUGPLAT2	PLAT2 Fugitives (4)	VOC		
FUGPOSTFRAC	POSTFRAC Fugitives (4)	VOC		
FUGPSA	PSA Fugitives (4)	VOC		
FUGSGP	SGP Fugitives (4)	VOC		
FUGSHCU	SHCU Fugitives (4)	VOC		
FUGSR3/4	SR3/4 Fugitives (4)	VOC		
FUGSR5	SR5 Fugitives (4)	VOC		
FUGSR6	SR6 Fugitives (4)	VOC		
FUGSR7	SR7 Fugitives (4)	VOC		
FUGSR8	SR8 Fugitives (4)	VOC		
FUGTHCR	Thermal Cracking Fugitives (4)	VOC		
FUGWBT	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		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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	HCU-2 Charge Heater	VOC		
H53NN	Catalytic Reformer SCR	VOC		
H5400	SHCU 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		
H600	FCCU CO Boiler	VOC		
H613	DU-1 Secondary Pre-Heater	VOC		
H63000	HVI Column Charge Heater	VOC		
H70001/2	GOHT Recycle Gas and Frac. Reboiler Heaters	VOC		
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		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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	J317 Storage Tank	VOC		
J318B	J318B Storage Tank	VOC		
J320	J320 Storage Tank	VOC		
J322	J322 Storage Tank	VOC		
J323	J323 Storage Tank	VOC		
J324	J324 Storage Tank	VOC		
J325	J325 Storage Tank	VOC		
J326	J326 Storage Tank	VOC		
J327	J327 Storage Tank	VOC		
J328	J328 Storage Tank	VOC		
J329	J329 Storage Tank	VOC		
J330	J330 Storage Tank	VOC		
J331	J331 Storage Tank	VOC		
J332	J332 Storage Tank	VOC		
J336	J336 Storage Tank	VOC		
J337	J337 Storage Tank	VOC		
J338	J338 Storage Tank	VOC		
J340	J340 Storage Tank	VOC		
J348	J348 Storage Tank	VOC		
J349	J349 Storage Tank	VOC		
K301	K301 Storage Tank	VOC		
K302	K302 Storage Tank	VOC		
K303	K303 Storage Tank	VOC		
K304	K304 Storage Tank	VOC		
K306	K306 Storage Tank	VOC		
K310	K310 Storage Tank	VOC		
K311	K311 Storage Tank	VOC		
L2COMPVT	L2COMPVT Vent	VOC		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
LEUOWS	WW - Sewer LEU Oily Water	VOC		
LHT1OWS	WW - Sewer LHT1 Oily Water	VOC		
LHT2OWS	WW - Sewer LHT2 Oily Water	VOC		
LOADOWS	WW - Sewer Loading Racks	VOC		
M301	Marine Fuel Oil Storage Tank	VOC		
M302	Marine Diesel Storage Tank	VOC		
MANHOLE4	WW - Manhole 4	VOC		
MVIDEASS	WW - Sewer DEA	VOC		
MVIEWS	WW - Sewer MVI Oily Water	VOC		
N92252	X4H DU1 Storage Tank	VOC		
NAB	North Aeration Basin	VOC		
NDAF	WW - North DAF Unit	VOC		
NONE2	FXTNK2/Amine Neutralizer Storage Tank	VOC		
NONE3	FXTNK2/Filmer Storage Tank	VOC		
OWATCTF	WW - Alky Tank Farm Oily Water	VOC		
OWDU1	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		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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	WW - South DAF Unit	VOC		
SR3/4PIT	SR3/4 Sulfur Pit	VOC		
SR3/4STACK	SR3/4 Incinerator	VOC		
SR3/4WW	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		
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		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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 Storage Tank	VOC		
T315	T315 Storage Tank	VOC		
T316	Methanol Storage Tank	VOC		
T59	T59 FXTNK2/SOAP Storage Tank	VOC		
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		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
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 Gas Treating	VOC		
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		
V5518	Hydrogen Plant Vent	VOC		
V5527	Column in HP1	VOC		

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
V9160	Vent V9160	VOC		
VA03	VA03 Storage Tank	VOC		
VA04	VA04 Storage Tank	VOC		
WAXPTOWS	WW - Sewer Wax Plant Oily Water	VOC		
WAXPTWAX	WW - Sewer Wax Plant Wax	VOC		
WX285	WX285 Storage Tank	VOC		
X2HDU1	FXTNK2/X2HDU1 Storage Tank	VOC		
X311	INTFLT/Amine Solutions Storage Tank	VOC		
X312	INTFLT/Amine Solutions Storage Tank	VOC		
X313	INTFLT/Slop Oil Storage Tank	VOC		
X315	Ballast Water Storage Tank	VOC		
X316	WW - DAF Float	VOC		
X320	Ballast Water O/S Storage Tank	VOC		
X321	Slop Oil Storage Tank	VOC		
X322	X322 Storage Tank	VOC		
X323	X323 Storage Tank	VOC		
X324	FXTNK2/Misc Organic Storage Tank	VOC		
X325	FXTNK2/Misc Organic Storage Tank	VOC		
X326	FXTNK2/DAF Float Storage Tank	VOC		
X327	FXTNK2/DAF Float Storage Tank	VOC		
X328	FXTNK2/Misc Organic Storage Tank	VOC		
X330	WW - Equalization Tank	VOC		
X330SM	WW - Sump	VOC		
FINAL EMISSIONS CAP		VOC	1895.68	2914.90

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr <u>TPY**</u>

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

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

Hrs/day ____ Days/week ____ Weeks/year ____ or Hrs/year 8,760

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated September 27, 2007