March 18, 2013

Mr. Kerby Zozula
Ventura County APCD
669 County Square Drive
Ventura, CA 93003

Subject: **Part 70 Permit Reissuance Application Incomplete Notice**
Platform Gina Application #01491-311

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A.P.C.D.

Dear Mr. Zozula:

In regards to the VCAPCD correspondence dated December 12, 2012 regarding the Platform Gina Part 70 permit reissuance application DCOR submits the following information:

1) DCOR believes that the following engines listed on the Platform Gina air permit are subject to the most recent revisions of 40CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAPS):

a) Crane No. 1 – 325 BHP CAT Model 3406B Diesel IC Engine.
b) Emergency "Back-up" Generator – 450 BHP Cummins 3406 Diesel IC Engine

Both units listed above are diesel-driven compression ignition engines installed prior to 2006 at an area source of HAP emissions that is also a Part 70 facility and thus requires compliance with ZZZZ, Part III. For compression ignition, non-emergency, 300-500 bhp at area and major sources, the emission standard is 49 ppmv CO or 70% CO reduction. In order to meet this emission limit, Crane No. 1 will require the installation of catalytic emission controls by May 3, 2013. DCOR will be submitting under separate cover a permit application to install catalytic convertor on the exhaust system of the crane engine. Once catalytic controls are installed an emission source test is required within 180 days (six months) to document 49 ppmv or 70% CO emission reduction and subsequent emission source tests are required every 8,760 hours or every three years, whichever comes first. The emission source test must be comprised of three separate runs that last at least one hour each.

The Emergency "Back-up" Generator is currently limited by the Part 70 permit to 50 hours a year for maintenance and testing and thus there is no requirement to install catalytic controls. The Federal regulation allows for maintenance and testing up to 100 hours a year, of which 15 hours can be used for a demand response program. There is no restriction on emergency operation.

Both engines, however, are subject to Maintenance Management Practices (MMP) and record keeping standards as follows:

For Crane Engine:

Change oil and filter every 1,000 hours or annually, whichever comes first.
Inspect air cleaner every 1,000 hours or annually, whichever comes first.
Inspect all hoses and belts every 500 hours or annually, whichever comes first.

Minimize the engine's time spent at idle and minimize the engine's start-up time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-start-up emission limitations apply.

Record all engine maintenance activities to demonstrate you operated and maintained engines according to manufacturer requirements.

For Emergency Generator Engine:
Change oil and filter every 500 hours or annually, whichever comes first.
Inspect air cleaner every 1,000 hours or annually, whichever comes first.
Inspect all hoses and belts every 500 hours or annually, whichever comes first.

Minimize the engine's time spent at idle and minimize the engine's start-up time at start-up to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-start-up emission limitations apply.

Record all engine maintenance activities to demonstrate you operated and maintained engines according to manufacturer requirements.

As is already required by the facility Part 70 permit, only ultra-low sulfur diesel fuel is allowed to be combusted in the crane and emergency generator engines.

For all diesel engines > 300 bhp a semi-annual compliance report needs to be certified by the Designated Responsible Official and submitted within 31 days of the end of the reporting period.

DCOR is submitting, as it was requested, information on the Platform Gina facility potential to emit of greenhouse gases. Please see attached document that also includes an update of the facility HAP emissions based upon 2011 actual emissions.

Last, as was also requested, there was a question about the engines currently installed in the M/V Kenneth Carl (formerly NRC Freedom). The M/V Kenneth Carl was repowered in December 2012 and is equipped with two (2) Caterpillar C18 (Tier 2) 671 BHP main engines and two (2) Kohler 4TNV98-GGKM (Tier 3) 49 BHP auxiliary generators.

If you have any questions or if this response does not answer all VCAPCD questions, please feel free to contact me at 805-535-2074 or cwhite@dcorllc.com.

Best Regards,

Christine White

Christine White
Environmental Advisor

Attachment (1)

DCOR, LLC Platform Gina

GHG Emission Calculations - Estimated Maximum/PTE

SUBPART C - COMBUSTION SOURCES

Emission Device	CO2 (metric tonnes)	CH4 (metric tonnes)	N2O (metric tonnes)	CO2e (metric tonnes)	CO2e %	Comments/Applicability
Crane No. 1 (Cat 3406B-325 bhp)	29.2926	0.0012	0.0002	29.3912	1.99%	
Generator (Cummins-450 bhp)	65.1459	0.0026	0.0005	65.3652	4.43%	exempt, emergency/backup [§ 98.30(a)(2)]
Crew Boats - Diesel Engines	739.9698	0.0300	0.0060	742.4610	50.38%	exempt, non-stationary [§ 98.30(a)]
Work Boats - Diesel Engines	121.4571	0.0049	0.0010	121.8660	8.27%	exempt, non-stationary [§ 98.30(a)]
Boom Boats - Gasoline Engines	4.3888	0.0002	0.0000	4.4043	0.30%	exempt, portable [§ 98.30(a)(1)]
subtotal (including exempt)	*960.2542*	*0.0390*	*0.0078*	*963.4878*		
subtotal (NOT including exempt)	*29.2926*	*0.0012*	*0.0002*	*29.3912*		

SUBPART W - PETROLEUM and NATURAL GAS SYSTEMS

Emission Source	CO2 (metric tonnes)	CH4 (metric tonnes)	N2O (metric tonnes)	CO2e (metric tonnes)	CO2e %	Comments/Applicability
Flare (John Zink, 142 MMBtu/hr)	347.4446	5.40553	0.00168	461.4805	31.31%	
Fugitive Components	0.0896	2.31827	0.00000	48.7734	3.31%	
Oil Tanks	0.0037	0.00533	0.00000	0.1156	0.01%	
subtotal	*347.5379*	*7.7291*	*0.0017*	*510.3695*	*34.63%*	

Summary (All Subparts incl. exempt)			
CO2 (metric tonnes)	CH4 (metric tonnes)	N2O (metric tonnes)	CO2e (metric tonnes)
1,307.79	7.77	0.01	1,473.86
CO2-CO2e (metric tonnes)	CH4-CO2e (metric tonnes)	N2O-CO2e (metric tonnes)	CO2e (metric tonnes)
1,307.79	163.13	2.94	**1,473.86**

Summary (All Subparts excl. exempt)			
CO2 (metric tonnes)	CH4 (metric tonnes)	N2O (metric tonnes)	CO2e (metric tonnes)
376.83	7.73	0.00	539.76
CO2-CO2e (metric tonnes)	CH4-CO2e (metric tonnes)	N2O-CO2e (metric tonnes)	CO2e (metric tonnes)
376.83	162.34	0.59	**539.76**

DCOR, LLC Platform Gina
GHG Emission Calculations - Estimated Maximum/PTE

Fuel Combustion [estimated using § 98.33(a)(1) & (c)(1) - Tier 1 Methodology]

Device	Fuel	Fuel Usage (gallons)	HHV (MMBtu/gal)	CO2 EF (kg/MMBtu)	CH4 EF (kg/MMBtu)	N2O EF (kg/MMBtu)	CO2 (metric tonnes)	CH4 (metric tonnes)	N2O (metric tonnes)	CO2e (metric tonnes)
Crane No. 1 (Cat 3406B-325 bhp)	Diesel	2,870	0.138	73.960	0.003	0.0006	29.29	0.00	0.00	29.39
Generator (Cummins-450 bhp)	Diesel	6,383	0.138	73.960	0.003	0.0006	65.15	0.00	0.00	65.37
Crew Boats - Diesel Engines	Diesel	72,500	0.138	73.960	0.003	0.0006	739.97	0.03	0.01	742.46
Work Boats - Diesel Engines	Diesel	11,900	0.138	73.960	0.003	0.0006	121.46	0.00	0.00	121.87
Boom Boats - Gasoline Engines	Gasoline	500	0.125	70.220	0.003	0.0006	4.39	0.00	0.00	4.40
						Total	*960.25*	*0.04*	*0.01*	*963.49*

Flare [estimated using § 98.233(n)(ill) - Flare Stack Emissions]

CH4 Emissions (un-combusted, tonnes) = Gas volume (scf) * (1-0.98 (default)) * (X_{ch4}) * ($density_{ch4}$) * 0.001 [reference § 98.233(n) & (v), Eqs. W-19 & W-36]

CO2 Emissions (un-combusted, tonnes) = Gas volume (scf) * (X_{co2}) * ($density_{co2}$) * 0.001 [reference § 98.233(n) & (v), Eqs. W-20 & W-36]

CO2 Emissions (combusted, tonnes) = Gas volume (scf) * (0.98) * (X_{ch4+}) * (# C atoms) * ($density_{ch4}$) * 0.001 [reference § 98.233(n) & (v), Eqs. W-21 & W-36]

N2O Emissions (combusted, tonnes) = Gas volume (MMscf) * (0.98) * (HHV) * (0.0001 kg N2O/MMBtu) * 0.001 [reference § 98.233(n) & (z), Eq. W-40]

Flare Emissions		
Un-combusted CH4	5.4055	tonnes CH4
Un-combusted CO2	10.4490	tonnes CO2
Combusted CO2	336.9955	tonnes CO2
Combusted N2O	0.0017	tonnes N2O
Total	*461.4805*	tonnes CO2e

Maximum Gas Volume (MMscf) = 16.60

Mole Fractions of HCs & CO2	
Methane, CH_4	0.8307
Ethane, C_2H_6	0.0371
Propane, C_3H_8	0.0302
Butane, C_4H_{10}	0.0132
Pentane, C_5H_{12}	0.0016
Hexane, C_6H_{14}	0.00012
Carbon Dioxide, CO_2	0.0117

DCOR, LLC Platform Gina
GHG Emission Calculations - Estimated Maximum/PTE

Density CH4 =	0.0196	kg/scf (at 68F & 14.7 psia; reference § 98.233(v) Eq. W-36)
Density CO2 and N2O =	0.0538	kg/scf (at 68F & 14.7 psia; reference § 98.233(v) Eq. W-36)
GWP CO2 =	1	(Table A-1 to Subpart A of Part 98 & Eq W-36)
GWP CH4 =	21	(Table A-1 to Subpart A of Part 98 & Eq. W-36)
GWP N2O =	310	(Table A-1 to Subpart A of Part 98 & Eq. W-36)
MW CO2 =	44.01	lb/lb-mole
MW CH4 =	16.04	lb/lb-mole
MVC =	849.5	scf/kg-mole
1 kg =	2.2046	lbs
1 kg =	0.001	metric tonne

Fugitive Components [estimated using § 98.233(r)(2)(i) - Population Count and Emission Factors, Methodology 1]

Component	# of Components (using Table W-1C)	Table W-1A THC EF [gas service] (scf/hr/component)	Table W-1A THC EF [lt. crude service] (scf/hr/component)	CO2 Fraction	CH4 Fraction	CO2 (kg/yr)	CH4 (kg/yr)	CO2 (metric tonnes)	CH4 (metric tonnes)	CO2e (metric tonnes)
[Note: Major equipment = 8 wellheads, 2 separator, 0 heater treater, 2 headers. Light crude service EFs utilized per § 98.233(r)(2).]										
Valve	62	0.123	0.040	0.0117	0.8307	42.05	1,087.68	0.0421	1.0877	22.8833
Flange	124		0.002	0.0117	0.8307	1.37	35.37	0.0014	0.0354	0.7442
Connector	60	0.017	0.005	0.0117	0.8307	5.62	145.48	0.0056	0.1455	3.0607
Open-Ended Line	0	0.032	0.040	0.0117	0.8307	0.00	0.00	0.0000	0.0000	0.0000
Other	32		0.230	0.0117	0.8307	40.58	1,049.74	0.0406	1.0497	22.0851
					Total	*89.63*	*2,318.27*	*0.0896*	*2.3183*	*48.7734*

Oil Processing Tanks [estimated using § 98.233(j)(2) - Onshore production storage tanks, Methodology 2]

2012 Total Crude Oil Allocation (bbls)	Volume of Crude Oil (ft3)	CO2 Fraction (E&P Tanks)	CH4 Fraction (E&P Tanks)	VRU Control Factor	CO2 (lbs/yr)	CH4 (lbs/yr)	CO2 (metric tonnes)	CH4 (metric tonnes)	CO2e (metric tonnes)
105,335	591,412	0.002437	0.009543	0.05	8.23	11.75	0.0037	0.0053	0.1156

DCOR, LLC - Platform Gina
HAP Emission Calculations - 2011 HAP Summary

HAP Name	HAP CAS No.	PTE/Max. lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	74.49	31.67
Acrolein	107028	3.44	1.37
Benzene	71432	39.00	24.59
Ethyl Benzene	100414	504.22	30.90
Formaldehyde	50000	182.79	70.13
Hexane	110543	3.00	1.10
Naphthalene	91203	97.10	6.12
PAHs (excluding naphthalene)	1151	3.44	1.46
Propylene	115071	84.24	19.65
Toluene	108883	14.59	4.28
Xylenes	1210	1,907.77	108.12
1,3-Butadiene	106990	20.82	8.79
Chlorobenzene	108907	0.02	0.01
Hydrogen chloride	7647010	17.45	7.53
Arsenic	7440382	0.15	0.06
Cadmium	7440439	0.14	0.06
Hexavalent Chromium	18540299	0.01	0.00
Copper	7440508	0.39	0.17
Lead	7439921	0.78	0.34
Manganese	7439965	0.29	0.13
Mercury	7439976	0.19	0.08
Nickel	7446020	0.37	0.16
Selenium	7782492	0.21	0.09
Zinc	7440666	2.10	0.91
Ammonia	7664417	74.92	32.33
Diesel Exhaust Particulates	9901	3,137.37	1,353.74
1,2,4-Trimethylbenzene	95636	0.70	0.00
Chlorine	7782505	0.23	0.00
Methanol	67561	0.39	0.00
Methyl Ethyl Ketone (MEK)	78933	0.03	0.00
Methyl tert-Butyl Ether (MTBE)	1634044	1.03	0.00
Styrene	100425	0.07	0.00
Hydrogen Sulfide	7783064	0.06	0.06

DCOR, LLC Platform Gina

HAP Emission Calculations - Flare

SIC	1311		
PROCESS EQPT DESCRIPTION	FLARE, 142 MMBTU/HR		
FUEL TYPE/PROCESS INFO	NATURAL/PRODUCED GAS		
MAXIMUM ANNUAL PROCESS RATE	16.60	MMCF	[permit]
MAXIMUM HOURLY PROCESS RATE	0.0833	MMCF	[permit, 2 MMCFD]
HRS/YEAR	As needed		199.2
2011 ACTUAL LOAD	1.9%	[based on 0.32 MMcf/year in 2011]	

HHV= 1124 BTU/cf

HAP Name	HAP CAS No.	Emission Factor lbs/MMBtu	Emission Factor lbs/MMcf	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	3.83E-05	0.0430	0.0036	0.7138	0.0138
Acrolein	107028	8.90E-06	0.0100	0.0008	0.1660	0.0032
Benzene	71432	1.41E-04	0.1590	0.0133	2.6394	0.0509
Ethyl Benzene	100414	1.28E-03	1.4440	0.1203	23.9704	0.4621
Formaldehyde	50000	1.04E-03	1.1690	0.0974	19.4054	0.3741
Hexane	110543	2.58E-05	0.0290	0.0024	0.4814	0.0093
Naphthalene	91203	9.79E-06	0.0110	0.0009	0.1826	0.0035
PAHs (excluding naphthalene)	1151	2.67E-06	0.0030	0.0003	0.0498	0.0010
Propylene	115071	2.17E-03	2.4400	0.2033	40.5040	0.7808
Toluene	108883	5.16E-05	0.0580	0.0048	0.9628	0.0186
Xylenes	1330207	2.58E-05	0.0290	0.0024	0.4814	0.0093

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001.

DCOR, LLC Platform Gina
HAP Emission Calculations - Crane

SIC	1311		
PROCESS EQPT DESCRIPTION	CRANE ENGINE (CAT 3406B - 325 BHP)		
FUEL TYPE/PROCESS INFO	DIESEL		
MAXIMUM ANNUAL PROCESS RATE	2.87	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.0230	MGAL/HR	[permit = 0.023 Mgal/hr]
HRS/YEAR	8760		
2011 ACTUAL LOAD	23.7%	[based on 0.68 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.7833	0.0180	2.2481	0.5326
Acrolein	107028	0.0339	0.0008	0.0973	0.0231
Benzene	71432	0.1863	0.0043	0.5347	0.1267
Ethyl Benzene	100414	0.0109	0.0003	0.0313	0.0074
Formaldehyde	50000	1.7261	0.0397	4.9539	1.1737
Hexane	110543	0.0269	0.0006	0.0772	0.0183
Naphthalene	91203	0.0197	0.0005	0.0565	0.0134
PAHs (excluding naphthalene)	1151	0.0362	0.0008	0.1039	0.0246
Propylene	115071	0.4670	0.0107	1.3403	0.3176
Toluene	108883	0.1054	0.0024	0.3025	0.0717
Xylenes	1330207	0.0424	0.0010	0.1217	0.0288
1,3-Butadiene	106990	0.2174	0.0050	0.6239	0.1478
Chlorobenzene	108907	0.0002	0.0000	0.0006	0.0001
Hydrogen chloride	7647010	0.1863	0.0043	0.5347	0.1267
Arsenic	7440382	0.0016	0.0000	0.0046	0.0011
Cadmium	7440439	0.0015	0.0000	0.0043	0.0010
Hexavalent Chromium	18540299	0.0001	0.0000	0.0003	0.0001
Copper	7440508	0.0041	0.0001	0.0118	0.0028
Lead	7439921	0.0083	0.0002	0.0238	0.0056
Manganese	7439965	0.0031	0.0001	0.0089	0.0021
Mercury	7439976	0.0020	0.0000	0.0057	0.0014
Nickel	7440020	0.0039	0.0001	0.0112	0.0027
Selenium	7782492	0.0022	0.0001	0.0063	0.0015
Zinc	7440666	0.0224	0.0005	0.0643	0.0152
Ammonia	7664417	0.8000	0.0184	2.2960	0.5440
Diesel Exhaust Particulates	9901	33.5000	0.7705	96.1450	22.7800

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001 (Diesel Internal Combustion Factors).
2. Ammonia and Diesel Exhaust Particulates EFs provided by SCAQMD, AER Program supplemental instructions.

DCOR, LLC Platform Gina

HAP Emission Calculations - Generator

SIC	1311		
PROCESS EQPT DESCRIPTION	BACKUP GENERATOR ENGINE (CUMMINS - 450 BHP)		
FUEL TYPE/PROCESS INFO	DIESEL		
MAXIMUM ANNUAL PROCESS RATE	6.3828	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.0270	MGAL/HR	[assume 27.0 gal/hr based on 0.06 gal/bhp & max bhp]
HRS/YEAR	200		
2011 ACTUAL LOAD	9.9%	[based on 0.63 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.7833	0.0211	4.9996	0.4935
Acrolein	107028	0.0339	0.0009	0.2164	0.0214
Benzene	71432	0.1863	0.0050	1.1891	0.1174
Ethyl Benzene	100414	0.0109	0.0003	0.0696	0.0069
Formaldehyde	50000	1.7261	0.0466	11.0174	1.0874
Hexane	110543	0.0269	0.0007	0.1717	0.0169
Naphthalene	91203	0.0197	0.0005	0.1257	0.0124
PAHs (excluding naphthalene)	1151	0.0362	0.0010	0.2311	0.0228
Propylene	115071	0.4670	0.0126	2.9808	0.2942
Toluene	108883	0.1054	0.0028	0.6727	0.0664
Xylenes	1330207	0.0424	0.0011	0.2706	0.0267
1,3-Butadiene	106990	0.2174	0.0059	1.3876	0.1370
Chlorobenzene	108907	0.0002	0.0000	0.0013	0.0001
Hydrogen chloride	7647010	0.1863	0.0050	1.1891	0.1174
Arsenic	7440382	0.0016	0.0000	0.0102	0.0010
Cadmium	7440439	0.0015	0.0000	0.0096	0.0009
Hexavalent Chromium	18540299	0.0001	0.0000	0.0006	0.0001
Copper	7440508	0.0041	0.0001	0.0262	0.0026
Lead	7439921	0.0083	0.0002	0.0530	0.0052
Manganese	7439965	0.0031	0.0001	0.0198	0.0020
Mercury	7439976	0.0020	0.0001	0.0128	0.0013
Nickel	7440020	0.0039	0.0001	0.0249	0.0025
Selenium	7782492	0.0022	0.0001	0.0140	0.0014
Zinc	7440666	0.0224	0.0006	0.1430	0.0141
Ammonia	7664417	0.8000	0.0216	5.1062	0.5040
Diesel Exhaust Particulates	9901	33.5000	0.9045	213.8238	21.1050

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001 (Diesel Internal Combustion Factors).
2. Ammonia and Diesel Exhaust Particulates EFs provided by SCAQMD, AER Program supplemental instructions.

DCOR, LLC Platform Gina
HAP Emission Calculations - Crew Boats

SIC	1311		
PROCESS EQPT DESCRIPTION	DIESEL ENGINES - CREW BOATS		
FUEL TYPE/PROCESS INFO	DIESEL		
MAXIMUM ANNUAL PROCESS RATE	72.50	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.1008	MGAL/HR	[based on Ryan T (former Wendy Tide): (3 x 510 BHP + 2 x 75 BHP) x 0.06 gal/bhp/hr]
HRS/YEAR	As needed		
2011 ACTUAL LOAD	46.2%	[based on 33.5 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.7833	0.0790	56.7893	26.2406
Acrolein	107028	0.0339	0.0034	2.4578	1.1357
Benzene	71432	0.1863	0.0188	13.5068	6.2411
Ethyl Benzene	100414	0.0109	0.0011	0.7903	0.3652
Formaldehyde	50000	1.7261	0.1740	125.1423	57.8244
Hexane	110543	0.0269	0.0027	1.9503	0.9012
Naphthalene	91203	0.0197	0.0020	1.4283	0.6600
PAHs (excluding naphthalene)	1151	0.0362	0.0036	2.6245	1.2127
Propylene	115071	0.4670	0.0471	33.8575	15.6445
Toluene	108883	0.1054	0.0106	7.6415	3.5309
Xylenes	1330207	0.0424	0.0043	3.0740	1.4204
1,3-Butadiene	106990	0.2174	0.0219	15.7615	7.2829
Chlorobenzene	108907	0.0002	0.0000	0.0145	0.0067
Hydrogen chloride	7647010	0.1863	0.0188	13.5068	6.2411
Arsenic	7440382	0.0016	0.0002	0.1160	0.0536
Cadmium	7440439	0.0015	0.0002	0.1088	0.0503
Hexavalent Chromium	18540299	0.0001	0.0000	0.0073	0.0034
Copper	7440508	0.0041	0.0004	0.2973	0.1374
Lead	7439921	0.0083	0.0008	0.6018	0.2781
Manganese	7439965	0.0031	0.0003	0.2248	0.1039
Mercury	7439976	0.0020	0.0002	0.1450	0.0670
Nickel	7440020	0.0039	0.0004	0.2828	0.1307
Selenium	7782492	0.0022	0.0002	0.1595	0.0737
Zinc	7440666	0.0224	0.0023	1.6240	0.7504
Ammonia	7664417	0.8000	0.0806	58.0000	26.8000
Diesel Exhaust Particulates	9901	33.5000	3.3768	2428.7500	1122.2500

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001 (Diesel Internal Combustion Factors).
2. Ammonia and Diesel Exhaust Particulates EFs provided by SCAQMD, AER Program supplemental instructions.

DCOR, LLC Platform Gina
HAP Emission Calculations - Work Boats

SIC	1311		
PROCESS EQPT DESCRIPTION	DIESEL ENGINES - WORK BOATS		
FUEL TYPE/PROCESS INFO	DIESEL		
MAXIMUM ANNUAL PROCESS RATE	11.90	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.3420	MGAL/HR	[based on Victory Seahorse: (2 x 2500 BHP + 2 x 200 BHP + 1 x 300 BHP) x 0.06 gal/bh
HRS/YEAR	As needed		
2011 ACTUAL LOAD	47.1%	[based on 5.6 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.7833	0.2679	9.3213	4.3865
Acrolein	107028	0.0339	0.0116	0.4034	0.1898
Benzene	71432	0.1863	0.0637	2.2170	1.0433
Ethyl Benzene	100414	0.0109	0.0037	0.1297	0.0610
Formaldehyde	50000	1.7261	0.5903	20.5406	9.6662
Hexane	110543	0.0269	0.0092	0.3201	0.1506
Naphthalene	91203	0.0197	0.0067	0.2344	0.1103
PAHs (excluding naphthalene)	1151	0.0362	0.0124	0.4308	0.2027
Propylene	115071	0.4670	0.1597	5.5573	2.6152
Toluene	108883	0.1054	0.0360	1.2543	0.5902
Xylenes	1330207	0.0424	0.0145	0.5046	0.2374
1,3-Butadiene	106990	0.2174	0.0744	2.5871	1.2174
Chlorobenzene	108907	0.0002	0.0001	0.0024	0.0011
Hydrogen chloride	7647010	0.1863	0.0637	2.2170	1.0433
Arsenic	7440382	0.0016	0.0005	0.0190	0.0090
Cadmium	7440439	0.0015	0.0005	0.0179	0.0084
Hexavalent Chromium	18540299	0.0001	0.0000	0.0012	0.0006
Copper	7440508	0.0041	0.0014	0.0488	0.0230
Lead	7439921	0.0083	0.0028	0.0988	0.0465
Manganese	7439965	0.0031	0.0011	0.0369	0.0174
Mercury	7439976	0.0020	0.0007	0.0238	0.0112
Nickel	7440020	0.0039	0.0013	0.0464	0.0218
Selenium	7782492	0.0022	0.0008	0.0262	0.0123
Zinc	7440666	0.0224	0.0077	0.2666	0.1254
Ammonia	7664417	0.8000	0.2736	9.5200	4.4800
Diesel Exhaust Particulates	9901	33.5000	11.4570	398.6500	187.6000

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001 (Diesel Internal Combustion Factors).
2. Ammonia and Diesel Exhaust Particulates EFs provided by SCAQMD, AER Program supplemental instructions.

DCOR, LLC Platform Gina

HAP Emission Calculations - Boom Boats

SIC	1311		
PROCESS EQPT DESCRIPTION	GASOLINE ENGINES - BOOM BOATS		
FUEL TYPE/PROCESS INFO	GASOLINE		
MAXIMUM ANNUAL PROCESS RATE	0.500	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.0040	MGAL/HR	[based on 2 x 70 BHP, 2.0 GPH average from engine spec sheet]
HRS/YEAR	As needed		
2011 ACTUAL LOAD	0.0%	[based on 0.00 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.8298	0.0033	0.4149	0.0000
Acrolein	107028	0.1992	0.0008	0.0996	0.0000
Benzene	71432	3.8061	0.0152	1.9031	0.0000
Ethyl Benzene	100414	1.6596	0.0066	0.8298	0.0000
Formaldehyde	50000	3.4520	0.0138	1.7260	0.0000
Hexane	110543	1.4494	0.0058	0.7247	0.0000
Naphthalene	91203	0.1438	0.0006	0.0719	0.0000
Toluene	108883	7.5125	0.0301	3.7563	0.0000
Xylenes	1330207	6.6384	0.0266	3.3192	0.0000
1,3-Butadiene	106990	0.9183	0.0037	0.4592	0.0000
Copper	7440508	0.0033	0.0000	0.0017	0.0000
Manganese	7439965	0.0033	0.0000	0.0017	0.0000
Nickel	7440020	0.0033	0.0000	0.0017	0.0000
1,2,4-Trimethylbenzene	95636	1.3941	0.0056	0.6971	0.0000
Chlorine	7782505	0.4550	0.0018	0.2275	0.0000
Methanol	67561	0.7745	0.0031	0.3873	0.0000
Methyl Ethyl Ketone (MEK)	78933	0.0664	0.0003	0.0332	0.0000
Methyl tert-Butyl Ether (MTBE)	1634044	2.0579	0.0082	1.0290	0.0000
Styrene	100425	0.1438	0.0006	0.0719	0.0000

Notes:

1. HAP/toxics EFs provided by SCAQMD AER General Instruction Booklet, 2007-2008

DCOR, LL Platform Gina

HAP Emission Calculations - Tanks-Fugitives

SIC	1311		
PROCESS EQPT DESCRIPTION	FUGITIVE LOSSES FROM TANKS AND PIPING COMPONENTS		
FUEL TYPE/PROCESS INFO	HYDROCARBON GASES		
MAXIMUM ANNUAL PROCESS RATE	5865.88	LBS/YR	[based on 8 wells @ 2.0 lbs/day/well + 25.88 lbs/yr ROC emissions from tanks/drains/pit]
MAXIMUM HOURLY PROCESS RATE	0.6696	LBS/HR	
HRS/YEAR	8760		
2011 ACTUAL LOAD	100.0%	[based on 8 active wells in 2011 + 25.46 lbs/yr ROC from tanks/drains]	

HAP Name	HAP CAS No.	Emission Factor lb/lb ROC	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Benzene	71432	2.90E-03	1.94E-03	17.0111	17.0098
Ethyl Benzene	100414	5.80E-04	3.88E-04	3.4022	3.4020
Hydrogen Sulfide	7783064	1.10E-05	7.37E-06	0.0645	0.0645
Naphthalene	91203	5.00E-06	3.35E-06	0.0293	0.0293
Toluene	108883	2.60E-03	1.74E-03	15.2513	15.2502
Xylenes	1210	1.80E-03	1.21E-03	10.5586	10.5578
Ammonia	7664417	1.20E-05	8.04E-06	0.0704	0.0704

Notes:

1. HAP/toxics speciation profiles from Unocal AB2588 testing by ABB Environmental, Oct. 1990. Highest results for all fields tested was utilized.

DCOR, LL Platform Gina

HAP Emission Calculations - Coatings-Solvents

SIC	1311		
PROCESS EQPT DESCRIPTION	MAINTENANCE		
FUEL TYPE/PROCESS INFO	MARINE COATINGS and SOLVENTS		
MAXIMUM ANNUAL PROCESS RATE	1000	GALS/YR	[assumed at 1000 gal/yr]
MAXIMUM HOURLY PROCESS RATE	50	GALS/HR	[assumed 50 gal/hr]
HRS/YEAR	As needed		
2011 ACTUAL LOAD	5.6%	[based on 2011 usage log, 56.0 gal/yr]	

HAP Name	HAP CAS No.	Emission Factor lb/gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Ethyl Benzene	100414	0.4750	23.75	475.00	26.60
Naphthalene	91203	0.0950	4.75	95.00	5.32
Toluene	108883	0.0000	0.00	0.00	0.00
Xylenes	1210	1.9000	95.00	1900.00	106.40

Notes:

1. HAP/toxics percentages taken from MSDS sheets.

Gas Sample - Gina Sales Gas (1/14/13)

Constiuent	MW	Mole %	lb/lb-mole	Wt %	Exansion Factor	Product
CO_2	44.01	1.170	0.51	2.66	1.00	0.01
N_2	28.01	5.920	1.66	8.57	1.00	0.06
O_2	32.00	1.620	0.52	2.68	1.00	0.02
H_2O	18.02	0.000	0.00	0.00	1.00	0.00
H_2S	34.08	0.000	0.00	0.00	6.65	0.00
Methane, CH_4	16.04	83.070	13.33	68.84	8.53	7.09
Ethane, C_2H_6	30.07	3.710	1.12	5.76	15.17	0.56
Propane, C_3H_8	44.10	3.020	1.33	6.88	21.82	0.66
i-Butane, i-C_4H_{10}	58.12	0.540	0.31	1.62	28.47	0.15
n-Butane, n-C_4H_{10}	58.12	0.780	0.45	2.34	28.47	0.22
i-Pentane, i-C_5H_{12}	72.15	0.110	0.08	0.41	35.11	0.04
n-Pentane, n-C_5H_{12}	72.15	0.050	0.04	0.19	35.11	0.02
n-Hexane, n-C_6H_{14}	86.18	0.012	0.01	0.05	41.76	0.01
n-Heptane, n-C_7H_{16}	100.21	0.000	0.00	0.00	48.40	0.00
n-Octane, n-C_8H_{18}	114.23	0.000	0.00	0.00	55.05	0.00
n-Nonane, n-C_9H_{20}	128.26	0.000	0.00	0.00	61.70	0.00
n-Decane, n-$C_{10}H_{22}$	142.29	0.000	0.00	0.00	68.34	0.00
Totals:		100.002	19.36	**100.0000**		**8.83**
Weight Fraction of Total Organics (C_1 +) in Gas:				**86.10**		
Weight Fraction of Reactive Organics (C_3 +) in Gas:				**11.49**		
ROG/TOG Fraction:				**0.1335**		
CH4/TOC Fraction:				**0.7996**		

	Wt %	lb C/lb-mole gas
%C	66.31	12.8366
%H	20.51	
%O	4.61	
%N	8.57	
%S	0.00	
Total	100.00	

Fuel Heat Value (Gross, HHV)

1. Perry's Chemical Engineers' Handbook (Table 9-13 & extrapolation, Sixth Edition)

BTU/ft3 = [(mole% methane * 1012 BTU/ft3) + (mole% ethane * 1786 BTU/ft3) + (mole% propane * 2522 BTU/ft3)
+ (mole% i-butane * 3163 BTU/ft3) + (mole% n-butane * 3261 BTU/ft3) + (mole% pentane * 4023 BTU/ft3)
+ (mole% n-hexane * 4758 BTU/ft3) + (mole% n-heptane * 5506 BTU/ft3) + (mole% n-octane * 6253 BTU/ft3)
+ (mole% hydrogen sulfide * 647 BTU/ft3)]

BTU/ft3 = 1032.62

2. Environmental Analytical Services, Inc. (gas analysis, BTU by ASTM 3588)

BTU/ft3 = [(mole% methane * 1010 BTU/ft3) + (mole% ethane * 1769.7 BTU/ft3) + (mole% propane * 2516.1 BTU/ft3)
+ (mole% i-butane * 3262.3 BTU/ft3) + (mole% n-butane * 3262.3 BTU/ft3) + (mole% i-pentane * 4000.9 BTU/ft3)
+ (mole% n-pentane * 4008.9 BTU/ft3) + (hexane+ * 4747.0 BTU/ft3) + (mole% hydrogen sulfide * 637.1 BTU/ft3)]

BTU/ft3 = 1030.69

3. Petroleum Refining Technology and Economics (Second Edition)

BTU/ft3 = [(mole% methane * 1009.7 BTU/ft3) + (mole% ethane * 1768.8 BTU/ft3) + (mole% propane * 2517.5 BTU/ft3)
+ (mole% i-butane * 3252.7 BTU/ft3) + (mole% n-butane * 3262.1 BTU/ft3) + (mole% i-pentane * 4000.3 BTU/ft3)
+ (mole% n-pentane * 4009.6 BTU/ft3) + (mole% n-hexane * 4756.2 BTU/ft3) + (mole% n-heptane * 5502.8 BTU/ft3)
+ (mole% n-octane * 6249.7 BTU/ft3) + (mole% n-nonane * 6996.5 BTU/ft3) + (mole% n-decane * 7742.1 BTU/ft3)
+ (mole% hydrogen sulfide * 637 BTU/ft3)]

BTU/ft3 = 1030.39

4. Perry's Chemical Engineers' Handbook (Tables 9-30 and 3-207, Sixth Edition)

BTU/ft3 = [(mole% methane * 1013 BTU/ft3) + (mole% ethane * 1792 BTU/ft3) + (mole% propane * 2590 BTU/ft3)
+ (mole% i-butane * 3363 BTU/ft3) + (mole% n-butane * 3370 BTU/ft3) + (mole% i-pentane * 4008 BTU/ft3)
+ (mole% n-pentane * 4016 BTU/ft3)+ (mole% n-hexane * 4762 BTU/ft3)+ (mole% n-heptane * 5506.3 BTU/ft3)
+ (mole% n-octane * 6253.2 BTU/ft3) + (mole% n-nonane * 7000.9 BTU/ft3) + (mole% n-decane * 7748.3 BTU/ft3)
+ (mole% hydrogen sulfide * 647 BTU/ft3)]

BTU/ft3 = 1037.63

AVERAGE = 1032.83 BTU/ft3 GCV (BTU/lb) = 20535.0 (assuming 384.9 dscf/lb-mol)

Dry F Factor (40 CFR, Appendix A, Method 19)

$F_d = 10^6$ [(3.64 scf/lb/%) 10^0 [(3.64 scf/lb/%)(%H) + (1.53 scf/lb/%)(%C) + (0.57 scf/lb/%)(%S) + (0.14 scf/lb/%)(%N)
- (0.46 scf/lb/%)(%O)]/GCV(BTU/lb)

F_d = **8531.7** DSCF/MMBTU

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
669 County Square Drive, Ventura, CA 93003 805/645-1401 Fax 805/645-1444 www.vcapcd.org

General Facility Information
Part 70 Permit Reissuance Application Form

1. Permit Number: 0 1491 Date: 9/25/12

2. Company Name:
DCOR, LLC

3. Company Mailing Address:
290 MAPLE CT, SUITE 290

4. Company City, State Zip Code:
VENTURA, CA 93003

5. Responsible Official and Title (as defined in 40 CFR 70.2 and VCAPCD Rule 33.1):
TINA WIEGMAN, ES&RC MANAGER

6. Responsible Official Telephone Number:
805-535-2073

7. Facility Name (Usually Same As Company Name):
PLATFORM GINA

8. Facility Street Address (or Lease Name/Field Name):
OCS LEASE P-0202 / PT HUENEME FIELD

9. Facility City, CA Zip Code:
OFFSHORE OF VENTURA, CA

10. Title V Permit Contact Person and Title:
CHRISTINE WHITE, ENVIRONMENTAL ADVISOR

11. Title V Permit Contact Person Telephone Number:
805-535-2074

12. Type of Organization:

☒ Corporation	☐ Sole Proprietorship
☐ Partnership	☐ Government

13. Facility Operating Schedule: 24 Hours/Day 7 Days/Week 52 Weeks/Year

A.P.C.D.
2012 SEP 27 PM 2:09
VENTURA COUNTY
RECEIVED

78592

Pd $450.00

14. Facility SIC Code: 1311

CAM(Compliance Assurance Monitoring) Plans

15. Are you required to submit a CAM plan for any emissions unit at this facility? ☐ Yes ☒ No

If yes, submit a CAM plan for each emissions unit as an attachment to the application. See the District CAM plan instructions for more detail.

If you answer yes to any of questions 16 through 18 below, submit supplemental information as an attachment to the application. See instructions for more detail.

16. Does this application request alternative operating scenarios pursuant to Rule 33.4.B? ☐ Yes ☒ No

17. Does this application request voluntary emission caps pursuant to Rule 33.4.C? ☐ Yes ☒ No

18. Does this application include any proposed exemptions from otherwise applicable requirements pursuant to Rule 33.2.A.5? ☐ Yes ☒ No

Miscellaneous Federal Requirements

19. Has this facility been required to prepare a federal Risk Management Plan pursuant to Section 112(r) of the federal Clean Air Act and 40 CFR Part 68? ☐ Yes ☒ No

If yes, has the federal Risk Management Plan been submitted to the implementing agency? ☐ Yes ☐ No

If a federal Risk Management Plan is required but has not been submitted to the implementing agency, provide a detailed explanation as an attachment to the application.

20. Does this facility conduct any activities that are regulated by the federal protection of stratospheric ozone requirements in 40 CFR Part 82? ☐ Yes ☒ No

21. Is this facility subject to the acid rain requirements in 40 CFR Part 72 through 40 CFR Part 78? ☐ Yes ☒ No

22. Is this facility subject to the federal outer continental shelf air regulations in 40 CFR Part 55? ☒ Yes ☐ No

Permit Shields

23. Does the current Part 70 permit for this facility include any permit shields? ☐ Yes ☒ No

If yes, is the basis for each permit shield still correct? ☐ Yes ☐ No

If the current Part 70 permit contains any permit shield for which the basis is no longer correct, provide a detailed explanation as an attachment to the application.

New Generally Applicable Requirement

24. Rule 74.11.1 requires that new large water heaters and new small boilers with a rated heat input capacity greater than or equal to 75,000 BTU per hour and less than or equal to 2,000,000 BTU per hour be certified by the manufacturer to meet certain nitrogen oxide emission standards. Are you complying with the requirements of Rule 74.11.1 by purchasing and installing only certified units? ☐ Yes ☐ No

If no, provide a detailed explanation as an attachment to the application.

Facilities Must Submit Process Descriptions, Plot Plans, and Process Flow Diagrams That Provide the Following:

25. General Nature of Business (e.g., Autobody Painting, Gasoline Storage & Dispensing, Oil Production, etc.)

26. Facility Process Description

27. A Street Map or Road Map That Shows the Location of the Facility in Ventura County.

28. A Facility Map That Clearly Indicates the Facility Boundaries and the Location of Permitted Equipment.

29. A Process Flow Diagram That Traces the Processes Throughout All Permitted Equipment from Start to Finish.

30. Certification by Responsible Official (as defined in 40 CFR 70.2 and VCAPCD Rule 33.1)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information provided for this Part 70 Permit Application are true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
T. Weiss, ES&RC MANAGER	9/25/20

General Facility Information (May 22, 2002)

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
669 County Square Drive, Ventura, CA 93003 805/645-1401 Fax 805/645-1444 www.vcapcd.org

Compliance Plan Cover Sheet
Part 70 Permit Reissuance Applications Forms

Instructions

A compliance plan, signed by the responsible official, must be attached to each application for reissuance of a Part 70 Permit. To complete the compliance plan, attach the following to this sheet:

1. A completed compliance plan form for all applicable requirements that are currently effective and that apply to an emission unit at your facility or to your entire facility. Only one form that refers to all currently applicable requirements needs to be completed.

2. A completed compliance plan form for each applicable requirement that will become effective during the term of your permit and that will apply to an emission unit at your facility or to your entire facility. One form for each applicable requirement with a future effective date must be completed.

3. A narrative description of how each emission unit at your facility that does not comply with an applicable requirement will achieve compliance with the requirement.

   A compliance schedule, approved as part of an order issued by the District Hearing Board, must be attached for each emission unit that is not in compliance with an applicable requirement. Each compliance schedule shall contain a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the applicable requirement. The compliance schedule shall resemble, and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject.

   A schedule for submission of certified progress reports on the compliance schedule no less frequently than every six months must also be attached.

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this compliance plan are true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
[signature], ES&RC MANAGER	9/25/2012

Compliance Plan Cover Sheet (May 22, 2002)

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
669 County Square Drive, Ventura, CA 93003 805/645-1401 Fax 805/645-1444 www.vcapcd.org

Compliance Plan
Applicable Requirements That Are Currently Effective

Compliance Schedule

Except for the specific applicable requirements and emission units listed below, the facility that is the subject of this application complies with all currently applicable requirements and will continue to comply with all currently applicable requirements.

Exceptions to This Declaration

Applicable Requirement	Emission Unit
N/A	

Compliance Plan Currently Effective (May 22, 2002)

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
669 County Square Drive, Ventura, CA 93003 805/645-1401 Fax 805/645-1444 www.vcapcd.org

Compliance Plan
Applicable Requirements With a Future Effective Date

Applicable Requirement

Citation:	Description:
N/A	

Compliance Schedule

The requirement cited and described will be applicable to my entire facility or to emission units at my facility.

Except for the specific emission units listed below, the facility that is the subject of this application will comply in a timely manner with the applicable requirement listed above and in accordance with the compliance schedule, if any, contained in the applicable requirement.

Exceptions to This Declaration

Emission Unit
N/A

DCOR, LLC
290 Maple Court, Suite 290
Ventura, CA 93110
(805) 535-2000
(805) 535-2100 Fax

September 25, 2012

Mr. Kerby Zozula
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, CA 93003

Subject: **Platform Gina, OCS Lease P-0202, PTO #1491**
Part 70 Permit Reissuance Application

Dear Mr. Zozula:

DCOR LLC submits the enclosed Part 70 Permit Reissuance Application for Permit to Operate #1491 (Platform Gina) along with a check for $450.00 for the application fee. DCOR understands that it will reimburse VCAPCD for all costs associated with processing the application and upon receipt of invoice will submit payment promptly.

Also enclosed is a Modification to Part 70 Permit Form and another check for $450.00 requesting a second Responsible Official be added to the permit.

If there are any questions regarding this application, please contact me at 805-535-2074.

Sincerely,

Christine White

Christine White
Environmental Advisor

Enclosures

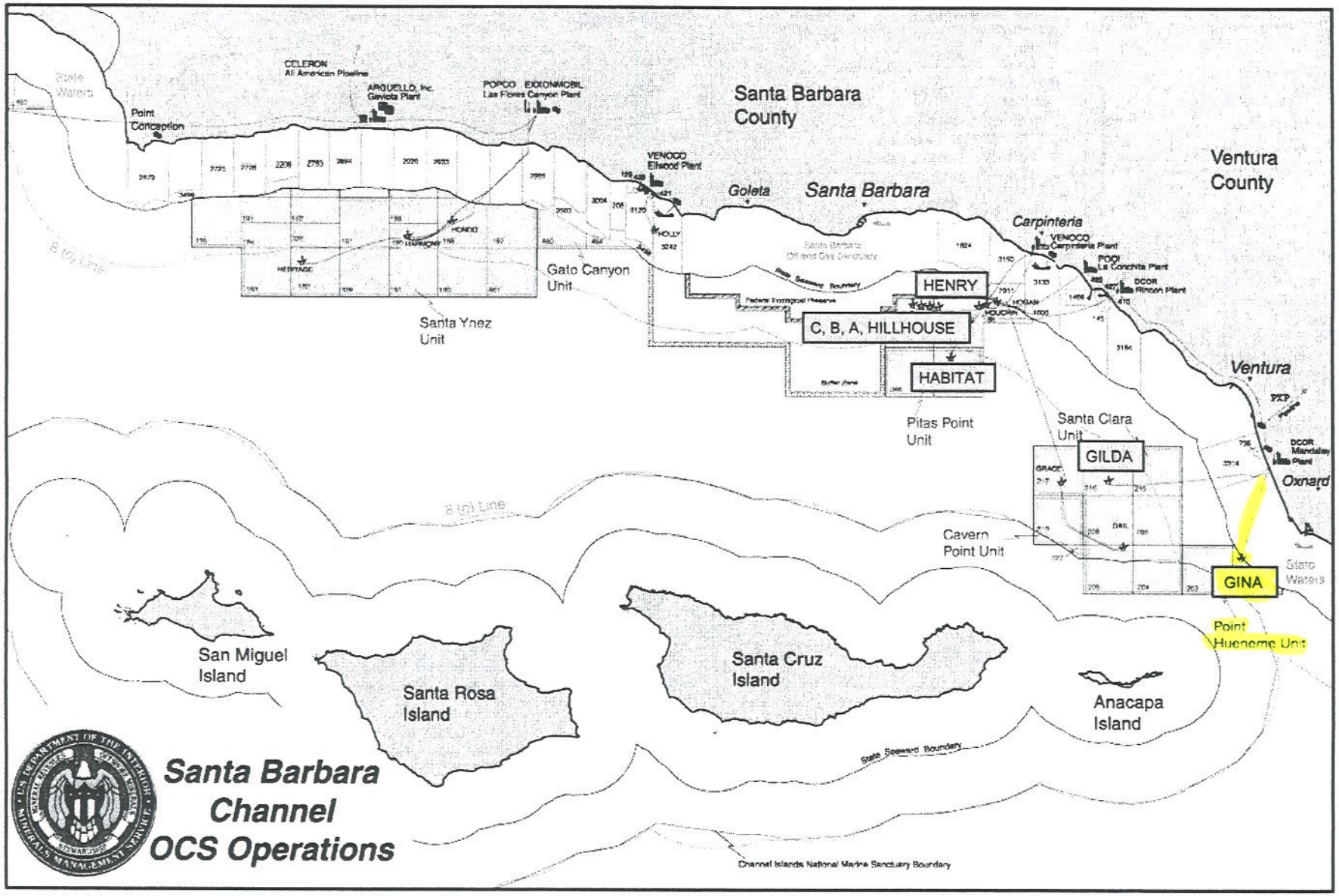

Figure 2. DCOR platforms in Santa Barbara Channel (from MMS fig.).

4.0 INTRODUCTION

This procedure summarizes all process operating procedures for Platform Gina, including all steps necessary to start-up and shutdown, and provides the operator with an understanding of global platform operation. This procedure will also help the operator to better understand how the process equipment is interrelated. The platform is comparably standard to California offshore facilities. The facility was designed and constructed per applicable sections of the following specifications and standards:

- ASME B31.3
- ASME Section 8
- ANSI B73.1
- ANSI 610
- API 14C, 14E, 14F
- ASTM
- NEC
- NEMA
- NFPA
- OSHA
- SSPC and others

Starting the F.W.K.O. System

1. Call Mandalay and inform them that the F.W.K.O. system is being started.
2. Do a visual inspection of all the F.W.K.O. system vessels to ensure all valves are in their correct position.
3. Turn the master by-pass on and put lockout caps on all tubing and casing SSV's. Log, tag, and monitor.
4. Turn on make-up gas.
5. Turn on turbo jets to the wash tank.
6. Turn on the Wemco.
7. Turn on the F.W.K.O. chemicals (DE-3008, RBW-0239, and WC-6560).
8. Check the oil on the vapor and booster compressors.
9. Turn on the vapor compressor by-pass and start.
10. Turn on the booster compressor by-pass; open the discharge valve for the booster and start.
11. Open the globe valve slowly; when barely cracked, monitor, then continue until comfortably in the middle of the Hi-Lo setting of the oil manifold.
12. Turn off the vapor compressor by-pass.
13. Turn off the booster compressor by-pass.
14. Close the shipping line valve.
15. Turn on the turbidity meters and ensure there is good flow.
16. Lower the Mag M rate.
17. Reset all applicable safety devices and put back in service. These include casing and tubing Hi-Lo pilots, oil shipping line and gross header Murphys.
18. Remove lockout caps and turn off master by-pass.

19. Call Mandalay and inform them the F.W.K.O. system is in service.

Routing Gross Production to Oil Pipeline

1. Call Mandalay and inform them the F.W.K.O. system is being shut down.
2. Turn master by-pass on and put lockout caps on all tubing and casing SSV's. Log, tag, and monitor.
3. Lower Hertz on all wells to minimum speed.
4. Open valve to shipping line and close globe valve in wellroom.
5. Shut off vapor compressor.
6. Shut off booster compressor.
7. Close booster discharge valve.
8. Turn off F.W.K.O. chemicals (DE-3008, RBW-0239, and WC-6560).
9. Turn off make-up gas.
10. Turn off turbidity meters.
11. Turn off jets to wash tank.
12. Raise Mag M rate as needed.
13. Reset all applicable safety devices and put back in service. These include Hi-Lo tubing and casing pilots, oil shipping line and gross header Murphys.
14. Remove lockout caps and turn off master by-pass.
15. Inform Mandalay turn around is complete and gradually raise Hertz as allowed.

Gas, Oil, and Water Separation

Fluid from the production wells is a mixture of oil, gas, and water. Separation of the liquid and gas streams is accomplished in gross oil separator #1, which is a horizontal, two-phase separator 8' in diameter by 20' seam-to-seam length. Wells are produced directly into the Free Water Knockout which has a capacity of 200 bpd of crude oil and .25 mmscfd of natural gas.

The Free Water Knockout operates at 35 psig and 100° F. The gas section (top 1/8) of the separator is designed to sufficiently reduce the velocity of oil to cause any water to drop out. The FWKO also has a mist extractor to promote removal of liquid droplets from the gas stream. Gas from the gross oil separator flows to the main gas scrubber before being compressed by the Sullair main gas compressor.

The liquid section (bottom 3/8) of the FWKO is designed with sufficient retention time to allow any entrained gas to bubble off from the liquid. The gas section is not large enough, however, to allow separation of the oil and gas into two separate streams. Liquid level in the separator is free flowing to shipping. The oil and water discharged from the FWKO flows to the free wash tank.

Waste Water Treatment System

The wash tank unit agitates the produced water to further separate the remaining oil. The agitation produces an oily froth. The froth is skimmed off inside the wash tank unit

and drains by gravity to the waste oil tank. Treated produced water flows out the end of the flotation cell unit and into the wastewater tank for solution by volume with clear produced water. The produced water from the wastewater unit is disposed in the ocean by way of the cuttings chute; a turbine meter measures the amount of disposed water.

Well Testing and Maintenance

To measure the oil, gas, and water flow rates from a well, the well is produced into test separator #1 by closing the well flow line valve to the gross oil header and opening the well flow line valve to the test header. The test separator is a vertical, two phase separator 16" in diameter by 6'4" seam-to-seam length, with a capacity of .5 bpd liquid and .0125 mmscfd of natural gas. Its capacity is smaller than the gross separator since only one well is tested at a time. The test separator has a mist extractor to promote removal of liquid droplets from the gas stream. The separator has a level control valve to maintain the operating level. Gas separated in the test separator is measured by an orifice meter in the outlet line and is commingled with the gas from the gross oil separator.

The liquid from the test separator is measured by a micro motion. This meter measures the total liquid flow of the combined oil and water stream. The water cut is determined by collection and analysis of samples. The oil and water from the test separator is combined with the oil and water from the gross oil header.

Emulsion Shipping System

The produced oil/water emulsion is shipped to the Mandalay facility for final processing. The oil shipping surge tank receives oil from the FWKO and the waste oil pumps; it is a vertical pressure vessel 6' in diameter by 8' seam-to-seam length operating at 12-50 psig. The tank provides surge capacity to stabilize the flow of oil and prevents upsets in the downstream processing equipment. Oil is pumped from the tank by one of two oil shipping pumps. The pump flow rate is controlled by a level controller that starts and stops the shipping pump, thereby maintaining the level in the oil shipping surge tank within an acceptable operating range. The oil shipping pumps discharge into the 6" subsea pipeline to Mandalay Onshore; oil flow rate to the pipeline is measured by a turbine meter.

Drain Sumps

The waste oil tank is a cone-bottom tank which is primarily used to receive oily water. The waste oil tank receives water from the platform deck drains and skimmings from wash tank and Wemko. Vacuum trucks are periodically transported to the platform on the supply boat to remove solids from the waste oil tank. The liquid in the waste oil tank is pumped from there to the oil shipping surge tank. The tank also receives the oil skimming's from the flotation unit and wash tank. Natural gas from all three tanks is gathered by the flotation deck vapor recovery compressor.

Gas Compression, Dehydration, and Disposition

Natural gas removed from the crude oil in the FWKO, test separator, and oil shipping surge tank is compressed, dehydrated, and shipped in a six-inch sub sea pipeline and then off to the Mandalay Facility.

Natural gas is removed in the FWKO and test separator, and then flows to the shipping tank for liquid removal and is then compressed by the I.R. main gas booster compressor to a pressure of 55 psig. The discharge from the compressor is cooled by a fin fan cooler; any condensed liquid is removed in the liquid knockout vessel, and the wet gas then flows to the Iron Sponge To remove any H_2S and then to the chiller skid.

The gas dehydration system is used to lower the water content of the gas to the sales gas pipeline requirement. It consists of the gas chiller, refrigerant compressor, refrigerant condenser, and refrigerant surge drum. The gas chiller is a heat exchanger in which liquid refrigerant is used to cool the natural gas and cause condensation of most of the entrained water. After chilling, the gas flows to the final gas scrubber where the condensed water and hydrocarbon liquids are removed. Dehydrated gas from the final gas scrubber flows directly to the 6" subsea pipeline to Platform Mandalay; an orifice meter records the gas flow rate.

Vapor Recovery Systems

Gas from the waste water, wash tank skimmer, flotation cell, and waste oil tank is compressed by the flotation deck vapor recovery compressor, which discharges to the main gas scrubber where the gas is commingled with the gas from the FWKO and shipping tank.

Pressure relief valves on pressure vessels, compressors, and other equipment handling hydrocarbon liquids or vapors discharge to a 2-inch relief header. The pressure relief valves only open during emergency situations or during required safety testing. Gases in the relief header flow into a flare gas scrubber which removes any liquid discharged from the pressure relief valves. Gas from the flare gas scrubber goes to the platform flare stack, while the liquid is drained to the waste oil and by a 4" line.

Flare Relief System

Platform Gina is equipped with a flare system to minimize emissions of ROC's that would otherwise be emitted to the atmosphere. The flare system receives gas from relief valves and piping vents which are first routed to the flare header. All equipment is connected to the flare header. All gas collected in the flare header is routed to the flare boom and on to the flare tip where it is burned.

A Daniel's ten-inch orifice meter is used to measure and record the gas that is flared. Its range of operation is 0.075 mmscfd minimum to 10 mmscfd maximum.

290 Maple Court
Suite 290
Ventura, CA 93003
(805) 535-2000

May 14, 2012

Mr. Dan Searcy
Ventura County Air
Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA93003

RE: Annual Compliance Certification Report
Platform Gina, PTO 1491

Dear Mr. Searcy:

DCOR, LLC, submits the enclosed Annual Compliance Verification Report for Platform Gina as required by Part 70 Permit to Operate 1491. This report covers the time period of April 1, 2011 through March 31, 2012.

Please do not hesitate to contact me at 805-535-2074 with any questions.

Sincerely,

Christine White

Christine White
Environmental Advisor

Enclosure

C: Mr. Gerardo Rios
USEPA REGION 9
75 Hawthorne Street
Mail Code: AIR-3
San Francisco, CA 94105

Ventura County
Air Pollution
Control District

ANNUAL COMPLIANCE CERTIFICATION SIGNATURE COVER FORM

A copy of each Annual Compliance Certification shall be submitted to EPA, Region 9, at the following address:

Mr. Gerardo Rios, Chief
Permits Office (AIR-3)
Office of Air Division
EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Confidentiality

All information in a Part 70 permit compliance certification is public information. The Part 70 permit is also public information.

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this compliance certification are true, accurate, and complete.

Signature and Title of Responsible Official:	Date:
T Wiegman Title: Tina Wiegman, ES&RC Manager	5/15/2012

Time Period Covered by Compliance Certification

04 / 01 / 2011 (MM/DD/YY) to 03 / 31 / 2012 (MM/DD/YY)

290 Maple Court
Suite 290
Ventura, CA 93003
(805) 535-2000

June 20, 2012

Mr. Travis Jones
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

RE: **April 1, 2011 through March 31, 2012 Compliance Certification Report**
Platform Gina, PTO 1491
Replacement Pages

Dear Mr. Jones:

DCOR, LLC, is submitting the enclosed replacement pages for the April 1, 2011 through March 31, 2012 Annual Compliance Verification report for Platform Gina as requested in a June 19, 2012 telephone conversation. Information has been added to reflect a May 3, 2011 Breakdown Report.

Please do not hesitate to contact me at 805-535-2074 with any further questions or comments. .

Sincerely,

Christine White

Christine White
Environmental Advisor

Enclosures (2)

C: Mr. Gerardo Rios
USEPA REGION 9
75 Hawthorne Street
Mail Code: AIR-3
San Francisco, CA 94105

PTO 1491: Platform Gina

REPLACEMENT PAGE, 6-19-12

Reporting Period: April 1, 2011 through March 31, 2012

There were 11 breakdowns filed during this reporting period, as summarized on the following Annual Compliance Certification Deviation Summary Forms.

There were no Notices of Violation (NOV) or Notices to Comply (NTC) issued during the reporting period.

There were no excess emissions.

Excess Emissions

NOx (lbs)	ROC (lbs)	CO (lbs)	SOx (lbs)	PM (lbs)	PM10 (lbs)
0	0	0	0	0	0

Ventura County
Air Pollution
Control District

ANNUAL COMPLIANCE CERTIFICATION
DEVIATION SUMMARY FORM

Period Covered by Compliance Certification: 04/01/11 (MM/DD/YY) to 03/31/12 (MM/DD/YY)

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
Attachment 71.1.C	**Vapor Recovery Compressor**	Begin 3/26/12, 1:30 End 3/26/12, 1:35 When Discovered: Date & Time 3/26/12, 1:30
D. Parameters monitored:	E. Limit	F. Actual:
Operations of vapor recovery compressor.	Produced gas is either directed to sales, vapor compressor or flare.	No excess emissions as production was shut in and the make-up gas system was shut down.
G. Probable Cause of Deviation	H. Corrective actions taken:	
Loss of electrical power due to lightening event that disrupted electrical power to facility.	Breakdown was reported to the District. Vapor recovery compressor was started back up as soon as possible after power was restored. All production was shut in and there was no venting; therefore, no excess emissions.	

A. Attachment # or Permit Condition #:	B. Equipment description:	C. Deviation Period: Date & Time
Attachment 71.1.C	**Vapor Recovery Compressor**	Begin 5/3/11, 9:20 End 5/3/11, 9:50 When Discovered: Date & Time 5/3/11, 9:20
D. Parameters monitored:	E. Limit	F. Actual:
Operations of vapor recovery compressor.	Produced gas is either directed to sales, vapor compressor or flare.	No excess emissions as production was shut in and the make-up gas system was shut down.
G. Probable Cause of Deviation	H. Corrective actions taken:	
Loss of electrical power to facility due to SCE service outage.	Breakdown was reported to the District. Vapor recovery compressor was started back up as soon as possible after power was restored. All production was shut in and there was no venting; therefore, no excess emissions.	

290 Maple Court
Suite 290
Ventura, CA 93003
(805) 535-2000

June 25, 2012

Mr. Travis Jones
Ventura County Air Pollution Control District
669 County Square Drive, Second Floor
Ventura, CA 93003

RE: **April 1, 2011 through March 31, 2012 Compliance Certification Report**
Platform Gina, PTO 1491
Flare Visible Emission Documentation

Dear Mr. Jones:

I am the Lead Operator on DCOR, LLC's Platform Gina and I was present during the planned flaring event that occurred on May 3, 2011 (see attached Platform Gina Flare Log). I observed no visible smoke coming from the flare during this event. DCOR, LLC, is submitting this information for the April 1, 2011 through March 31, 2012 Annual Compliance Verification report for Platform Gina.

Please do not hesitate to contact me at 805-585-1022 with any further questions or comments. .

Sincerely,

David Berryman

David Berryman
Lead Operator
Platform Gina

Attachment (1)

PLATFORM GINA FLARE LOG

Record all flaring greater than 10 minutes. Record ppm, not "sweet" or "x"					Call in a Breakdown Report to VCAPCD within 4-hours for unplanned flaring lasting longer than 1-hour only if >300 ppm H2S	May-11	
DATE	START TIME	STOP TIME	VOLUME (MCF)	Estimated or Measured H2S (PPM)	Reason for Flaring Event	PLANNED OR UNPLANNED	OPERATOR INITIALS
5/3/11	00:05	21:05	150	0	Gas Line Shut Down For MOSF	Planned	David Berryman

Flaring Requirements: **A)** Unplanned flaring >300 ppm H2S is prohibited to last longer than 24 hrs **B)** Unplanned flaring >300 ppm H2S lasting longer than 1-hr requires filing a Breakdown Report to APCD **C)** Unplanned and Planned flaring of sweet gas (<300 ppm) only requires logging **D)** Planned flaring >300 ppm H2S for any duration requires a 72-hr written notice to APCD **E)** All flaring >48-hrs require an MMS Variance.

This list has been reviewed. No changes. Christine White

1.c. PERIODIC MONITORING SUMMARY

This periodic monitoring summary is intended to aid the permittee in quickly identifying key monitoring, recordkeeping, and reporting requirements. It is not intended to be used as a "stand alone" monitoring guidance document that completely satisfies the requirements specifically applicable to this facility. The following tables are included in the periodic monitoring summary:

- Table 1.c.1. - Specific Applicable Requirements
- Table 1.c.2. - Permit-Specific Conditions
- Table 1.c.3. - General Applicable Requirements
- Table 1.c.4. - General Requirements for Short-Term Activities

1.c.1. Specific Applicable Requirements

The Specific Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 7 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.1N1	Rules 71.1.B.1.a, 74.10	•Quarterly inspection of the following components for proper operation: gas compressor, hatches, relief valves, pressure regulators, flare, as applicable •Verbal notice of maintenance activities •Rule 74.10 inspections •Annual compliance certification including verification that tanks are equipped with a vapor recovery system	•Records of quarterly inspections and tank maintenance activities •Rule 74.10 records	None	None	
71.1N6	Rules 71.1.B.3, 71.1.D.1.c, 74.10	•Annual compliance certification including verification of the integrity of the roof and pressure-vacuum relief valve •Rule 74.10 inspections	•Records of number of days the tank has stored or held crude oil during the maintenance operation, location of the tank relative to a tank battery, and whether tank was connected to vapor recovery •Records to show integrity of roof and PV valves for tanks not permanently located at facility •Rule 74.10 records	None	None	

1.c.1. Specific Applicable Requirements (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.4 N1	Rules 71.4.B.2 and 74.10	•Verbal notice of maintenance operations •Rule 74.10 inspections •Annual compliance certification including verifying the integrity of the cover	•Records of maintenance •Rule 74.10 records	None	None	
74.9N9	Rule 74.9.D.9	•Annual compliance certification •Routine surveillance to ensure diesel-fired engine is used to power cranes and welding equipment only	•Records of engine data including engine function (usage), manufacturer, model number, operator identification number, and engine location	None	None	
ATCM Engine N3	ATCM for Stationary Compression Ignition Engines – OCS	•Fuel type records •Fuel use records	•Fuel type records •Fuel use records	None	None	Not federally enforceable

1.c.2. Permit-Specific Conditions

The Permit-Specific Conditions Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 8 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO1491PC1 - Condition No. 1	Rule 29 General Recordkeeping	•Annual compliance certification •Monthly records of throughput and consumption	•Monthly records	None	None	
PO1491PC1 - Condition No. 2	Rule 29 Maximum Number of Oil Wells	•Annual compliance certification	None	None	None	
PO1491PC1 - Condition No. 3	Rule 29 Maximum Sulfur Content of Diesel Fuel	•Fuel records or fuel supplier certification containing sulfur content of each diesel fuel delivery •Annual compliance certification	Fuel records	None	None	
PO1491PC1 - Condition No. 4	Rules 26 and 29 Crew Boat and Work Boat Emission Limits	•Diesel fuel consumption for boats servicing Platforms Gina and Gilda •Monthly calculations of emissions (boats) •Annual compliance certification	•Monthly records of diesel fuel consumption •Monthly calculations of emissions (boats)	None	None	
PO1491PC1 – Condition No. 5	Rule 29 Two Crew Boats Shall Not Be Used Simultaneously	•Maintain a log book of hours and days of crew boat operation •Annual compliance certification	•Maintain a log book of hours and days of crew boat operation	None	None	
PO1491PC1 – Condition No. 6	Rule 29 Two Work Boats Shall Not Be Used Simultaneously	•Maintain a log book of hours and days of work boat operation •Annual compliance certification	•Maintain a log book of hours and days of work boat operation	None	None	
PO1491PC1 – Condition No. 7	Rule 29 Boom Boat Fuel Limit	•Gasoline consumption at boom boats •Monthly gasoline consumption records •Annual compliance certification	•Monthly gasoline consumption at boom boats	None	None	
PO1491PC1 - Condition No. 8	Rules 23 and 29 Solvent Recordkeeping	•Maintain a list of exempt solvents •Annual compliance certification	•Maintain a list of exempt solvents	None	None	
PO1491PC2 - Condition Nos. 1 and 4	Rule 29 Flare Fuel Consumption	•Fuel consumption •Identify emergency vs. non-emergency usage •Annual compliance certification	•Monthly records of fuel consumption	None	None	
PO1491PC2 - Condition Nos. 2 and 3	Rules 71.1 Flare Ignition System Operation	•Monthly tests of flare's ignition system •Annual compliance certification	•Records of ignition system •Maintenance records	None	None	

1.c.2. Permit-Specific Conditions (continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
PO1491PC3 - Condition No. 1	Rules 26 and 74.9 200 hours per year backup utility generator operation	•Annual compliance certification •Monthly records of backup utility generator hours of operation	•Hours of operation log (non-resettable meter) differentiating non-emergency use and emergency use •Monthly and twelve month rolling records of hours of operation	None	None	
PO1491PC3 - Condition No. 2	Rule 74.9 200 hours per year / emergency use exemptions	•Annual compliance certification •Recordkeeping	•Hours of operation log (non-resettable meter) •Monthly and twelve month rolling records of hours of operation	None	None	

1.c.3. General Applicable Requirements

The General Applicable Requirements Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 9 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
50	Rule 50	•Routine surveillance •Visual inspections •Annual compliance certification, including a formal survey •Opacity readings upon request •Notification required for uncorrectable visible emissions	•All occurrences of visible emissions for periods>3min in any one hour •Annual formal survey of all emissions units	None	•Opacity - EPA Method 9	
54.B.1 (OCS)	Rule 54.B.1	•Annual compliance certification •Identify planned vs. unplanned flaring event •Identify date, time, duration, flare volume, and estimated sulfur emissions per flare event •Upon request, source test for sulfur compounds at point of discharge	•Representative fuel analysis or exhaust analysis and compliance demonstration •Flare records	None	•Sulfur Compounds - EPA Test Method 6, 6A, 6C, 8, 15, 16A,16B, or SCAQMD Method 307-94, as appropriate	
54.B.2 (OCS)	Rule 54.B.2	•Annual compliance certification •Identify planned vs. unplanned flaring event •Identify date, time, duration, flare volume, and estimated sulfur emissions per flare event •Determine ground or sea level concentrations of SO_2, upon request	•Representative fuel analysis or exhaust analysis and modeling data or other compliance demonstration •Flare records	None	•SO_2 - BAAQMD Manual of Procedures, Vol.VI, Section 1, Ground Level Monitoring for H_2S and SO_2	
57.1	Rule 57.1	•Annual compliance certification	None	None	None	•Not required based on District analysis
64.B.1	Rule 64.B.1	•Annual compliance certification •None for PUC-quality gas •Annual test for non PUC-quality gas (submit with annual compliance certification)	•Annual fuel gas analysis for non PUC-quality gas	None	•SCAQMD Method 307-94	
64.B.2	Rule 64.B.2	•Annual compliance certification •Fuel supplier's certification, or fuel test per each delivery (submit with annual compliance certification)	•Fuel supplier's certification, or fuel test per each delivery	None	•ASTM Method D4294-83 or D2622-87	

1.c.3. General Applicable Requirements (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
71.1.C	Rules 71.1.C and 74.10	•Annual compliance certification •Rule 74.10 inspections •Visual inspection to ensure collection system is closed •Quarterly inspection of flare to ensure proper operation	•Records of inspections of flare •Rule 74.10 records	None	None	•Compliance with Rule 74.10 ensures compliance with the gas collection system's maintenance requirements
71.4.B.1	Rule 71.4.B.1	•Annual compliance certification to ensure there are no first stage sumps	None	None	None	
71.4.B.3	Rule 71.4.B.3	•Annual compliance certification •Routine surveillance and visual inspections of well cellars	•Records of maintenance or well workover activity during periods of crude oil storage	None	None	
74.6	Rule 74.6	•Annual compliance certification •Maintain current solvent information •Routine surveillance of solvent cleaning activities •Upon request, solvent testing	•Records of current solvent information	None	•ROC content-EPA Test Method 24 or 24A •Identity of solvent components-ASTM E168-67, ASTM E169-87, or ASTM E260-85 •True vapor pressure or composite partial pressure -ASTM D2879-86 •Initial boiling point-ASTM 1078-78 or published source •Spray gun active/passive solvent losses-SCAQMD Method (10-3-89)	

1.c.3. General Applicable Requirements (Continued)

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.10	Rule 74.10	•Annual compliance certification •Identify leaking components •Inspections every shift or 8 hours at natural gas processing plants •Daily and/or weekly inspections for specified equipment •Quarterly inspections for specified components •Pressure relief valve inspections •Annual update to Operator Management Plan •Notification of major leaks in critical components •Notification of repeat leaks	•Records of leak inspections in inspection log	None	•Gas Leaks - EPA Method 21 •ROC Concentration of Gas Streams - ASTM E168-88, ASTM E169-87, or ASTM E260-85 •Weight percentage of evaporated compounds of liquids – ASTM Method D 86-82 •API Gravity - ASTM Method D287	
74.11.1	Rule 74.11.1	•Annual compliance certification •Maintain identification records of large water heaters and small boilers	•Records of current information of large water heaters and small boilers	None	None	•Rule only applies to future installation of large water heaters and small boilers
74.22	Rule 74.22	•Annual compliance certification •Maintain furnace identification records	•Records of current furnace information	None	None	•Rule only applies to future installation of natural gas-fired, fan-type furnaces

1.c.4. General Requirements for Short-Term Activities

The General Requirements for Short-Term Activities Table includes a summary of the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods associated with the attachments contained in Section No. 10 of this permit.

Attachment No./ Condition No.	Applicable Rule or Requirement	Monitoring	Recordkeeping	Semi-annual Reports	Test Methods	Comments
74.1	Rule 74.1	•Annual compliance certification •Routine surveillance and visual inspections of abrasive blasting operation •Abrasive blasting records	•Abrasive blasting records	None	•Visible emission evaluation-Section 92400 of CCR	
74.2	Rule 74.2	•Annual compliance certification •Routine surveillance •Maintain VOC records of coatings used	•Maintain VOC records of coatings used	None	•VOC content-EPA Method 24, CARB Method 432 • Acid content-ASTM Method D 1613-85, •Metal content-SCAQMD Method 311-91	
74.16	Rule 74.16	•Annual compliance certification to ensure grid power being used, and/or •Annual compliance certification to ensure drilling engine has a valid APCD Permit to Operate, and meets NOx limit, or •Maintain cost analysis documentation as verification to grid power exemption, if applicable •Annual source tests (NO_x) or engine manufacturer certification	•Records of source tests or engine manufacturer certification •Records of cost analysis documentation	None	•NO_x-ARB Method 100	
40CFR61.M	40 CFR Part 61, Subpart M	•Annual Compliance Certification •See 40 CFR Part 61.145 for inspection procedures	•See 40 CFR Part 61.145 for recordkeeping procedures	•See 40 CFR Part 61.145 for notification procedures	•See 40 CFR Part 61.145 for test methods	

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This list has been reviewed. See changes

Christine White

TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 01491
Permitted Equipment and Applicable Requirements

M:\TITLEV\TV Permits\PO1491\Permit II\Tables_1491-APP-281

Equipment	71.1	71.4	74.9	Engine ATCM	Additional Requirements
OCS Platform Gina					
1 - 250 BBL PWT (TK-14) VR	1				
1 - 200 BBL Wash Tank VR	1				
1 - 130 BBL Waste Oil Tank (TK-2) VR	1				
1 - 35 BBL PWT, Wemco Flotation Cell, Model No. 56, VR	1				
1 - 3.14 sqft Surface Pit (2 ft diameter covered floor drain pit)		1			
1 - 142 MMBTU/Hr Flare, John Zink Model LRGO-4/FF, maximum design gas flow throughput of 2 MMCF/day, equipped with an automatic ignition system and smokeless tip					PC1, PC2
1 - 325 BHP Diesel Crane Engine, (Caterpillar 3406B), Crane No. 1			9	3	PC1
1 - 450 BHP Diesel Backup Utility Generator Engine, (Cummins 3406) Serial No. NT4855-62/63				3	PC1, PC3
Boom Boat #					
2 - 70 BHP Suzuki Gasoline Engines, Model DF-70, Serial Nos. 07001F-423028 and 07001F-423033, EPA Family 5SKXM1.302G8					PC1
Crew Boat Engines					
"Ryan T"					
4 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine					PC1
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
"Luke"					
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine					PC1
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
spelling **"~~Allen~~ Alan T"**					
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine					PC1
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
"Capt T Lee"					
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine					PC1
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
"~~Nicholas~~ L" (ok)					
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine					PC1
2 - 40.2 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
Renamed - KennethCarl **"~~NRC Freedom~~"**					
2 - 626 BHP Detroit Diesel Engines, Model 16V92N, Main Engine					PC1
2 - 54 BHP Detroit Diesel Engines, Model 4-71, Generator Engine					PC1
"Patrick"					
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine					PC1
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
"Peter Mac"					
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine					PC1
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
"Michael Uhl"					
2 - 400 BHP Diesel Main Engines, Detroit 3V71					PC1
2 - 75 BHP Diesel Generator Engines, Detroit 3V71					PC1
"Isabel L"					
3 - 600 BHP Diesel Main Engines, MTU Series 60					PC1
2 - 49 BHP Diesel Generator Engines, Isuzu A-4JG1					PC1

TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

Permit to Operate No. 01491

Permitted Equipment and Applicable Requirements

M:\TITLEV\TV Permits\PO1491\Permit II\Tables_1491-APP-281

Equipment	71.1	71.4	74.9	Engine ATCM	Additional Requirements
Work Boat Engines					
~~"Victory Seahorse"~~ remove					
2 - 2500 BHP Diesel Main Engines (EMD 16-645-ED3A)					PC1
2 - 200 BHP Diesel Generator Engines (Detroit 8V-71)					PC1
1 - 300 BHP Diesel Thruster Engine (Detroit 8V-71)					PC1
"Santa Cruz"					
2 - 2000 BHP Diesel Main Engines (Caterpillar 3516B)					PC1
2 - 245 BHP Diesel Generator Engines (Caterpillar 3306)					PC1
1 - 515 BHP Diesel Thruster Engine (Caterpillar 3408)					PC1
renamed - Kenneth Carl "NRC Freedom"					
2 - 626 BHP Detroit Diesel Engines, Model 16V92N, Main Engine					PC1
2 - 54 BHP Detroit Diesel Engines, Model 4-71, Generator Engine					PC1
"NRC Patriot II"					
2 - 626 BHP Detroit Diesel Engines, Model 16V92N, Main Engine					PC1
2 - 54 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
"Ryan T"					
4 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine					PC1
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine					PC1
M/V San Miguel					
2 - 2000 BHP Caterpillar Diesel Main Engines, Model 3516B					PC1
2 - 245 BHP Caterpillar Diesel Engines, Model 3306, Generator Engine (175 KW)					PC1
1 - 500 BHP Diesel Bow Thruster Engine, Caterpillar 3408C					PC1
"Michael Uhl"					
2 - 400 BHP Diesel Main Engines, Detroit 3V71					PC1
2 - 75 BHP Diesel Generator Engines, Detroit 3V71					PC1
"Isabel L"					
3 - 600 BHP Diesel Main Engines, MTU Series 60					PC1
2 - 49 BHP Diesel Generator Engines, Isuzu A-4JG1					PC1
"Danny C"					
2 - 360 BHP Diesel Main Engines, Caterpillar 3406C					PC1
1 - 30 BHP Diesel Generator Engine, Shibaura M20CRW2					PC1
1 - 47 BHP Diesel Generator Engine, Isuzu 4JB1					PC1
1 - 45 BHP Winch engine, Detroit 2-71					PC1
~~"Pearl"~~ remove					
2 - 930 BHP Diesel Main Engines, Detroit Diesel 16V149					PC1
2 - 200 BHP Diesel Generator Engines, Detroit Diesel 8VA-71					PC1
1 - 325 BHP Diesel Bow Thruster Engine, Detroit Diesel 8VA-71					PC1
1 - 275 BHP Diesel Bow Thruster Engine, Detroit Diesel 6-71					PC1
~~"Vigilance"~~ remove					
2 - 1125 BHP Diesel Main Engines, Caterpillar D399 TA					PC1
2 - 245 BHP Diesel Generator Engines, Caterpillar 3306					PC1
1 - 325 BHP Diesel Bow Thruster Engine, Caterpillar 3406					PC1
1 - 325 BHP Diesel Winch Engine, Detroit Diesel 8-71					PC1
~~"Cape Atlas"~~ remove					
2 - 3070 BHP Diesel Main Engines, EMD 16-645-E					PC1
1 - 500 BHP Diesel Bow Thruster Engine, Detroit 12V-71					PC1
2 - 133 Diesel Generator Engines, Detroit 8V-71N					PC1
1 - 550 BHP Diesel Tow Winch Engine, Detroit 12V-71					PC1

TABLE NO. 2

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 01491
Permitted Equipment and Applicable Requirements

M:\TITLEV\TV Permits\PO1491\Permit II\Tables_1491-APP-281 Equipment	71.1	71.4	74.9	Engine ATCM	Additional Requirements
For Use Throughout Platform					
8 - Oil Wells 1 - 500 BBL Portable Tank	6				PC1
Exempt Equipment					
Portable Emergency Engines (Exempt - Rule 23.D.7.c)					
Wipe Cleaning Operations (Exempt - Rule 23.F.10)					PC1

- Operate for two (2) platforms, "Gina" and "Gilda" (PO 01491 & PO 01492)

No changes
Christine White

TITLE V EQUIPMENT LIST DESCRIPTION KEY

For Title V permits, the Permitted Equipment and Applicable Requirements Table contains a number of terms, abbreviations, and acronyms that have been standardized for oilfield facilities. The following list describes many of the terms on an oilfield equipment list:

BHP The output of an internal combustion engine as measured in brake horsepower.

BL A crude oil loading facility that is equipped with bottom loading capabilities.

Condensate Tank A tank that is used for the purpose of storing water and hydrocarbon liquids recovered from natural gas scrubbers. This tank is assumed to operate with a variable liquid level and has an associated throughput limit.

COST A crude oil storage tank that generally operates with a variable liquid level and has an associated throughput limit. An oil shipping tank that has a truck loading rack is a COST by definition. These tanks may also be known as shipping tanks.

Cover Indicates that a petroleum sump, pit, or pond is equipped with a properly installed and maintained cover which complies with Rule 71.4.

EXEMPT A tank, pit, or sump that processes produced water with an ROC content of less than 5 milligrams per liter and is exempt from Rule 71.1 or Rule 71.4.

Gauge or Test Tank A tank that is used for the purpose of production testing a well or group of wells. This tank is assumed to operate with a variable liquid level and has an associated throughput limit.

LACT Tank A Lease Automated Custody Transfer tank that operates at a constant or near constant liquid level and does not have an associated throughput limit. This tank is generally equipped with a LACT pump for pipeline oil shipping. A shipping tank with a truck loading rack is not by definition a LACT tank, but is a COST.

Loading Facility A crude oil loading rack or loading valve used for the transfer of crude oil from a storage tank or group of tanks to a delivery vessel.

Lo-NOx Device has equipment to control the emissions of NOx and CO to meet the requirements of Rules 74.15 or 74.15.1, or best available control technology requirements.

MMBTU/Hr The heat input of an external combustion device as measured in millions of British Thermal Units per hour.

NG Indicates that the equipment is permitted to be fired on natural gas only.

NG/FO Indicates that equipment is permitted to be fired on natural gas with fuel oil or diesel as a backup fuel.

NSCR Engine that is equipped with non-selective catalytic reduction to meet its Rule 74.9 compliance requirements.

Pit Device used to receive emergency or intermittent flows.

PSC Engine that is equipped with a pre-stratified charge to meet its Rule 74.9 compliance requirements.

PWT A produced water tank that generally operates with a constant liquid level and does not have an associated throughput limit. These tanks may also be known as free water knock out (FWKO) tanks.

Rich Burn or Lean Burn A designation associated with a gas-fired internal combustion engine that determines its Rule 74.9 compliance requirements.

SCR Engine or turbine that is equipped with selective catalytic reduction and ammonia injection to meet its Rule 74.9 or Rule 74.23 compliance requirements.

SF A crude oil loading facility that is equipped with submerged fill loading capabilities.

Sump Device used for separation, generally in constant use.

UNC Indicates that the equipment is uncontrolled. For example, a tank that is not equipped with a vapor recovery system, or an engine or heater that is not equipped with NOx controls are labeled UNC.

VR A vapor recovery system that is installed on a tank, loading rack or loading facility, glycol dehydrator, or other piece of process equipment.

Wash Tank A tank that stores and separates oil and water that generally operates with a constant liquid level. It does not have an associated throughput limit.

No changes
Christine White

TITLE V APPLICABLE REQUIREMENT CODE KEY

Rule 71.1, "Crude Oil Production and Separation"

1. Storage tanks shall be equipped with a vapor recovery system that directs all vapors to a gas gathering system or flare (71.1.B.1.a)
2. Storage tanks shall be equipped with a vapor recovery system that directs all vapors to some other control system with a minimum destruction or removal efficiency of 90% by weight (71.1.B.1.b)
3. Tank batteries installed prior to June 20, 1978 are exempt from vapor recovery when processing crude oil having a modified Reid vapor pressure of less than 0.5 psia. Solid roof and pressure-vacuum relief valve is required. (71.1.B.2/71.1.D.1.a)
4. Storage tanks are exempt from the solid roof and vapor recovery requirements if the ROC content of the liquid entering the tank is less than 5 milligrams per liter. (71.1.D.3)
5. Storage tanks are exempt from the solid roof and vapor recovery requirements if a BACT Cost Analysis indicates that maximum emission reduction has already taken place. (71.1.D.4)
6. Portable tanks shall be equipped with closed covers and pressure vacuum valves and have limited exemptions from vapor recovery requirements. (71.1.B.3/71.1.D.1.c)

Rule 71.4, "Petroleum Sumps, Pits, Ponds and Well Cellars"

1. Second and third stage sumps, pits, and ponds shall have an impermeable cover (71.4.B.2)
2. Exemption from cover requirement for emergency pits (71.4.C.1.b)
3. Exemption from cover requirement for sumps, pits, or pond if the ROC content of the liquid at the point of entry is less than 5 milligrams per liter (71.4.C.1.c)
4. Exemption from cover requirement for sumps, pits, or pond when a BACT Cost Analysis indicates that maximum emission reduction has already taken place. (71.4.C.1.d)

Rule 74.9, "Stationary Internal Combustion Engines"

1. Pre-January 1, 2002 emission limits and post-January 1, 2002 emission limits for natural gas rich burn engines with existing emission controls installed after September 5, 1989. (74.9.B.1 or 74.9.B.2, and 74.9.B.3)
2. Pre-January 1, 2002 emission limits and post-January 1, 2002 emission limits for natural gas lean burn engines with existing emission controls installed after September 5, 1989. (74.9.B.1 or 74.9.B.2, and 74.9.B.3)
3. Post-January 1, 1997 emission limits for natural gas rich burn engines with emission controls installed before September 5, 1989; or installed after March 5, 1992. (74.9.B.1 or 74.9.B.2)
4. Post-January 1, 1997 emission limits for natural gas lean burn engines with emission controls installed before September 5, 1989; or installed after March 5, 1992. (74.9.B.1 or 74.9.B.2) Post-January 1, 1997 emission limit for ammonia, if applicable. (74.9.B.5)
5. Post-January 1, 1997 emission limits for diesel engines. (74.9.B.1 or 74.9.B.2) Post-January 1, 1997 emission limit for ammonia, if applicable. (74.9.B.5)

6. Exemption from Rule 74.9 for engines operated less than 200 hours per calendar year (74.9.D.2)
7. Exemption from Rule 74.9 for emergency standby engines operated during either an emergency or maintenance operation. (74.9.D.3)
8. Exemption from Rule 74.9 for diesel engines with a permitted capacity factor of less than or equal to 15%. (74.9.D.8)
9. Exemption from Rule 74.9 for diesel engines used to power cranes and welding equipment. (74.9.D.9)
10. Exemption from Rule 74.9 for diesel engines operated on San Nicolas Island. (74.9.D.10)

Section 93115, Title 17, California Code of Regulations California Airborne Toxic Control Measure For Stationary Compression Ignition (CI) Engines

1. In-use emergency fire pump assembly engines
2. In-use emergency engines operated not more than 20 hours per year for maintenance and testing purposes.
3. Engines operated solely on OCS Platforms.

This list has been reviewed. See changes below. Christine White

TABLE NO. 4

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
Permit to Operate No. 01491
Permitted Emissions

M:\TITLEV\TV Permits\PO1492\Permit\Tables_1491-ADM1

Equipment	TONS PER YEAR					POUNDS PER HOUR				
	ROC	NOx	PM	SOx	CO	ROC	NOx	PM	SOx	CO
OCS Platform Gina										
1 - 250 BBL PWT (TK-14) VR	0.01					0.00				
1 - 200 BBL Wash Tank VR	0.01					0.00				
1 - 130 BBL Waste Oil Tank (TK-2) VR	0.01					0.00				
1 - 35 BBL PWT, Wemco Flotation Cell, Model No. 56, VR	0.00					0.00				
1 - 3.14 sqft Surface Pit (2 ft diameter covered floor drain pit)	0.00					0.00				
1 - 142 MMBTU/Hr Flare, John Zink Model LRGO-4/FF, maximum design gas flow throughput of 2 MMCF/day, equipped with an automatic ignition system and smokeless tip	0.45	0.59	0.04	4.41	3.22	7.35	9.65	0.71	71.87	52.53
1 - 325 BHP Diesel Crane Engine, (Caterpillar 3406B), Crane No. 1	0.05	0.67	0.05	0.01	0.15	0.76	10.79	0.77	0.17	2.35
1 - 450 BHP Diesel Backup Utility Generator Engine, (Cummins 3406) Serial No. NT4855-62/63	0.11	1.50	0.11	0.02	0.33	1.06	14.96	1.07	0.24	3.25
Boom Boat #										
2 - 70 BHP Suzuki Gasoline Engines, Model DF-70, Serial Nos. 07001F-423028 and 07001F-423033, EPA Family 5SKXM1.302G8	0.02	0.02	0.00	0.00	0.58	1.21	1.68	0.10	0.08	45.83
Crew Boat Engines										
"Ryan T"										
4 - 510 BHP Diesel Main Engines (Detroit 12V71TI)	1.20	20.34	1.21	0.27	3.70	4.80	81.23	4.85	1.09	14.77
2 - 75 BHP Diesel Generator Engines (Detroit 3-71)	*	*	*	*	*	0.35	5.95	0.36	0.08	1.08
"Luke"										
3 - 510 BHP Diesel Main Engines (Detroit 12V71TI)	*	*	*	*	*	*	*	*	*	*
2 - 75 BHP Diesel Generator Engines (Detroit 3-71)	*	*	*	*	*	*	*	*	*	*
spelling - Alan T **"Allen T"**										
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
"Capt T Lee"										
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
"Nicholas L"										
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 40.2 BHP Detroit Diesel Engines, Model 3-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
renamed - Kenneth Carl ~~"NRC Freedom"~~										
2 - 626 BHP Detroit Diesel Engines, Model 16V92N, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 54 BHP Detroit Diesel Engines, Model 4-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
"Patrick"										
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
"Peter Mac"										
3 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
"Michael Uhl"										
2 - 400 BHP Diesel Main Engines, Detroit 3V71	*	*	*	*	*	*	*	*	*	*
2 - 75 BHP Diesel Generator Engines, Detroit 3V71	*	*	*	*	*	*	*	*	*	*
"Isabel L"										
3 - 600 BHP Diesel Main Engines, MTU Series 60	*	*	*	*	*	*	*	*	*	*
2 - 49 BHP Diesel Generator Engines, Isuzu A-4JG1	*	*	*	*	*	*	*	*	*	*
Work Boat Engines										
~~**"Victory Seahorse"**~~										
~~2 - 2500 BHP Diesel Main Engines (EMD 16-645-ED3A)~~ remove	0.20	3.34	0.20	0.04	0.61	*	*	*	*	*
~~2 - 200 BHP Diesel Generator Engines (Detroit 8V-71)~~	*	*	*	*	*	*	*	*	*	*
~~1 - 300 BHP Diesel Thruster Engine (Detroit 8V-71)~~	*	*	*	*	*	*	*	*	*	*
"Santa Cruz"										
2 - 2000 BHP Diesel Main Engines (Caterpillar 3516B)	*	*	*	*	*	*	*	*	*	*
2 - 245 BHP Diesel Generator Engines (Caterpillar 3306)	*	*	*	*	*	*	*	*	*	*
1 - 515 BHP Diesel Thruster Engine (Caterpillar 3408)	*	*	*	*	*	*	*	*	*	*

TABLE NO. 4

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

Permit to Operate No. 01491

Permitted Emissions

M:\TITLEV\TV Permits\PO1492\Permit\Tables_1491-ADM1

Equipment	TONS PER YEAR					POUNDS PER HOUR				
	ROC	NOx	PM	SOx	CO	ROC	NOx	PM	SOx	CO
renamed Kenneth Carl										
~~"NRC Freedom"~~										
2 - 626 BHP Detroit Diesel Engines, Model 16V92N, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 54 BHP Detroit Diesel Engines, Model 4-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
"NRC Patriot II"										
2 - 626 BHP Detroit Diesel Engines, Model 16V92N, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 54 BHP Detroit Diesel Engines, Model 3-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
"Ryan T"										
4 - 510 BHP Detroit Diesel Engines, Model 12V71TI, Main Engine	*	*	*	*	*	*	*	*	*	*
2 - 75 BHP Detroit Diesel Engines, Model 3-71, Generator Engine	*	*	*	*	*	*	*	*	*	*
M/V San Miguel										
2 - 2000 BHP Caterpillar Diesel Main Engines, Model 3516B	*	*	*	*	*	*	*	*	*	*
2 - 245 BHP Caterpillar Diesel Engines, Model 3306, Generator Engine (175 KW	*	*	*	*	*	*	*	*	*	*
1 - 500 BHP Diesel Bow Thruster Engine, Caterpillar 3408C	*	*	*	*	*	*	*	*	*	*
"Michael Uhl"										
2 - 400 BHP Diesel Main Engines, Detroit 3V71	*	*	*	*	*	*	*	*	*	*
2 - 75 BHP Diesel Generator Engines, Detroit 3V71	*	*	*	*	*	*	*	*	*	*
"Isabel L"										
3 - 600 BHP Diesel Main Engines, MTU Series 60	*	*	*	*	*	*	*	*	*	*
2 - 49 BHP Diesel Generator Engines, Isuzu A-4JG1	*	*	*	*	*	*	*	*	*	*
"Danny C"										
2 - 360 BHP Diesel Main Engines, Caterpillar 3406C	*	*	*	*	*	*	*	*	*	*
1 - 30 BHP Diesel Generator Engine, Shibaura M20CRW2	*	*	*	*	*	*	*	*	*	*
1 - 47 BHP Diesel Generator Engine, Isuzu 4JB1	*	*	*	*	*	*	*	*	*	*
1 - 45 BHP Winch engine, Detroit 2-71	*	*	*	*	*	*	*	*	*	*
"Pearl" remove										
2 - 930 BHP Diesel Main Engines, Detroit Diesel 16V149	*	*	*	*	*	*	*	*	*	*
2 - 200 BHP Diesel Generator Engines, Detroit Diesel 8VA-71	*	*	*	*	*	*	*	*	*	*
1 - 325 BHP Diesel Bow Thruster Engine, Detroit Diesel 8VA-71	*	*	*	*	*	*	*	*	*	*
1 - 275 BHP Diesel Bow Thruster Engine, Detroit Diesel 6-71	*	*	*	*	*	*	*	*	*	*
"Vigilance" remove										
2 - 1125 BHP Diesel Main Engines, Caterpillar D399 TA	*	*	*	*	*	*	*	*	*	*
2 - 245 BHP Diesel Generator Engines, Caterpillar 3306	*	*	*	*	*	*	*	*	*	*
1 - 325 BHP Diesel Bow Thruster Engine, Caterpillar 3406	*	*	*	*	*	*	*	*	*	*
1 - 325 BHP Diesel Winch Engine, Detroit Diesel 8-71	*	*	*	*	*	*	*	*	*	*
"Cape Athas" remove										
2 - 3070 BHP Diesel Main Engines, EMD 16-645-E	*	*	*	*	*	11.84	200.39	11.97	2.68	36.43
1 - 500 BHP Diesel Bow Thruster Engine, Detroit 12V-71	*	*	*	*	*	1.18	19.92	1.19	0.27	3.62
2 - 133 Diesel Generator Engines, Detroit 8V-71N	*	*	*	*	*	0.62	10.55	0.63	0.14	1.92
1 - 550 BHP Diesel Tow Winch Engine, Detroit 12V-71	*	*	*	*	*	1.29	21.88	1.31	0.29	3.98
For Use Throughout Platform										
8 - Oil Wells	2.92					0.67				
1 - 500 BBL Portable Tank	0.27					0.06				
Exempt Equipment										
Portable Emergency Engines (Exempt - Rule 23.D.7)										
Wipe Cleaning Operations (Exempt - Rule 23.F.10)										
* - Included in Emissions Above										
# - 1/2 emissions of total of 500 gal/yr for two (2) platforms										
Total Permitted Emissions	5.25	26.46	1.61	4.75	8.59	31.19	377.00	22.96	76.91	165.76

HAP Emissions Ref.: OCS HAP Emission Estimation Techniques and Calculations are maintained at the facility.

Ventura County Air Pollution Control District

OIL WELL LIST

Part 70 Permit No. 01491

The following oil wells are on permit:

This list has been reviewed and it is correct

Christine White

Total Active Wells: 8

Slot Number	Well Number
1	H-8
3	H-4
5	H-12
7	H-5
8	H-1
12	H-7
13	H-14
14	H-2

This list is correct. Christine White

Ventura County Air Pollution Control District

INSIGNIFICANT ACTIVITIES (EXEMPT EQUIPMENT)

Part 70 Permit No. 01491

INSIGNIFICANT ACTIVITIES (EXEMPT EMISSION UNITS)	BASIS FOR EXEMPTION (Size/Production Rate)	RULE 23 CITATION
Portable Emergency Drilling Generator	Portable Emergency Engine (Portable is defined as residing at a stationary source for less than 12 consecutive months)	23.D.7.c
Skimmer Power Pack	Portable engine used for emergency purposes, engine maintenance operation < 50 hours per year	23.D.7.c
Wipecleaning Operation	ROC content ≤ 25 grams per liter	23.F.10.b

See changes written this section. Christine White

Ventura County Air Pollution Control District
Additional Permit Requirements
Platform Gina Additional Requirements

Rule 26, "New Source Review"

Rule 29, "Conditions on Permits"

For OCS sources, conditions applied pursuant to Rule 26 or Rule 29 are federally enforceable.

Applicability:

This attachment applies to Platform Gina. These requirements are in addition to any other specific or general requirements referenced in this permit.

Conditions:

1. In order to comply with the throughput and consumption limits of this permit, the permittee shall maintain monthly records of throughput and consumption as detailed in Section No. 3, "Permitted Throughput and Consumption Limit Table", of this permit. The monthly records shall be summed for the previous 12 months. Throughput or consumption totals for any of these 12 calendar month rolling periods in excess of the specified limit shall be considered a violation of this permit. This is a general throughput and consumption recordkeeping condition and applies unless another throughput and consumption recordkeeping condition appears in this section of the permit. (Rule 29)

2. The permitted emissions authorized by this permit are based in part on the fugitive emissions from 8 oil wells. This platform currently has 8 slots with oil well completions. An Authority to Construct is required to be obtained from the District prior to drilling in a slot that does not contain an active or shut-in oil well. Emission offsets must also be provided with the submittal of any application to increase the number of wells beyond 8 wells. (Rule 29)

3. Well No. H-2 shall be shall be free flowing, operated on gas lift, or operated with electric motor driven artificial lift equipment. This condition is applied as Best Available Control Technology (BACT). (Rule 26)

4. All diesel fuel consumed in the crane engines, backup generator engines, and boats shall contain 0.05% sulfur by weight, or less. In order to comply with this condition, permittee shall maintain fuel records, or certification from the fuel supplier, documenting the sulfur content of each diesel fuel delivery. (Rule 29)

5. The permitted emissions for crew boats and work boats servicing this OCS Platform shall not exceed the following limits:

	ROC	NOx	PM	SOx	CO
Tons/Year	1.40	23.68	1.41	0.31	4.31

In order to comply with this condition, the permittee shall maintain monthly records of diesel fuel consumption for all crew boats and work boats servicing OCS Platforms Gina and Gilda. Boats not owned by the permittee that are providing emergency oil spill response or training shall not be included in these records. The fuel usage, in gallons, shall be allocated 25% to Platform Gina and 75% to Platform Gilda. The fuel usage figures, in gallons per month, shall be multiplied by the following District approved emission factors, in units of pounds per thousand gallons (lbs/Mgal), and multiplied by the appropriate conversion factors to obtain emissions in units of tons per month:

	ROC	NOx	PM	SOx	CO
Lbs/Mgal	33.15	561.00	33.50	7.50	102.00

Using these emission factors, the annual permitted emissions for the crew and work boats at this platform are equivalent to an annual diesel fuel limitation of 84,400 gallons per year.

The monthly boat emissions shall be summed for the previous 12 months. The emission totals for the previous 12 months in excess of the above limits shall be considered to be a violation of this condition.

This boat emission calculation method is for the purposes of demonstrating compliance with the above permitted emission limits only. If permittee wishes to submit an application to create an ERC (emission reduction credit) from reducing permitted emissions from boats servicing this platform, an analysis shall be submitted with the application, as required by Rule 26.4.E.2, to demonstrate that the emission reduction is real, quantifiable, permanent, enforceable, and surplus. This analysis shall include, but is not limited to, source test data and actual fuel use data on individual boat engines that may be subject to an application for ERCs. (Rules 26 and 29)

6. There are forty nine permitted engines which are used on ten Crew Boats:

"**Ryan T**"
4 - 510 BHP Diesel Main Engines, Detroit 12V71TI
2 - 75 BHP Diesel Generator Engines, Detroit 3-71
"**Luke**"
3 - 510 BHP Diesel Main Engines, Detroit 12V71TI
2 - 75 BHP Diesel Generator Engines, Detroit 3-71

Spelling: Alan T

"~~Allen T~~"
3 - 510 BHP Diesel Main Engines, Detroit 12V71TI
2 - 75 BHP Diesel Generator Engines, Detroit 3-71
"**Capt T Lee**"
3 - 510 BHP Diesel Main Engines, Detroit 12V71TI
2 - 75 BHP Diesel Generator Engines, Detroit 3-71
"**Nicholas L**"
3 - 510 BHP Diesel Main Engines, Detroit 12V71TI
2 - 40.2 BHP Diesel Generator Engines, Detroit 3-71
Renamed "~~NRC Freedom~~" Kenneth Carl
2 - 626 BHP Diesel Main Engines, Detroit 16V92N
2 - 54 BHP Diesel Generator Engines, Detroit 3-71
"**Patrick**"
3 - 510 BHP Diesel Main Engines, Detroit 12V71TI
2 - 75 BHP Diesel Generator Engines, Detroit 3-71
"**Peter Mac**"
3 - 510 BHP Diesel Main Engines, Detroit 12V71TI
2 - 75 BHP Diesel Generator Engines, Detroit 3-71
"**Michael Uhl**"
2 - 400 BHP Diesel Main Engines, Detroit 3V71
2 - 75 BHP Diesel Generator Engines, Detroit 3V71
"**Isabel L**"
3 - 600 BHP Diesel Main Engines, MTU Series 60
2 - 49 BHP Diesel Generator Engines, Isuzu A-4JG1

These ten sets of crew boat engines shall not be used simultaneously for servicing Platform Gina. The permittee shall maintain a log showing the days and hours that each crew boat is in service to Platform Gina. (Rule 29)

7. There are change sixty one permitted engines which are used on twelve Work Boats:

"**Victory Seahorse**"
2 - 2500 BHP Diesel Main Engines, EMD 16-645-ED3A
2 - 200 BHP Diesel Generator Engines, Detroit 8V-71 remove
1 - 300 BHP Diesel Thruster Engine, Detroit 8V-71
"Santa Cruz"
2 - 2000 BHP Diesel Main Engines, Caterpillar 3516B
2 - 245 BHP Diesel Generator Engines, Caterpillar 3306
1 - 515 BHP Diesel Thruster Engine, Caterpillar 3408
Renamed "~~NRC Freedom~~" - Kenneth Carl
2 - 626 BHP Diesel Main Engines, Detroit 16V92N
2 - 54 BHP Diesel Generator Engines, Detroit 3-71

"**NRC Patriot II**"
2 - 626 BHP Diesel Main Engines, Detroit 16V92N
2 - 54 BHP Diesel Generator Engines, Detroit 3-71
"**Ryan T**"
4 - 510 BHP Diesel Main Engines, Detroit 12V71TI
2 - 75 BHP Diesel Generator Engines, Detroit 3-71
"M/V San Miguel"
2 - 2000 BHP Diesel Main Engines, Caterpillar 3516B
2 - 245 BHP Diesel Generator Engines, Caterpillar 3306
1 - 500 BHP Diesel Thruster Engine, Caterpillar 3408C
"**Michael Uhl**"
2 - 400 BHP Diesel Main Engines, Detroit 3V71
2 - 75 BHP Diesel Generator Engines, Detroit 3V71
"**Isabel L**"
3 - 600 BHP Diesel Main Engines, MTU Series 60
2 - 49 BHP Diesel Generator Engines, Isuzu A-4JG1
"Danny C"
2 - 360 BHP Diesel Main Engines, Caterpillar 3406C
1 - 30 BHP Diesel Generator Engine, Shibaura M20CRW2
1 - 47 BHP Diesel Generator Engine, Isuzu 4JB1
1 - 45 BHP Winch Engine, Detroit 2-71
"**Pearl**"
2 - 930 BHP Diesel Main Engines, Detroit Diesel 16V149
2 - 200 BHP Diesel Generator Engines, Detroit Diesel 8VA-71 remove
1 - 325 BHP Diesel Bow Thruster Engine, Detroit Diesel 8VA-71
1 - 275 BHP Diesel Bow Thruster Engine, Detroit Diesel 6-71
"**Vigilance**"
2 - 1125 BHP Diesel Main Engines, Caterpillar D399 TA remove
2 - 245 BHP Diesel Generator Engines, Caterpillar 3306
1 - 325 BHP Diesel Bow Thruster Engine, Caterpillar 3406
1 - 325 BHP Diesel Winch Engine, Detroit Diesel 8-71
"M/V Cape Atlas"
2 - 3070 BHP Diesel Main Engines, EMD 16-645-E remove
1 - 500 BHP Diesel Bow Thruster Engine, Detroit 12V-71
2 - 133 Diesel Generator Engines, Detroit 8V-71N
1 - 550 BHP Diesel Tow Winch Engine, Detroit 12V-71

These twelve sets of work boat engines shall not be used simultaneously for servicing Platform Gina. The permittee shall maintain a log showing the days and hours that each work boat is in service to Platform Gina. (Rule 29)

8. There are two permitted 70 BHP gasoline engines which are used in one (1) Boom Boat that is operated for use on two platforms, "Gina" and "Gilda". The gasoline usage limit of 500 gallons per year is a limit for combined use on both platforms. These engines have EPA family names of 5SKXM1.302G8. The emission factors are based on the certificate levels in the EPA certification after converting the units of g/KW-hr to g/BHP-hr using a factor of 1.341 KW/HP.

   In order to comply with this condition, the permittee shall maintain monthly records of gasoline fuel consumption for the Boom Boat servicing OCS Platforms Gina and Gilda.

9. Pursuant to Rule 23.F.7, the use of solvents, in addition to the use of coatings, adhesives, lubricants, and sealants, for facility and building maintenance and repair is exempt from permit. However, the use of such materials by contractors for the maintenance and repair of process and industrial equipment is not exempt from permit pursuant to Rule 23.F.7, unless the material is exempted under another specific section of Rule 23. Pursuant to Rule 23.F.6, the use of non-refillable aerosol cans is exempt from permit. Pursuant to Rule 23.F.10, the use of cleaning agents certified by the SCAQMD as Clean Air Solvents (Rule 23.F.10.a) and the use of cleaning agents that contain no more than 25 grams per liter of ROC as used or applied, and no more than 5 percent by weight combined of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, and chloroform (Rule 23.F.10.b), is also exempt from permit. This permit does not limit the usage of acetone. Acetone is exempt from permit and record keeping requirements, as it is not defined as a reactive organic compound.

   In order to substantiate the solvent use exemptions listed above, the permittee shall maintain a list of all exempt solvents used at the stationary source and a reference to the specific permit exemption status.

   (Rule 29)

This list has been received. See changes within. Christine White

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 14798 1 - 250 Barrel | Produced Water Tank (TK-14)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301062 - Brth Ht<12' VP 1.5-3.0psi	bbl-Cap.	250.0000 bbl-Cap.	0.0285 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.00	1.0600	0.1000	0.1060	Y	Y			Vapor Recovery (90%)

DEVICE NO: 14799 1 - 200 Barrel | Wash Tank

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301066 - Brth Ht 12-20' VP 1.5-3.0	bbl-Cap.	200.0000 bbl-Cap.	0.0228 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.00	0.8500	0.1000	0.0850	Y	Y			Vapor Recovery (90%)

DEVICE NO: 14800 1 - 130 Barrel | Produced Water Tank (Waste Oil TK-2)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301062 - Brth Ht<12' VP 1.5-3.0psi	bbl-Cap.	130.0000 bbl-Cap.	0.0148 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.01	0.00	1.0600	0.1000	0.1060	Y	Y			Vapor Recovery (90%)

DEVICE NO: 14802 1 - 35 Barrel | Produced Water Tank, Wemco Flotation Cell, Model No. 56

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301061 - Brth Ht<12' VP <1.5 psi	bbl-Cap.	35.0000 bbl-Cap.	0.0040 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	0.4300	0.1000	0.0430	Y	Y			Vapor Recovery (90%)

DEVICE NO: 14803 1 - 3.14 Sqft-Surface | Pit (2 ft diameter covered floor drain pit)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000105 - Pits	sqft-surf.	3.1400 sqft-surf.	0.0004 sqft-surf.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	3.6500	0.1000	0.3650	Y	Y			Sump/Pit Cover

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 14805 1 - 142 MMBTU/hr — Flare, John Zink Model LRGO-4/FF, maximum design gas flow throughput of 2 MMCF/Day, equipped with an automatic ignition system and smokeless tip. The flare is used for both sweet and sour gas and planned and unplanned flaring.

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
10201302 - Flare	MMcf	16.6000 MMcf	142.0000 MMBTU NG	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.45	7.35	54.3980	1.0000	54.3980	Y	Y			
Nitrogen Oxides	0.59	9.65	71.4000	1.0000	71.4000	Y	Y			
Particulate Matter	0.04	0.71	5.2500	1.0000	5.2500	Y	Y			
Sulfur Oxides	4.41	71.87	531.6000	1.0000	531.6000	Y	Y	Y		
Carbon Monoxide	3.22	52.53	388.5000	1.0000	388.5000	Y	Y			

DEVICE NO: 14806 1 - 325 BHP — Caterpillar Diesel Engine Model 3406B, Crane Engine (Crane No. 1)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
?00102 - Diesel ICE - Industrial	Mgal	2.8700 Mgal	0.0230 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.05	0.76	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.67	10.79	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.05	0.77	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.01	0.17	75.0000	0.1000	7.5000	Y	Y			Low Sulfur 0.05 fuel
Carbon Monoxide	0.15	2.35	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 14825 1 - 450 BHP — Cummins Diesel Engine, Model 3406, Serial No. NT4855-62/63, used as a backup utility generator

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	6.3828 Mgal	450.0000 BHP-d<1000	Calculate Annual Using 200 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.11	1.06	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	1.50	14.96	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.11	1.07	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.02	0.24	75.0000	0.1000	7.5000	Y	Y			Low Sulfur 0.05 fuel
Carbon Monoxide	0.33	3.25	102.0000	1.0000	102.0000	Y	Y			

Equipment and Emissions Summary

01491 - REN Platform Gina Permit Period: 4/1/2012 to 3/31/2013 SIC Code 1311 - Crude Oil Production

DEVICE NO: 18301 1 - 0 Boom Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200302 - Gasoline ICE-g/hp-hr<100	BHP-g<1000	0.0000	BHP-g<1000 0.0000	BHP-g<1000

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	6.8100	1.0000	6.8100	Y	Y			
Nitrogen Oxides	0.00	0.00	4.9900	1.0000	4.9900	Y	Y			
Particulate Matter	0.00	0.00	0.3270	1.0000	0.3270	Y	Y			
Sulfur Oxides	0.00	0.00	0.2680	1.0000	0.2680	Y	Y			
Carbon Monoxide	0.00	0.00	3.1600	1.0000	3.1600	Y	Y			

DEVICE NO: 18302 2 - 70 BHP Suzuki Gasoline Engines, Model DF-70, Serial Nos. 07001F-423028 and 07001F-423033, EPA family Name 5SKXM1.302G8, Model year 2005

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200302 - Gasoline ICE-g/hp-hr<100	BHP-g<1000	0.1250 Mgal	70.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.02	1.21	3.9116	1.0000	3.9116	Y	Y	Y		
Nitrogen Oxides	0.02	1.68	5.4504	1.0000	5.4504	Y	Y	Y		
Particulate Matter	0.00	0.10	0.3270	1.0000	0.3270	Y	Y			
Sulfur Oxides	0.00	0.08	0.2680	1.0000	0.2680	Y	Y			
Carbon Monoxide	0.58	45.83	148.6152	1.0000	148.6152	Y	Y	Y		

Emissioin Factors from EPA Certificate for Engin with EPA Family of 5SKXM1.302G8 after conversion from gr/KW-hr to gr/BHP-hr

DEVICE NO: 14822 1 - 0 Portable Engines - Ryan T (Previous Name Wendy Tide) for Operation of Crew Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	72.5000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	1.20	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	20.34	0.00	561.0000	1.0000	561.0000	Y	Y	Y		
Particulate Matter	1.21	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.27	0.00	75.0000	0.1000	7.5000	Y	Y			Low Sulfur 0.05 fuel
Carbon Monoxide	3.70	0.00	102.0000	1.0000	102.0000	Y	Y			

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 14823 4 - 510 BHP | Detroit Diesel Engines Model 12V71TI, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	510.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	4.80	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	81.23	561.0000	1.0000	561.0000	Y	Y	Y		
Particulate Matter	0.00	4.85	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	1.09	75.0000	0.1000	7.5000	Y	Y			Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	14.77	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 14824 2 - 75 BHP | Detroit Diesel Engines Model 3-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	75.0000 BHP-d<1000	

)LLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.35	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	5.95	561.0000	1.0000	561.0000	Y	Y	Y		
Particulate Matter	0.00	0.36	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.08	75.0000	0.1000	7.5000	Y	Y			Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	1.08	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 14815 1 - 0 | Portable Engines - Luke (Previous Name Robbie Tide) for Operation of Crew Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	0.00	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	N	N			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	N	N			

Equipment and Emissions Summary

01491 - REN Platform Gina Permit Period: 4/1/2012 to 3/31/2013 SIC Code 1311 - Crude Oil Production

DEVICE NO: 14807 3 - 510 BHP Detroit Diesel Engines Model 12V71TI, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	510.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	3.60	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	60.92	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	3.64	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.81	75.0000	0.1000	7.5000	N	N			Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	11.08	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 14808 2 - 75 BHP Detroit Diesel Engines Model 3-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	75.0000 BHP-d<1000	

_LUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.35	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	5.95	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	0.36	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.08	75.0000	0.1000	7.5000	N	N			Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	1.08	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 18248 1 - 0 spelling Alan T Portable Engines - ~~Allen~~ T for Operation of Crew Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

^dd for process file only for clarification in the Equipment and Emissions Summary

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18249 3 - 510 BHP | Detroit Diesel Engines, Model 12V71TI, Main Engines.

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 BHP-d<1000	510.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	3.60	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	60.92	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	3.64	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	8.15	75.0000	1.0000	75.0000	N	N			
Carbon Monoxide	0.00	11.08	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 18250 2 - 75 BHP | Detroit Diesel Engines, Model 3-71, Generator Engines.

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	75.0000 BHP-d<1000	

OLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.35	33.1500	1.0000	33.1500	Y	N			
Nitrogen Oxides	0.00	5.95	561.0000	1.0000	561.0000	Y	N	Y		
Particulate Matter	0.00	0.36	33.5000	1.0000	33.5000	Y	N			
Sulfur Oxides	0.00	0.80	75.0000	1.0000	75.0000	Y	N			
Carbon Monoxide	0.00	1.08	102.0000	1.0000	102.0000	Y	N			

DEVICE NO: 18251 1 - 0 | Portable Engines - Capt T Lee for Operation of Crew Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

Add process only for clarification in Emission Summary form

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18252 3 - 510 BHP — Detroit Diesel Engines, Model 12V71 TI 535, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	510.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	3.60	33.1500	1.0000	33.1500	Y	N			
Nitrogen Oxides	0.00	60.92	561.0000	1.0000	561.0000	Y	N	Y		
Particulate Matter	0.00	3.64	33.5000	1.0000	33.5000	Y	N			
Sulfur Oxides	0.00	8.15	75.0000	1.0000	75.0000	Y	N			
Carbon Monoxide	0.00	11.08	102.0000	1.0000	102.0000	Y	N			

DEVICE NO: 18253 2 - 75 BHP — Detroit Diesel Engines, Model 3-71, Generator Engines.

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

OLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

Add Process with Zero (0) Emissions only for clarification

DEVICE NO: 18274 1 - 0 — Portable Engines - Nicholas L for Operation of Crew Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

\dd Process only for Clarification

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18275 3 - 510 BHP — Detroit Diesel Engines, Model 12V71 T1, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	510.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	3.60	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	60.92	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	3.64	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	8.15	75.0000	1.0000	75.0000	N	N			
Carbon Monoxide	0.00	11.08	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 18276 2 - 40.2 BHP — Detroit Diesel Engines,Model 3-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	40.2000 BHP-d<1000	

)LLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.19	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	3.25	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	0.19	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.44	75.0000	1.0000	75.0000	N	N			
Carbon Monoxide	0.00	0.59	102.0000	1.0000	102.0000	N	N			

renamed Kenneth Carl

DEVICE NO: 18277 1 - 0 — Portable Engines - NRC Freedom for Operation of Crew Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

Add process for future & clarification

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18278 2 - 626 BHP | Detroit Diesel Engines, Model 16V92N, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	626.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	2.94	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	49.82	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	2.97	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	6.66	75.0000	1.0000	75.0000	N	N			
Carbon Monoxide	0.00	9.06	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 18279 2 - 54 BHP | Detroit Diesel Engines, Model 3-71 , Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	57.0000 BHP-d<1000	

LLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.27	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	4.49	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	0.27	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.60	75.0000	1.0000	75.0000	N	N			
Carbon Monoxide	0.00	0.82	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 18283 1 - 0 | Portable Engines - Patrick for Operation of Crew Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

Add process only for future & clarification

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18284 3 - 510 BHP — Detroit Diesel Engines, Model 12V71T1, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	510.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	3.60	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	60.92	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	3.64	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	8.15	75.0000	1.0000	75.0000	N	N			
Carbon Monoxide	0.00	11.08	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 18285 2 - 75 BHP — Detroit Diesel Engines Model 3-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

LLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 18286 1 - 0 — Portable Engines - Peter Mac for Operation of Crew Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18287 3 - 510 BHP — Detroit Diesel Engines, Model 12V71 T1 535, Main Generators

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 18288 2 - 75 BHP — Detroit Diesel Engines, Model 3-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

.LUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 14817 1 - 0 — Portable Engines - Victory Seahorse for Operation of Work Boat — Remove

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	11.9000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.20	0.00	33.1500	1.0000	33.1500	Y	N			
Nitrogen Oxides	3.34	0.00	561.0000	1.0000	561.0000	Y	N	Y		
Particulate Matter	0.20	0.00	33.5000	1.0000	33.5000	Y	N			
Sulfur Oxides	0.04	0.00	7.5000	1.0000	7.5000	Y	N	Y		
Carbon Monoxide	0.61	0.00	102.0000	1.0000	102.0000	Y	N			

Emi. Fac.of NOx is based on t/yr limit calculated based on gal/yr usage limit set on Cond 5 of Sec. 8 of PO 01491PC1

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 14818 2 - 2500 BHP | EMD Diesel Engines Model 16-645-ED3A, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 BHP-d>1000	2500.0000 BHP-d>1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	9.64	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	163.14	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	9.74	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	2.18	7.5000	1.0000	7.5000	N	N	Y		
Carbon Monoxide	0.00	29.66	102.0000	1.0000	102.0000	N	N			

remove

Emi. Fac.of NOx is based on t/yr limit calculated based on gal/yr usage limit set on Cond 5 of Sec. 8 of PO 01491PC1

DEVICE NO: 14812 2 - 200 BHP | Detroit Diesel Engines Model N0. 8V-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 BHP-d<1000	200.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.94	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	15.93	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	0.95	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.21	7.5000	1.0000	7.5000	N	N	Y		
Carbon Monoxide	0.00	2.90	102.0000	1.0000	102.0000	N	N			

remove

Emi. Fac.of NOx is based on t/yr limit calculated based on gal/yr usage limit set on Cond 5 of Sec. 8 of PO 01491PC1

DEVICE NO: 14813 1 - 300 BHP | Detroit Diesel Engine Model N0. 8V-71, Bow Thruster Engine

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 BHP-d<1000	300.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.71	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	11.95	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	0.71	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.16	7.5000	1.0000	7.5000	N	N	Y		
rbon Monoxide	0.00	2.17	102.0000	1.0000	102.0000	N	N			

remove

ni. Fac.of NOx is based on t/yr limit calculated based on gal/yr usage limit set on Cond 5 of Sec. 8 of PO 01491PC1

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 14816 1 - 0 | Portable Engines - Santa Cruz for Operation of Work Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	11.9000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.20	0.00	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	3.34	0.00	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.20	0.00	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.04	0.00	75.0000	0.1000	7.5000	N	N			Low Sulfur 0.05 fuel
Carbon Monoxide	0.61	0.00	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 14819 2 - 2000 BHP | Caterpillar Diesel Engines Model 3516B, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	2000.0000 BHP-d>1000	

_LUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	7.71	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	130.49	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	7.79	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	1.74	75.0000	0.1000	7.5000	N	N			Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	23.73	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 14820 2 - 245 BHP | Caterpillar Diesel Engines Model 3306, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	245.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	1.15	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	19.52	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	1.17	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.26	75.0000	0.1000	7.5000	N	N			Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	3.55	102.0000	1.0000	102.0000	N	N			

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 14821 1 - 515 BHP — Caterpillar Diesel Engine Model 3408, Bow Thruster Engine

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	515.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	1.21	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	20.48	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	1.22	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.27	75.0000	0.1000	7.5000	N	N			Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	3.72	102.0000	1.0000	102.0000	N	N			

Renamed - Kenneth Carl

DEVICE NO: 18294 1 - 0 — Portable Engines - NRC Freedom for Operation of Work Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

LLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 18289 2 - 626 BHP — Detroit Diesel Engines, Model 16V92N, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 BHP-g<1000	Calculate Annual Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18290 2 - 54 BHP — Detroit Diesel Engines, Model 3-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 18295 1 - 0 — Portable Engines - NRC Patriot II for Operation of Work Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

'LUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 18291 2 - 626 BHP — Detroit Diesel Engines, Model 16V92N, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18292 2 - 54 BHP — Detroit Diesel Engines, Model 3-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 18296 1 - 0 — Portable Engines - Ryan T (Previous Name Wendy Tide) for operation of Work Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

)LLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 18297 4 - 510 BHP — Detroit Diesel Engines, Model 12V71T1, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18298 2 - 75 BHP | Detroit Diesel Engines, Model 3-71, Generator Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	Y	Y			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	Y	Y			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	Y	Y			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	Y	Y			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	Y	Y			

DEVICE NO: 18594 1 - 0 | Portable Engines - M/V San Miguel for Operation of Work Boat

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	0.0000 BHP-d>1000	

LLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.00	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	0.00	469.0000	1.0000	469.0000	N	N			
Particulate Matter	0.00	0.00	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.00	75.0000	1.0000	75.0000	N	N			
Carbon Monoxide	0.00	0.00	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 18595 2 - 2000 BHP | Caterpillar Diesel Engines, Model 3516B, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	2000.0000 BHP-d>1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	7.71	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	130.49	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	7.79	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	17.45	75.0000	1.0000	75.0000	N	N	Y		
Carbon Monoxide	0.00	23.73	102.0000	1.0000	102.0000	N	N			

emission factor for NOx according to letter dated Dec/22/06 of Application No. 241 is 561 Lb/1000 gal

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 18596 2 - 245 BHP — Caterpillar Diesel Engines, Model 3306 (175 KW), Generator Engines.

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	245.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	1.15	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	19.52	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	1.17	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.26	75.0000	0.1000	7.5000	N	N	Y		Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	3.55	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 18597 1 - 500 BHP — Caterpillar Diesel Engine, Model 3408C, Bow Thruster Engine.

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	500.0000 BHP-d<1000	

)LLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	1.18	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	0.00	19.92	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.00	1.19	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.00	0.27	75.0000	0.1000	7.5000	N	N	Y		Low Sulfur 0.05 fuel
Carbon Monoxide	0.00	3.62	102.0000	1.0000	102.0000	N	N			

DEVICE NO: 19493 1 - 0 — Portable Engines - Cape Atlas for Operation of Work Boat *

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	11.9000 Mgal	0.0000 Mgal	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.20	0.00	33.1500	1.0000	33.1500	N	N			
Nitrogen Oxides	3.34	0.00	561.0000	1.0000	561.0000	N	N	Y		
Particulate Matter	0.20	0.00	33.5000	1.0000	33.5000	N	N			
Sulfur Oxides	0.04	0.00	75.0000	0.1000	7.5000	N	N			Low Sulfur 0.05 fuel
Carbon Monoxide	0.61	0.00	102.0000	1.0000	102.0000	N	N			

remove

This was created just for Title of new work boat in PEETS (Cape Atlas), no annual emission selected since "Victory Seahourse Annual emissions is higher an this. NOx Emi.Fact selected is based on t/yr limit calculated based on gal/yr usag

* Please note that Cape Atlas will remain on Platform gilda's permit (1492)

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 19494 2 - 3070 BHP — EMD Diesel Engines, Model 16-645-E, Serial Nos. 77A3-1528 and 73-B1-1-149, Main Engines

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 BHP-d>1000	3070.0000 BHP-d>1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	11.84	33.1500	1.0000	33.1500	N	Y			
Nitrogen Oxides	0.00	200.39	561.0000	1.0000	561.0000	N	Y	Y		
Particulate Matter	0.00	11.97	33.5000	1.0000	33.5000	N	Y			
Sulfur Oxides	0.00	2.68	7.5000	1.0000	7.5000	N	Y	Y		
Carbon Monoxide	0.00	36.43	102.0000	1.0000	102.0000	N	Y			

remove

Emi. Fac.of NOx is based on t/yr limit calculated based on gal/yr usage limit set on Cond 5 of Sec. 8 of PO 01491PC1

DEVICE NO: 19495 1 - 500 BHP — Detroit Diesel Engine, Model 12V-71, Serial No. 12UA74032, Bow Thruster Engine.

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	500.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	1.18	33.1500	1.0000	33.1500	N	Y			
Nitrogen Oxides	0.00	19.92	561.0000	1.0000	561.0000	N	Y	Y		
Particulate Matter	0.00	1.19	33.5000	1.0000	33.5000	N	Y			
Sulfur Oxides	0.00	0.27	7.5000	1.0000	7.5000	N	Y	Y		
Carbon Monoxide	0.00	3.62	102.0000	1.0000	102.0000	N	Y			

remove

Emi. Fac.of NOx is based on t/yr limit calculated based on gal/yr usage limit set on Cond 5 of Sec. 8 of PO 01491PC1

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 19496 2 - 133 BHP — Detroit Diesel Engines, Model 8V-71N, Serial Nos. 8UA425887 7033-7005 and 8UA85937 7087-7040, Generator Engines.

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
20200102 - Diesel ICE - Industrial	Mgal	0.0000 Mgal	133.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	0.62	33.1500	1.0000	33.1500	N	Y			
Nitrogen Oxides	0.00	10.55	561.0000	1.0000	561.0000	N	Y	Y		
Particulate Matter	0.00	0.63	33.5000	1.0000	33.5000	N	Y			
Sulfur Oxides	0.00	0.14	7.5000	1.0000	7.5000	N	Y	Y		
Carbon Monoxide	0.00	1.92	102.0000	1.0000	102.0000	N	Y			

remove

Emi. Fac.of NOx is based on t/yr limit calculated based on gal/yr usage limit set on Cond 5 of Sec. 8 of PO 01491PC1

DEVICE NO: 19497 1 - 550 BHP — Detroit Diesel Engine, Model 12V-71, Serial No. 12VA76311, Tow Winch Engine

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
00102 - Diesel ICE - Industrial	Mgal	0.0000 BHP-d<1000	550.0000 BHP-d<1000	

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.00	1.29	33.1500	1.0000	33.1500	N	Y			
Nitrogen Oxides	0.00	21.88	561.0000	1.0000	561.0000	N	Y	Y		
Particulate Matter	0.00	1.31	33.5000	1.0000	33.5000	N	Y			
Sulfur Oxides	0.00	0.29	7.5000	1.0000	7.5000	N	Y	Y		
Carbon Monoxide	0.00	3.98	102.0000	1.0000	102.0000	N	Y			

remove

Emi. Fac.of NOx is based on t/yr limit calculated based on gal/yr usage limit set on Cond 5 of Sec. 8 of PO 01491PC1

DEVICE NO: 14797 8 - 0 — Oil Wells (Slot Nos. 1, 3, 5, 7, 8, 12, 13, 14)

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
31000122 - Crude Oil Well	Well-Day	365.0000 Well-Day	0.0417 Well-Day	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	2.92	0.67	2.0000	1.0000	2.0000	Y	Y			

Equipment and Emissions Summary

01491 - REN Platform Gina | Permit Period: 4/1/2012 to 3/31/2013 | SIC Code 1311 - Crude Oil Production

DEVICE NO: 14801 1 - 500 Barrel | Portable Tank, without vapor recovery

SOURCE CLASSIFICATION CODE	SCC Units	Prmt Annual Throughput	Max Hourly Throughput	Hours Per Year (if used)
40301062 - Brth Ht<12' VP 1.5-3.0psi	bbl-Cap.	500.0000 bbl-Cap.	0.0571 bbl-Cap.	Calculate Hourly Using 8760 Hrs/Yr

POLLUTANT	Tons/Yr	Lbs/Hr	Uncntl EF	Cntl Factor	Cntl EF	APE?	HPE?	EF Over	CF Over	Control Device
Reactive Organics	0.27	0.06	1.0600	1.0000	1.0600	Y	Y			

DCOR, LLC - Platform Gina
HAP Emission Calculations - Summary

HAP Name	HAP CAS No.	PTE/Max. lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	74.18	31.67
Acrolein	107028	3.37	1.37
Benzene	71432	37.57	24.59
Ethyl Benzene	100414	503.60	30.90
Formaldehyde	50000	181.49	70.13
Hexane	110543	3.00	1.10
Naphthalene	91203	97.05	6.12
PAHs (excluding naphthalene)	1151	3.44	1.46
Propylene	115071	84.24	19.65
Toluene	108883	11.77	4.28
Xylenes	1210	1,905.28	108.12
1,3-Butadiene	106990	20.47	8.79
Chlorobenzene	108907	0.02	0.01
Hydrogen chloride	7647010	17.45	7.53
Arsenic	7440382	0.15	0.06
Cadmium	7440439	0.14	0.06
Hexavalent Chromium	18540299	0.01	0.00
Copper	7440508	0.38	0.17
Lead	7439921	0.78	0.34
Manganese	7439965	0.29	0.13
Mercury	7439976	0.19	0.08
Nickel	7446020	0.37	0.16
Selenium	7782492	0.21	0.09
Zinc	7440666	2.10	0.91
Ammonia	7664417	74.92	32.33
Diesel Exhaust Particulates	9901	3,137.37	1,353.74
1,2,4-Trimethylbenzene	95636	0.17	0.00
Chlorine	7782505	0.06	0.00
Methanol	67561	0.10	0.00
Methyl Ethyl Ketone (MEK)	78933	0.01	0.00
Methyl tert-Butyl Ether (MTBE)	1634044	0.26	0.00
Styrene	100425	0.02	0.00
Hydrogen Sulfide	7783064	0.06	0.06

DCOR, LLC - Platform Gilda
HAP Emission Calculations - Flare

SIC	1311			HHV= 1124 BTU/cf
PROCESS EQPT DESCRIPTION	FLARE, 142 MMBTU/HR			
FUEL TYPE/PROCESS INFO	NATURAL/PRODUCED GAS			
MAXIMUM ANNUAL PROCESS RATE	16.60	MMCF	[permit]	
MAXIMUM HOURLY PROCESS RATE	0.0833	MMCF	[permit, 2 MMCFD]	
HRS/YEAR	As needed		199.2	
2011 ACTUAL LOAD	1.9%	[based on 0.32 MMcf/year in 2011]		

HAP Name	HAP CAS No.	Emission Factor lbs/MMBtu	Emission Factor lbs/MMcf	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	3.83E-05	0.0430	0.0036	0.7138	0.0138
Acrolein	107028	8.90E-06	0.0100	0.0008	0.1660	0.0032
Benzene	71432	1.41E-04	0.1590	0.0133	2.6394	0.0509
Ethyl Benzene	100414	1.28E-03	1.4440	0.1203	23.9704	0.4621
Formaldehyde	50000	1.04E-03	1.1690	0.0974	19.4054	0.3741
Hexane	110543	2.58E-05	0.0290	0.0024	0.4814	0.0093
Naphthalene	91203	9.79E-06	0.0110	0.0009	0.1826	0.0035
PAHs (excluding naphthalene)	1151	2.67E-06	0.0030	0.0003	0.0498	0.0010
Propylene	115071	2.17E-03	2.4400	0.2033	40.5040	0.7808
Toluene	108883	5.16E-05	0.0580	0.0048	0.9628	0.0186
Xylenes	1330207	2.58E-05	0.0290	0.0024	0.4814	0.0093

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001.

DCOR, LLC Platform Gilda

HAP Emission Calculations - Crane

SIC	1311		
PROCESS EQPT DESCRIPTION	CRANE ENGINE (CAT 3406B - 325 BHP)		
FUEL TYPE/PROCESS INFO	DIESEL		
MAXIMUM ANNUAL PROCESS RATE	2.87	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.0230	MGAL/HR	[permit = 0.023 Mgal/hr]
HRS/YEAR	8760		
2011 ACTUAL LOAD	23.7%	[based on 0.68 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.7833	0.0180	2.2481	0.5326
Acrolein	107028	0.0339	0.0008	0.0973	0.0231
Benzene	71432	0.1863	0.0043	0.5347	0.1267
Ethyl Benzene	100414	0.0109	0.0003	0.0313	0.0074
Formaldehyde	50000	1.7261	0.0397	4.9539	1.1737
Hexane	110543	0.0269	0.0006	0.0772	0.0183
Naphthalene	91203	0.0197	0.0005	0.0565	0.0134
PAHs (excluding naphthalene)	1151	0.0362	0.0008	0.1039	0.0246
Propylene	115071	0.4670	0.0107	1.3403	0.3176
Toluene	108883	0.1054	0.0024	0.3025	0.0717
Xylenes	1330207	0.0424	0.0010	0.1217	0.0288
1,3-Butadiene	106990	0.2174	0.0050	0.6239	0.1478
Chlorobenzene	108907	0.0002	0.0000	0.0006	0.0001
Hydrogen chloride	7647010	0.1863	0.0043	0.5347	0.1267
Arsenic	7440382	0.0016	0.0000	0.0046	0.0011
Cadmium	7440439	0.0015	0.0000	0.0043	0.0010
Hexavalent Chromium	18540299	0.0001	0.0000	0.0003	0.0001
Copper	7440508	0.0041	0.0001	0.0118	0.0028
Lead	7439921	0.0083	0.0002	0.0238	0.0056
Manganese	7439965	0.0031	0.0001	0.0089	0.0021
Mercury	7439976	0.0020	0.0000	0.0057	0.0014
Nickel	7440020	0.0039	0.0001	0.0112	0.0027
Selenium	7782492	0.0022	0.0001	0.0063	0.0015
Zinc	7440666	0.0224	0.0005	0.0643	0.0152
Ammonia	7664417	0.8000	0.0184	2.2960	0.5440
Diesel Exhaust Particulates	9901	33.5000	0.7705	96.1450	22.7800

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001 (Diesel Internal Combustion Factors).
2. Ammonia and Diesel Exhaust Particulates EFs provided by SCAQMD, AER Program supplemental instructions.

DCOR, LLC - Platform Gilda
HAP Emission Calculations - Generator

SIC	1311		
PROCESS EQPT DESCRIPTION	BACKUP GENERATOR ENGINE (CUMMINS - 450 BHP)		
FUEL TYPE/PROCESS INFO	DIESEL		
MAXIMUM ANNUAL PROCESS RATE	6.3828	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.0270	MGAL/HR	[assume 27.0 gal/hr based on 0.06 gal/bhp & max bhp]
HRS/YEAR	200		
2011 ACTUAL LOAD	9.9%	[based on 0.63 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.7833	0.0211	4.9996	0.4935
Acrolein	107028	0.0339	0.0009	0.2164	0.0214
Benzene	71432	0.1863	0.0050	1.1891	0.1174
Ethyl Benzene	100414	0.0109	0.0003	0.0696	0.0069
Formaldehyde	50000	1.7261	0.0466	11.0174	1.0874
Hexane	110543	0.0269	0.0007	0.1717	0.0169
Naphthalene	91203	0.0197	0.0005	0.1257	0.0124
PAHs (excluding naphthalene)	1151	0.0362	0.0010	0.2311	0.0228
Propylene	115071	0.4670	0.0126	2.9808	0.2942
Toluene	108883	0.1054	0.0028	0.6727	0.0664
Xylenes	1330207	0.0424	0.0011	0.2706	0.0267
1,3-Butadiene	106990	0.2174	0.0059	1.3876	0.1370
Chlorobenzene	108907	0.0002	0.0000	0.0013	0.0001
Hydrogen chloride	7647010	0.1863	0.0050	1.1891	0.1174
Arsenic	7440382	0.0016	0.0000	0.0102	0.0010
Cadmium	7440439	0.0015	0.0000	0.0096	0.0009
Hexavalent Chromium	18540299	0.0001	0.0000	0.0006	0.0001
Copper	7440508	0.0041	0.0001	0.0262	0.0026
Lead	7439921	0.0083	0.0002	0.0530	0.0052
Manganese	7439965	0.0031	0.0001	0.0198	0.0020
Mercury	7439976	0.0020	0.0001	0.0128	0.0013
Nickel	7440020	0.0039	0.0001	0.0249	0.0025
Selenium	7782492	0.0022	0.0001	0.0140	0.0014
Zinc	7440666	0.0224	0.0006	0.1430	0.0141
Ammonia	7664417	0.8000	0.0216	5.1062	0.5040
Diesel Exhaust Particulates	9901	33.5000	0.9045	213.8238	21.1050

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001 (Diesel Internal Combustion Factors).
2. Ammonia and Diesel Exhaust Particulates EFs provided by SCAQMD, AER Program supplemental instructions.

DCOR, LLC - Platform Gilda
HAP Emission Calculations - Crew Boats

SIC	1311		
PROCESS EQPT DESCRIPTION	DIESEL ENGINES - CREW BOATS		
FUEL TYPE/PROCESS INFO	DIESEL		
MAXIMUM ANNUAL PROCESS RATE	72.50	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.0351	MGAL/HR	[based on Ryan T (former Wendy Tide): (3 x 510 BHP + 2 x 75 BHP) x 0.06 gal/bhp/hr]
HRS/YEAR	As needed		
2011 ACTUAL LOAD	46.2%	[based on 33.5 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.7833	0.0275	56.7893	26.2406
Acrolein	107028	0.0339	0.0012	2.4578	1.1357
Benzene	71432	0.1863	0.0065	13.5068	6.2411
Ethyl Benzene	100414	0.0109	0.0004	0.7903	0.3652
Formaldehyde	50000	1.7261	0.0606	125.1423	57.8244
Hexane	110543	0.0269	0.0009	1.9503	0.9012
Naphthalene	91203	0.0197	0.0007	1.4283	0.6600
PAHs (excluding naphthalene)	1151	0.0362	0.0013	2.6245	1.2127
Propylene	115071	0.4670	0.0164	33.8575	15.6445
Toluene	108883	0.1054	0.0037	7.6415	3.5309
Xylenes	1330207	0.0424	0.0015	3.0740	1.4204
1,3-Butadiene	106990	0.2174	0.0076	15.7615	7.2829
Chlorobenzene	108907	0.0002	0.0000	0.0145	0.0067
Hydrogen chloride	7647010	0.1863	0.0065	13.5068	6.2411
Arsenic	7440382	0.0016	0.0001	0.1160	0.0536
Cadmium	7440439	0.0015	0.0001	0.1088	0.0503
Hexavalent Chromium	18540299	0.0001	0.0000	0.0073	0.0034
Copper	7440508	0.0041	0.0001	0.2973	0.1374
Lead	7439921	0.0083	0.0003	0.6018	0.2781
Manganese	7439965	0.0031	0.0001	0.2248	0.1039
Mercury	7439976	0.0020	0.0001	0.1450	0.0670
Nickel	7440020	0.0039	0.0001	0.2828	0.1307
Selenium	7782492	0.0022	0.0001	0.1595	0.0737
Zinc	7440666	0.0224	0.0008	1.6240	0.7504
Ammonia	7664417	0.8000	0.0281	58.0000	26.8000
Diesel Exhaust Particulates	9901	33.5000	1.1759	2428.7500	1122.2500

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001 (Diesel Internal Combustion Factors).
2. Ammonia and Diesel Exhaust Particulates EFs provided by SCAQMD, AER Program supplemental instructions.

DCOR, LLC Platform Gilda
HAP Emission Calculations - Work Boats

SIC	1311		
PROCESS EQPT DESCRIPTION	DIESEL ENGINES - WORK BOATS		
FUEL TYPE/PROCESS INFO	DIESEL		
MAXIMUM ANNUAL PROCESS RATE	11.90	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.3420	MGAL/HR	[based on Victory Seahorse: (2 x 2500 BHP + 2 x 200 BHP + 1 x 300 BHP) x 0.06 gal/bh
HRS/YEAR	As needed		
2011 ACTUAL LOAD	47.1%	[based on 5.6 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.7833	0.2679	9.3213	4.3865
Acrolein	107028	0.0339	0.0116	0.4034	0.1898
Benzene	71432	0.1863	0.0637	2.2170	1.0433
Ethyl Benzene	100414	0.0109	0.0037	0.1297	0.0610
Formaldehyde	50000	1.7261	0.5903	20.5406	9.6662
Hexane	110543	0.0269	0.0092	0.3201	0.1506
Naphthalene	91203	0.0197	0.0067	0.2344	0.1103
PAHs (excluding naphthalene)	1151	0.0362	0.0124	0.4308	0.2027
Propylene	115071	0.4670	0.1597	5.5573	2.6152
Toluene	108883	0.1054	0.0360	1.2543	0.5902
Xylenes	1330207	0.0424	0.0145	0.5046	0.2374
1,3-Butadiene	106990	0.2174	0.0744	2.5871	1.2174
Chlorobenzene	108907	0.0002	0.0001	0.0024	0.0011
Hydrogen chloride	7647010	0.1863	0.0637	2.2170	1.0433
Arsenic	7440382	0.0016	0.0005	0.0190	0.0090
Cadmium	7440439	0.0015	0.0005	0.0179	0.0084
Hexavalent Chromium	18540299	0.0001	0.0000	0.0012	0.0006
Copper	7440508	0.0041	0.0014	0.0488	0.0230
Lead	7439921	0.0083	0.0028	0.0988	0.0465
Manganese	7439965	0.0031	0.0011	0.0369	0.0174
Mercury	7439976	0.0020	0.0007	0.0238	0.0112
Nickel	7440020	0.0039	0.0013	0.0464	0.0218
Selenium	7782492	0.0022	0.0008	0.0262	0.0123
Zinc	7440666	0.0224	0.0077	0.2666	0.1254
Ammonia	7664417	0.8000	0.2736	9.5200	4.4800
Diesel Exhaust Particulates	9901	33.5000	11.4570	398.6500	187.6000

Notes:

1. HAP/toxics EFs provided by VCAPCD, 5/17/2001 (Diesel Internal Combustion Factors).
2. Ammonia and Diesel Exhaust Particulates EFs provided by SCAQMD, AER Program supplemental instructions.

DCOR, LLC Platform Gilda

HAP Emission Calculations - Boom Boats

SIC	1311		
PROCESS EQPT DESCRIPTION	GASOLINE ENGINES - BOOM BOATS		
FUEL TYPE/PROCESS INFO	GASOLINE		
MAXIMUM ANNUAL PROCESS RATE	0.125	MGAL/YR	[permit]
MAXIMUM HOURLY PROCESS RATE	0.0040	MGAL/HR	[based on 2 x 70 BHP, 2.0 GPH average from engine spec sheet]
HRS/YEAR	As needed		
2011 ACTUAL LOAD	0.0%	[based on 0.00 Mgals/year in 2011]	

HAP Name	HAP CAS No.	Emission Factor lbs/1000 gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Acetaldehyde	75070	0.8298	0.0033	0.1037	0.0000
Acrolein	107028	0.1992	0.0008	0.0249	0.0000
Benzene	71432	3.8061	0.0152	0.4758	0.0000
Ethyl Benzene	100414	1.6596	0.0066	0.2075	0.0000
Formaldehyde	50000	3.4520	0.0138	0.4315	0.0000
Hexane	110543	1.4494	0.0058	0.1812	0.0000
Naphthalene	91203	0.1438	0.0006	0.0180	0.0000
Toluene	108883	7.5125	0.0301	0.9391	0.0000
Xylenes	1330207	6.6384	0.0266	0.8298	0.0000
1,3-Butadiene	106990	0.9183	0.0037	0.1148	0.0000
Copper	7440508	0.0033	0.0000	0.0004	0.0000
Manganese	7439965	0.0033	0.0000	0.0004	0.0000
Nickel	7440020	0.0033	0.0000	0.0004	0.0000
1,2,4-Trimethylbenzene	95636	1.3941	0.0056	0.1743	0.0000
Chlorine	7782505	0.4550	0.0018	0.0569	0.0000
Methanol	67561	0.7745	0.0031	0.0968	0.0000
Methyl Ethyl Ketone (MEK)	78933	0.0664	0.0003	0.0083	0.0000
Methyl tert-Butyl Ether (MTBE)	1634044	2.0579	0.0082	0.2572	0.0000
Styrene	100425	0.1438	0.0006	0.0180	0.0000

Notes:

1. HAP/toxics EFs provided by SCAQMD AER General Instruction Booklet, 2007-2008

DCOR, LLC - Platform Gilda
HAP Emission Calculations - Tanks-Fugitives

SIC	1311		
PROCESS EQPT DESCRIPTION	FUGITIVE LOSSES FROM TANKS AND PIPING COMPONENTS		
FUEL TYPE/PROCESS INFO	HYDROCARBON GASES		
MAXIMUM ANNUAL PROCESS RATE	5865.88	LBS/YR	[based on 8 wells @ 2.0 lbs/day/well + 25.88 lbs/yr ROC emissions from tanks/drains/pit]
MAXIMUM HOURLY PROCESS RATE	0.6696	LBS/HR	
HRS/YEAR	8760		
2011 ACTUAL LOAD	100.0%	[based on 8 active wells in 2011 + 25.46 lbs/yr ROC from tanks/drains]	

HAP Name	HAP CAS No.	Emission Factor lb/lb ROC	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Benzene	71432	2.90E-03	1.94E-03	17.0111	17.0098
Ethyl Benzene	100414	5.80E-04	3.88E-04	3.4022	3.4020
Hydrogen Sulfide	7783064	1.10E-05	7.37E-06	0.0645	0.0645
Naphthalene	91203	5.00E-06	3.35E-06	0.0293	0.0293
Toluene	108883	2.60E-03	1.74E-03	15.2513	15.2502
Xylenes	1210	1.80E-03	1.21E-03	10.5586	10.5578
Ammonia	7664417	1.20E-05	8.04E-06	0.0704	0.0704

Notes:

1. HAP/toxics speciation profiles from Unocal AB2588 testing by ABB Environmental, Oct. 1990. Highest results for all fields tested was utilized.

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HAP Emission Calculations - Coatings-Solvents

SIC	1311		
PROCESS EQPT DESCRIPTION	MAINTENANCE		
FUEL TYPE/PROCESS INFO	MARINE COATINGS and SOLVENTS		
MAXIMUM ANNUAL PROCESS RATE	1000	GALS/YR	[assumed at 1000 gal/yr]
MAXIMUM HOURLY PROCESS RATE	50	GALS/HR	[assumed 50 gal/hr]
HRS/YEAR	As needed		
2011 ACTUAL LOAD	5.6%	[based on 2011 usage log, 56.0 gal/yr]	

HAP Name	HAP CAS No.	Emission Factor lb/gal	PTE lbs/hr	PTE lbs/yr	2011 Actual lbs/yr
Ethyl Benzene	100414	0.4750	23.75	475.00	26.60
Naphthalene	91203	0.0950	4.75	95.00	5.32
Toluene	108883	0.0000	0.00	0.00	0.00
Xylenes	1210	1.9000	95.00	1900.00	106.40

Notes:

1. HAP/toxics percentages taken from MSDS sheets.