Permit No.:	47023	Company Name:	Hilcorp Energy Company	APD Reviewer:	Mr. Clyde Price
Project No.:	148827	Unit Name:	Federal Gayette Lease Tank Battery	PBR No(s).:	106.352 and 106.512

GENERAL INFORMATION			
Regulated Entity No.:	RN102527579	Project Type:	Permit by Rule Application
Customer Reference No.:	CN600125991	Date Received by TCEQ:	July 7, 2009
Account No.:	GB-0577-F	Date Received by Reviewer:	July 15, 2009
City/County:	Alta Loma, Galveston County	Physical Location:	From Highway 6 in Alta Loma, travel east for approximately 1.5 miles and turn left on Jack Brooks Road. Travel north on Jack Brooks Road approximately 1.5 miles to facility on left.

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Mr. Mike Schoch Director Of Environmental Regulatory & Safety	Phone No.: Fax No.:	(713) 209-2416 (713) 209-2420	Email:	MSCHOCH@HILCORP.CO M
Technical Contact/ Consultant Name and Title:	Mr. John Connolly, Agent Energy Resources Development, Inc.	Phone No.: Fax No.:	(225) 753-4723 (225) 753-4661	Email:	ERSSES@COX.NET

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?		Х	No confidential information has been submitted.
Are there affected NSR or Title V permits for the project?		Х	This is an existing PBR site with no previously issued NSR or Title V Permits.
Is each PBR > 25/250 tpy?		Х	Registered Emissions: 9.17 tpy VOC, <0.01 tpy SO ₂ , 9.58 tpy CO,
			1.59 tpy NOx, 0.06 tpy HCHO, and 0.09 tpy PM_{10} .
Are PBR sitewide emissions > 25/250 tpy?		Х	See Estimated Emissions Table
Are there permit limits on using PBRs at the site?		Х	
Is PSD or Nonattainment netting required?		Х	This site is not one of the 28 named sources and emissions are below the federal significance as major source levels, therefore, PSD and NA review and netting are not required.
Do NSPS, NESHAP, or MACT standards apply to this registration?		Х	None represented.
Does NOx Cap and Trade apply to this registration?	X		The Federal Gayette Lease Tank Battery site is located in a designated ozone non-attainment county. Both VOC and NOX emissions are decreasing with this PBR revision.
Is the facility in compliance with all other applicable rules and regulations?	х		The company submitted Checklist for 106.352, 106.512, and 106.4

DESCRIBE OVERALL PROCESS AT THE SITE

Hilcorp Energy Company operates the Federal Gayette Lease Tank Battery located near Alta Loma in Galveston County.

The facility is a typical oil and gas production site that produces hydrocarbons from natural reservoirs through deep wells. The oil, gas, and salt water are separated at the surface. The oil is transported via tank truck and the gas is transported via pipeline. The saltwater tanks are not designed to process oil, and are therefore not claimed.

DESCRIBE PROJECT AND INVOLVED PROCESS

This action is to replace the existing compressor engine (EPN: COMP1) with a 332-hp Caterpillar G 3408 TA compressor engine (EPN: COMP2). The tank loading and fugitive emissions were also recalculated to account for current production rates, oil gravity, and operating conditions. The oil production has declined from 250 barrels of oil per day (bopd) to 37 bopd resulting in a net decrease in VOC emissions.

Federal Gayette Lease Tank Battery site will consist of one compressor engine, four crude oil storage tanks, one pneumatic pump, truck loading, and fugitive emissions.

No planned MSS emissions have been represented or reviewed for this registration.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES

Not provided

OIL AND GAS FACILITY GENERAL INFORMATION

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Project No.:	148827	Unit Name:	Federal Gayette Lease Tank Battery	PBR No(s).:	106.352 and 106.512

Natural Gas Throughput (MMSCF/day):			
Oil Throughput (bbl/day):	37.00	Is the gas sweet or sour?	
Condensate Throughput (bbl/day):		Is this an existing site?	
Produced Water Throughput (bbl/day):	Not provided	Has the site been registered before?	

EQUIPMENT/PROC	EQUIPMENT/PROCESSES AT SITE												
Number of each:	Compressor Engines:	1	Glycol dehydrators:	0	VRU:	0							
	Separators:	1	Amine units:	0	Other:								
	Storage Tanks:	4	Heater Treaters:	0	Other:								
	Truck Loading:	1	Flares:	0	Other:								

STORAGE TANKS						
Tank Identifier (EPN)	Capacity of Tank	Throughput (bbl/day)	Contents of Tank	Working and breathing Loss Calculation Method*	Flash Loss Calculation Method	Other
T1 / Oil Storage Tank	300 bbl	9.25	crude oil	Tanks 4.0	Vasquez Beggs	
T2 / Oil Storage Tank	300 bbl	9.25	crude oil	Tanks 4.0	Vasquez Beggs	
T3 / Oil Storage Tank	300 bbl	9.25	crude oil	Tanks 4.0	Vasquez Beggs	
T4 / Oil Storage Tank	300 bbl	9.25	crude oil	Tanks 4.0	Vasquez Beggs	

TANKS 4.0 SOFTWARE [FOR ESTIMATING WORKING AND BREATHING LOSSES FROM STORAGE TANKS]												
Tank Identifier (EPN)	Throughput (gallons/year) (pg. 1 of report)	Turnovers per year (pg. 1 of report)	Results (Ib/year) (last page of report)	Emissions after any controls (tpy)								
T1 / Oil Storage Tank			Crude oil RVP=5	Option 4: RVP=5	50.00		1.238					
T2 / Oil Storage Tank	145,686.30	12.30	Crude oil	Option 4: RVP=5	50.00	1,448.46	1.238					
T3 / Oil Storage Tank			RVP=5	Option 4: RVP=5	50.00		1.238					
T4 / Oil Storage Tank			Crude oil	Option 4: RVP=5	50.00		1.238					

VASQUEZ-BEGGS CORRELATION [FOR ESTIMATING FLASH LOSSES FROM STORAGE TANKS]													
Tank Identifier (EPN)	API Gravity	Separator Pressure (psig)	Separator Temperature (°F)	Separator SeparatorSeparator Gas Gravity at InitialStock Tank GasFraction VOC (C3+)Temperature (°F)Initial ConditionsThroughput (bbl/day)Molecular Weightof Stock Tank Gas									
	(16 - 58°)	(35.3 - 5250 psig)	70 - 295°F	0.56 - 1.18	(no limits)	18 - 125 lb/lb-mole	50% - 100%						
T1 / Oil Storage Tank	38.00	50.00	125	0.65	9.25	49	80%	0.50	1.24				
T2 / Oil Storage Tank	38.00	50.00	125	0.65	9.25	49	80%	0.50	1.24				
T3 / Oil Storage	38.00	50.00	125	0.65	9.25	49	80%	0.50	1.24				

Open Control Data Name: Federal Gayette Lease Tank Battery PBR No(s): 106.352 and 106.512 Tark T Tark	ermit No	7023	Hilcorp Enerç	jy Co	mpany					APD F	eviewer:	Mr. Clyde Price							
Tark Image: Construct of the image: Co	oject).:	1	148827Unit Name:Federal Gayette Lease Tank BatteryPBR No(s).:106.352 and 106.52									106.512							
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Tank	T4 / O Storag	il ge	38.00	5	0.00		125	0.65	9.25			49		80%		0.50	1.24		
TRUCK LOADING [EMISSIONS CALCULATED USING L_=(12.46)(S)(P)(M)(T) EQUATION FROM AP-42, SECTION 5.2.4] mail of the section of the sectin of the section of the sectin of the section of the sect	Tank Justifi	icatio	on as to why	y use	of Vas	quez-B	eggs is appro	opriat	t e: Inpu	ut para	ameters ar	e withi	n the j	parame	eters of the	Vaso	quez Beg	gs equation.	
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P M T L Hourly Loading Rate (galons/hour) Annual Lang Rate (galons/year) Hourly Emissions Emissions (tb/h) Annual Lang Rate (galons/year) Hourly Emissions (tb/h) Annual Lang Rate (galons/year) Hourly Emissions (tb/h) Annual Lang Rate (galons/year) Hourly Lang Rate (galons/year) Annual Lang Rate (galons/year) <td>TRUC</td> <td>K LC</td> <td>DADING [E</td> <td>EMISSI</td> <td>IONS C</td> <td>ALCUL</td> <td>LATED USING</td> <td>G L.=</td> <td>(12.46)(S)(I</td> <td>P)(M)/</td> <td>(T) EQUAT</td> <td>FION F</td> <td>ROM</td> <td>AP-42</td> <td>, SECTION</td> <td>۰ 5.2</td> <td>-4]</td> <td></td>	TRUC	K LC	DADING [E	EMISSI	IONS C	ALCUL	LATED USING	G L.=	(12.46)(S)(I	P)(M)/	(T) EQUAT	FION F	ROM	AP-42	, SECTION	۰ 5.2	-4]		
P (b)b). T (b) VOC/L000 gallons Rate gallon shout) (gallon shout) <t< td=""><td></td><td></td><td>М</td><td></td><td></td><td></td><td>LL</td><td>н</td><td>lourly Load</td><td>ling</td><td></td><td></td><td></td><td></td><td>н</td><td colspan="2">Hourly</td><td>Annual</td></t<>			М				LL	н	lourly Load	ling					н	Hourly		Annual	
S [psia] mole) (R) loaded) (gallons/hour) (gallons/year) (th/n) (tpy) 0.5 5.00 50.00 528 2.95 8.400 567.210.00 24.78 0.817 ngitive Emissions Fugitive Emissions Fugitive Emissions Component [ub/n/n] (tp)/n (tp)/n I Gas Service Quantity Emission Factor Emissions Enissions VOC Total Emissions (tp)/n Valves 21 0.000529 0.023175 0.0631 0.001 0.001 Pump Seal 1 0.000529 0.023175 0.063 0.001 0.001 Comector 40 0.00044 0.017377 0.063 0.001 0.001 0.001 Service 10 0.00041 0.00 0.000 10.063 0.001 0.001 Int L1quid Service Quantity Emission Factor Emissions Comector 10.000 0.003 0.02386 100 0.0413 1.811 <		Ρ	(lb/lb-	. 1	Г (II	voc/	1000 gallons		Rate		Annu	ial Lo	ading	Rate	Em	issio	ns	Emissions	
0.5 5.00 50.0 52.8 2.95 8.400 567.210.00 24.78 0.817 argitive Emissions Fugitive Emissions - Components in Gas Service Total Emissions Component (Ib/hr-source) Emissions Emissions Emissions Total Emissions Total Emissions (Ib/hr) Image 0.003 0.001 Pump Seal 1 0.00529 0.023175 0.063 0.063 0.001 Commector 40 0.00044 0.000 0.063 0.063 0.063 0.001 Commector 40 0.000441 0.00 0.000 0.063 0.001 0.001 Other 0 0.01940 0.00 0.000 0.063 0.001 0.001 0.001 Valves 75 0.0055 Component 100hr) Emissions Emissions Total Emissions Comotice 0.002 0.2316 0.002 0.2284 0.002 0.2284 0.002 0.2284 0.000 0.014 0.014 <td>S</td> <td>(psia</td> <td>) mole)</td> <td>(°I</td> <td>R)</td> <td>lo</td> <td>aded)</td> <td>(</td> <td>(gallons/ho</td> <td>ur)</td> <td>(</td> <td>gallon</td> <td>slyea</td> <td>r)</td> <td>(</td> <td>lb/hr)</td> <td>1</td> <td>(tpy)</td>	S	(psia) mole)	(°I	R)	lo	aded)	((gallons/ho	ur)	(gallon	slyea	r)	(lb/hr)	1	(tpy)	
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Prantige 140 0.00024 0.03391 0.148/07 100 0.000 0.00 Open-ended Line 0 0.00309 0.00 100 0.00 0.00 0.00 Other 0 0.01653 0.00 100 0.00 0.00 0.00 Total 0.541 2.37 Fugitive Emissions - Components in Water Service Total Emissions VOC Total Emissions Total Emissions Valves 2 0.0002161 0.000432 0.001193 100 0.00 0.002 Valves 2 0.000259 0.00 0.00 100 0.00 0.002 Pump Seal 0 0.0000529 0.00 0.00 100 0.00 0.00 0.002 Connector 2 0.000245 0.000112 100 0.00 0.00 0.00 Open-ended Line 0 0.0005512 0.00 0.00 100 0.00 0.00	Conne	ector			140		0.0004630)	0.64816		0.283895		100	0.03				0.204	
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Outer 0 0.000 0.000 1.000 Total 0.541 2.37 Fugitive Emissions - Components in Water Service Component in Lt. Liquid Service Quantity Emission Factor (lb/hr) Emissions (lb/hr) VOC (lb/hr) Total Emissions Total Emissions Valves 2 0.0002161 0.000432 0.001893 100 0.00 0.002 Pump Seal 0 0.0000529 0.00 0.00 100 0.00 0.002 Connector 2 0.000064 2.56E-05 0.000112 100 0.00 0.00 Open-ended Line 0 0.0308649 0.00 0.00 0.00 0.00 Other 0 0.0308649 0.00 0.00 0.00 0.00 Total Emissions Emissions Emissions Control O.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.004 Itight Oil 0.541 2.37 Vater <t< td=""><td>Other</td><td>enue</td><td></td><td></td><td>0</td><td></td><td>0.00309</td><td></td><td colspan="3"></td><td></td><td colspan="3">100 0.0</td><td></td><td></td><td>0.00</td></t<>	Other	enue			0		0.00309						100 0.0					0.00	
Ending Order Order <t< td=""><td>Other</td><td></td><td></td><td>I</td><td>0</td><td></td><td>0.01055</td><td></td><td colspan="4">0.00 0.00 10 Tota</td><td colspan="3">iotal 0.541</td><td></td><td>T</td><td>2.37</td></t<>	Other			I	0		0.01055		0.00 0.00 10 Tota				iotal 0.541				T	2.37	
Fugitive Emissions - Components in Water Service Component in Lt. Liquid Service Quantity (Ib/hr-source) Emissions (Ib/hr) Emissions (Ib/hr) VOC (tpy) Total Emissions (Ib/hr) Total Emissions (tpy) Valves 2 0.0002161 0.000432 0.001893 100 0.00 0.002 Pump Seal 0 0.0002425 0.000485 0.002124 100 0.000 0.002 Connector 2 0.0002425 0.000485 0.002124 100 0.00 0.002 Plange 4 0.000064 2.56E-05 0.00112 100 0.00 0.00 Open-ended Line 0 0.0005512 0.00 0.00 100 0.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.004 Service Emissions (Ib/hr) Emissions (tpy) Emissions Emissions Gas 0.00 0.004 2.375 1 2.375 Water 0.00 0.004 2.375													10tal 0.541						
Component in Lt. Liquid Service Quantity (lb/hr, source) Emissions (lb/hr) Emissions (tpy) VOC Wt % Total Emissions (lb/hr) Total Emissions (tpy) Valves 2 0.0002161 0.00432 0.001893 100 0.00 0.002 Pump Seal 0 0.0000529 0.00 0.00 100 0.00 0.00 Connector 2 0.0002425 0.000485 0.002142 100 0.00 0.00 Connector 2 0.00005512 0.00 0.00 0.00 0.00 Open-ended Line 0 0.0005512 0.00 0.00 0.00 0.00 Other 0 0.0308649 0.00 0.00 0.00 0.00 Other 0 0.0308649 0.00 0.00 0.00 0.00 Service Emissions (lb/hr) ftpy) ftp 0.00 0.004 0.004 Gas 0.00 0.004 0.004 0.004 0.00 0.00 Uight Oil 0.541							Fugitive E	Imiss	sions - Con	npone	ents in Wa	ter Se	rvice						
in Lt. Liquid Service (Ib/hr-source) (Ib/hr) (tpy) Vit % (Ib/hr) (tpy) Valves 2 0.0002161 0.000432 0.001893 100 0.00 0.00 Pump Seal 0 0.0002425 0.000432 0.00 100 0.00 0.00 Connector 2 0.0002425 0.000485 0.002124 100 0.00 0.00 Connector 2 0.0000644 2.56E-05 0.000112 100 0.00 0.00 Open-ended Line 0 0.0005512 0.00 0.00 100 0.00 0.00 Other 0 0.0308649 0.00 0.00 0.00 0.00 Other 0 0.0308649 0.00 100 0.00 0.004 Construct Emissions Emissions Emissions Items is in the second is in		Con	nponent		Quant	ity	Emission Fa	ctor	Emissi	ons	Emission	ns \	OC	Tot	al Emissio	ons	Tot	al Emissions	
Valves 2 0.0002161 0.000432 0.001893 100 0.00 0.002 Pump Seal 0 0.0000529 0.00 0.00 100 0.00 0.00 Connector 2 0.0002425 0.000485 0.002124 100 0.00 0.002 Flange 4 0.000064 2.56E-05 0.000112 100 0.00 0.00 Open-ended Line 0 0.0005512 0.00 0.00 100 0.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.00 Service Emissions (lb/hr) Emissions (lpy) Emissions Emissions Valuer Valuer O.00 0.004 Uight Oil 0.541 2.375 Valuer 0.541 2.375 Valuer Emission Factor /	in L	_t. Lie	quid Servic	e			(lb/hr-sour	ce)	(lb/h	r)	(tpy)	V	/t %		(lb/hr)			(tpy)	
Pump Seal 0 0.0000529 0.00 0.00 100 0.00 0.00 Connector 2 0.0002425 0.000485 0.002124 100 0.00 0.002 Flange 4 0.000064 2.56E-05 0.000112 100 0.00 0.00 Open-ended Line 0 0.0005512 0.00 0.00 100 0.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.00 Service Emissions (lb/hr) Emissions (lb/hr) Emissions Emissions Emissions Figure National Actional Ac	Valves	s			2		0.0002161	<u>L</u>	0.0004	132	0.00189	3 :	100		0.00			0.002	
Connector Z 0.0002425 0.0002124 100 0.00 0.00 Flange 4 0.000064 2.56E-05 0.000112 100 0.00 0.00 0.00 Open-ended Line 0 0.0005512 0.00 0.00 100 0.00 0.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.00 Other 0 0.0308649 0.00 0.00 100 0.00 0.00 Total Fugitives - All Services Emissions Emissions Emissions Emissions Emissions Emissions Emission	Pump	Seal			0		0.0000529	1	0.00)	0.00		100		0.00			0.00	
Friange 4 0.0000064 2.56E-05 0.000112 100 0.004 0.00 <td>Conne</td> <td>ector</td> <td></td> <td></td> <td>2</td> <td></td> <td>0.0002425</td> <td>2</td> <td>0.0004</td> <td>185</td> <td>0.00212</td> <td>4</td> <td>100</td> <td></td> <td>0.00</td> <td></td> <td></td> <td>0.002</td>	Conne	ector			2		0.0002425	2	0.0004	185	0.00212	4	100		0.00			0.002	
Openmended Line 0 0.000312 0.00 0.00 100 0.00	Flange	e onde	dling		4		0.000064	+	2.56E	-05	0.00011	∠ .	100		0.00			0.00	
Other Other <th< td=""><td>Othor</td><td>enue</td><td></td><td></td><td>0</td><td></td><td>0.0005512</td><td><u>^</u></td><td>0.00</td><td>י ר</td><td>0.00</td><td></td><td>100</td><td>•</td><td>0.00</td><td></td><td></td><td>0.00</td></th<>	Othor	enue			0		0.0005512	<u>^</u>	0.00	י ר	0.00		100	•	0.00			0.00	
Total Fugitives - All Services Service Emissions (lb/hr) Emissions (tpy) Gas 0.00 0.001 Light Oil 0.541 2.37 Water 0.00 0.004 Total 0.541 2.375	Other				0		0.0306048	1	0.00	, ,	0.00	Т			0.00			0.004	
Total Fugitives - All Services Service Emissions (lb/hr) Emissions (tpy) Gas 0.00 0.001 Light Oil 0.541 2.37 Water 0.00 0.004 Total 0.541 2.375 NATURAL GAS FIRED COMPRESSOR ENGINES Engine Rich Emission Factor /															0.00		1	0.004	
Service Emissions (lb/hr) Emissions (tpy) Gas 0.00 0.001 Light Oil 0.541 2.37 Water 0.00 0.004 Total 0.541 2.375			Total Fu	gitives	s - All S	Service	S												
Gas 0.00 0.001 Light Oil 0.541 2.37 Water 0.00 0.004 Total 0.541 2.375 NATURAL GAS FIRED COMPRESSOR ENGINES Emission Factor /		Service Emissions (lb/hr)						5											
Light Oil 0.541 2.37 Water 0.00 0.004 Total 0.541 2.375 NATURAL GAS FIRED COMPRESSOR ENGINES Emission Factor /	Gas				0.	00	0.001												
Water 0.00 0.004 Total 0.541 2.375 NATURAL GAS FIRED COMPRESSOR ENGINES Emission Factor /	Light (Oil			0.5	541	2.37												
Total 0.541 2.375 NATURAL GAS FIRED COMPRESSOR ENGINES Emission Factor /	Water				00	0.004													
NATURAL GAS FIRED COMPRESSOR ENGINES Engine Rich Emission Factor /			Т	otal	0.5	541	2.375												
NATURAL GAS FIRED COMPRESSOR ENGINES Engine Rich Emission Factor /																			
Engine Rich Emission Factor /	NATU	RAL	GAS FIRED	сом	PRES	SOR EN	IGINES												
	Eng	jine							Rich						Emis	sion	Factor /		

Engine Identifier (EPN /	Hou Operati	r of ion per			Rich or Lean Burp				V Inc	endor luded?	Data S ' (requi	heet C red if	Emission Facto Drigin of Emiss Factor	or / ion	
name)		222	9 760	1.052	Dich		VES	VOC (NMNEHO	c)	NOx	CO	SO2	(g/np-nr) HCHO (formal- dehyde)		

Permit No.:	47023	Compan Name:	ıy	Hilco	rp Energ	y Comp	bany					APD Reviewer: Mr. Clyde Price			Price
Project No.:	148827	Unit Nar	ne:	Fede	ral Gaye	tte Lea	se Ta	ank Bat	ttery			PBR No(s).: 106.352 and 106.53			nd 106.512
COMP2 Compres	/ Caterpillar 34 ssor Engine	08							0.32 Mfg	2 0.50 . Mfg) 3.(. Mf	3.00 0.00185 0.02 Air Mfg. AP-42 Mfg. C			Air -fuel ratio controller NSCR Catalyst
30 TAC	8106 352 RUI I														
REQUIR	REMENTS	LONEON								YES, N	0.	OTHER / CON	/ME	NTS	
										or n/a	ι				
If the si recovery (1 long t	te conditions th v unit, etc.), it h on = 2240 pour	ne natural andles les: nds).	gas (wit s than tw	n a gly 10 long	col deh tons pe	ydrator, r day o	am f suli	ine uni fur com	t, sulfur Ipounds	NO		Site is swe	eet. I pe	No gas con erformed.	ditioning is
(1) All co	ompressors will	meet the r	equireme	ents of	106.512.					YES					
(1) All fla	ares will meet th	ne requirem	nents of 1	.06.492	2.					N/A		No site flare.			
(2) Total emissions, including process fugitives, combustion unit stacks, separator, or other process vents, tank vents, and loading emissions from all such facilities constructed at a site under this section, will be equal to or below 25 tons per year (tpy) each of sulfur dioxide (SO ₂), all other sulfur compounds combined, or all volatile organic compounds (VOC) combined; and 250 tpy each of nitrogen oxide and carbon monoxide. Emissions of VOC and sulfur compounds other than SO ₂ must include gas lost by						YES		See Estimatec	I Em	issions Tab	ole.				
(3) If the facility handles sour gas, it will be located at least 1/4 mile from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located.						om any / by the acility is	N/A		Site is sweet. Actual Distance = <u>>100 feet.</u>						
(4) Tota be equa	(4) Total emissions of sulfur compounds, excluding sulfur oxides, from all vents will be equal to or below 4.0 pounds per hour (lb/hr).					ents will	YES		Actual Sulfur E	Emis	sions = <u>0.</u>	001 lb/hr SO ₂ .			
(4) The requiren interpola <u>H₂S</u> 0 0 1. 3.	height of ea nents, and is in tted) .27 .60 94 00	ch vent e 1 no case <u>Minim</u>	emitting ess than <u>num Vent</u> 20 30 50 60 68	sulfur 20 fee <u>Heigh</u>	compou t: (N ⁱ <u>t (ft)</u>	nds m OTE: of	eets ther	the fo	bllowing may be	YES		Actual Vent He	eight	= <u>24 feet.</u>	
(5) If the site handles sour gas, the company will register the site by submitting Form						ng Form	N/A		Site is sweet.	Com	pany regist	ered using			
30 TAC	§106.512 RULI	E CHECK								YES NO				TS	
										or n/a	, 0				
(1) The within 10 Engi	engines or turl) days of the sta nes and turbir	bines have art of const nes rated	e been re ruction. less tha	egistere n 240	ed with F	Form P	I-7 c ו (מו	need n	CERT ot be	YES		orsenower of	əngir	no(c) - 33	2
regis and	registered, but must meet paragraphs (5) and (6) of this section, relating to fuel and protection of air quality.							ic(3) = <u>-33</u>	<u></u>						
(1) Tab stational	(1) Table 29 has been submitted for each proposed gas or liquid fuel-fired stationary internal combustion reciprocating engine.						el-fired	YES							
(1) Table 31 has been submitted for each proposed gas turbine.						N/A	Ν	turbines are u	ised	at this site.					
(2) Any engines rated greater than 500-hp will meet the requirements of subparagraphs (A) - (C) of this paragraph.						N/A									
(2)(A) Emissions of Check which I	nitrogen ox <i>limit applie</i>	kides (NC s:) will	not exce	ed the	follo	wing lin	nit:		A	ctual NOx Emi	issio	ns = <u>0.5</u> 0	g/hp-hr.
	(2)(A)(vi) 11.0) g/hp-hr fo	or any co	npress	ion-ignite	ed liquio	d-fire	ed engir	ne.						
(2)(E to m	b) The engine re eet the NOx lim	equires an its in subpa	automat aragraph	ic air-fı (2) (A)	uel ratio	(AFR) (contr	oller in	order	YES					
				-						VES					

Permit No.:	47023	Company Name:	Hilcorp Energy Company			APD Reviewer	Mr. Clyde Price	
Project No.:	148827	Unit Name:	Federal Gayette Lease Tank I	Battery		PBR No(s).:	106.352 and 106.512	
(2)(B to me A w a th fu s) The engine re eet the following n AFR controll ith a non-selu pplications whe nermal unit/stan nel. If an NSCR hall operate on	quires an automati requirements: er shall be deemen ective catalytic re the fuel heating dard cubic feet fror converter is used exhaust oxygen coi	c air-fuel ratio (AFR) controller d necessary for any engine c eduction (NSCR) converter g value varies more than ± 5 n the design lower heating value to reduce NO _x , the automatic on htrol.	in order ontrolled and for 0 British ue of the controller				
2)(C) main availa agen	The records tained by the or able, upon requ cy having jurisd	specified in (2)(C wher or operator fo est, to the commis iction.	c) of this PBR will be crea r a period of at least two year sion and any local air pollution	ted and s, made n control	YES	Per the 106.512 C	hecklist	
(4) Any replacem and (3) a Tempo days o inoper	engine or tur nent purposes is bove. prary replaceme of operation aft able.	bine rated less t s exempt from the ent engines or turbin er which they sha	han 500 hp or used for te emission limitations of paragr nes shall be limited to a maximu II be removed or rendered p	mporary aphs (2) um of 90 hysically	NO	Horsepower: <u>332</u> Temporary? <u>NO.</u>		
(5) The g gas cont or field g	gas fuel will be aining no more as.	limited to: sweet na than ten grains tota	atural gas or liquid petroleum I sulfur per 100 dry standard cu	gas, fuel ıbic feet,	YES	Type of fuel: <u>Natu</u>	ral Gas	
(6) Comp the prope	bliance with Nat bsed facility has	ional Ambient Air Q been demonstrate	uality Standard (NAAQS) in the	e area of	YES	Which method was used (A, B, or C)? <u>C</u> . Delete rows below that are not needed.		
(6)(C Th eq) Distance to fro e total emission uals the shortes	m all existing and p s of NO _x (nitrogen c t distance in feet fr	proposed facilities on the prope pixide plus NO_{2} will not exceed om any existing or proposed sta	rty to the r the most r ack to the	nearest proper estrictive of th nearest prope	ty line was used to a e 250 tpy or the valu rty line.	demonstrate NAAQS: ie (0.3125 D) tpy, where D	
		D (feet)	0.3125 X D	Actua	al NOx emissions (tpy)			
		100	31.25		1.59			
(7) The e	engine or turbine	will not be used to	generate electricity.		YES	The engine will not electricity	be used to generate	

ESTIMATED EMISSIONS													
EPN / Emission Source	Specific VOC	VC	C	N	Эх	со		PM ₁₀		SO ₂		Other	
	or Other Pollutants	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
T1 / 300 bbl Oil Storage Tank		0.283	1.238										
(Working Breathing & Flash)													
T2 / 300 bbl Oil Storage Tank		0.283	1.238										
(Working Breathing & Flash)													
T3 / 300 bbl Oil Storage Tank		0.283	1.238										
(Working Breathing & Flash)													
T4 / 300 bbl Oil Storage Tank		0.283	1.238										
(Working Breathing & Flash)													
P1 / Pneumatic Pump		0.002	0.009										
COMP2 / 332-hp Caterpillar 3408 Compressor Engine	НСНО	0.233	1.022	0.37	1.597	2.19	9.583	0.02	0.094	0.001	0.006	0.02	0.064
Load 1 / Truck Loading		24.78	0.817										
FUG / Fugitive Emissions		0.54	2.37										

Permit No.:	47023	Company Name:	Hilcorp Energy Company	APD Reviewer:	Mr. Clyde Price
Project No.:	148827	Unit Name:	Federal Gayette Lease Tank Battery	PBR No(s).:	106.352 and 106.512

TOTAL EMISSIONS (TPY):	9.17	1.59		9.58		0.09	<0.01		0.06
MAXIMUM OPERATING SCHEDULE:	Hours/Day	Day	/s/Week		Wee	ks/Year	Ηοι	urs/Year	8,760

SITE REVIEW / DISTANCE LIMIT	Yes	No	Description/Outcome	Date	Reviewed by
Site Review Required?		Х		July 15, 2009	Mr. Clyde Price
PBR Distance Limits Met?	Х		The distance to the nearest property line and the nearest off-property receptor is >100 feet.	July 15, 2009	Mr. Clyde Price

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:	Clyde Price	Juitstager	See Hard Copy.
PRINTED NAME:	Mr. Clyde Price	Ms. Julie Steger	Ms. Anne M. Inman, P.E., Manager
DATE:	July 30, 2009	July 30, 2009	July 30, 2009

BASIS OF PROJECT POINTS	POINTS
Base Points: 106.352	1.50
Project Complexity Description and Points: 106.512	0.50
Technical Reviewer Project Points Assessment:	2.00
Final Reviewer Project Points Confirmation:	