



air pollution control district
SANTA BARBARA COUNTY

DRAFT

PERMIT to OPERATE No. 8234-R12

and

PART 70 RENEWAL OPERATING PERMIT No. 8234-R12

PLATFORM HOLLY

**PARCEL 3242-1
SOUTH ELLWOOD OFFSHORE FIELD
SANTA BARBARA COUNTY, CALIFORNIA
STATE TIDELANDS**

OPERATOR

California State Lands Commission/Beacon West Energy Group

OWNERSHIP

California State Lands Commission

**Santa Barbara County
Air Pollution Control District**

August 2024

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION.....	1
1.1 PURPOSE.....	1
1.3 EMISSION SOURCES.....	5
1.4 EMISSION CONTROL OVERVIEW.....	6
1.5 OFFSETS/EMISSION REDUCTION CREDIT OVERVIEW.....	6
1.6 PART 70 OPERATING PERMIT OVERVIEW.....	6
2.0 PROCESS DESCRIPTION.....	8
2.1 PROCESS SUMMARY.....	8
2.2 SUPPORT SYSTEMS.....	9
2.4 MAINTENANCE/DEGREASING ACTIVITIES.....	10
2.5 PLANNED PROCESS TURNAROUNDS.....	10
2.6 OTHER PROCESSES.....	10
2.7 DETAILED PROCESS EQUIPMENT LISTING.....	10
3.0 REGULATORY REVIEW.....	10
3.1 RULE EXEMPTIONS CLAIMED.....	10
3.2 COMPLIANCE WITH APPLICABLE FEDERAL RULES AND REGULATIONS.....	11
3.3 COMPLIANCE WITH APPLICABLE STATE RULES AND REGULATIONS.....	12
3.4 COMPLIANCE WITH APPLICABLE LOCAL RULES AND REGULATIONS.....	13
3.5 COMPLIANCE HISTORY.....	17
4.0 ENGINEERING ANALYSIS.....	24
4.1 GENERAL.....	24
4.2 STATIONARY INTERNAL COMBUSTION ENGINES.....	24
4.3 FLARE SYSTEMS.....	25
4.4 FUGITIVE HYDROCARBON SOURCES.....	26
4.5 CREW AND SUPPLY VESSELS.....	27
4.6 TANKS/VESSELS/SUMPS/SEPARATORS.....	28
4.7 OTHER EMISSION SOURCES.....	28
4.8 BACT/NSPS/NESHAP/MACT.....	29
4.9 CEMS/PROCESS MONITORING/CAM.....	29
4.10 SOURCE TESTING/SAMPLING.....	30
4.11 PART 70 ENGINEERING REVIEW: HAZARDOUS AIR POLLUTANT EMISSIONS.....	31
5.0 EMISSIONS.....	31
5.1 GENERAL.....	31
5.2 PERMITTED EMISSION LIMITS - EMISSION UNITS.....	31
5.3 PERMITTED EMISSION LIMITS - FACILITY TOTALS.....	32
5.4 PART 70: FEDERAL POTENTIAL TO EMIT FOR THE FACILITY.....	33
5.5 PART 70: HAZARDOUS AIR POLLUTANT EMISSIONS FOR THE FACILITY.....	33
5.6 EXEMPT EMISSION SOURCES/PART 70 INSIGNIFICANT EMISSIONS.....	33
6.0 AIR QUALITY IMPACT ANALYSES.....	46
6.1 MODELING.....	46
6.2 INCREMENTS.....	46
6.3 MONITORING.....	46
6.4 HEALTH RISK ASSESSMENT.....	47
7.0 CAP CONSISTENCY, OFFSET REQUIREMENTS AND ERCS.....	47

7.1	GENERAL:	47
7.2	CLEAN AIR PLAN	48
7.3	OFFSET REQUIREMENTS	48
7.4	EMISSION REDUCTION CREDITS	48
8.0	CEQA AND LEAD AGENCY PERMIT CONSISTENCY	48
8.1	CEQA	48
8.2	LEAD AGENCY PERMIT CONSISTENCY	48
9.0	PERMIT CONDITIONS	51
9.A	STANDARD ADMINISTRATIVE CONDITIONS	51
9.B	GENERIC CONDITIONS	55
9.C	EQUIPMENT SPECIFIC CONDITIONS	57
9.D	DISTRICT-ONLY CONDITIONS	74
10.0	ATTACHMENTS	83
10.1	EMISSION CALCULATION DOCUMENTATION	83
10.1	EMISSION CALCULATION DOCUMENTATION	84
10.2	FEE CALCULATIONS	89
10.3	IDS DATABASE EMISSIONS TABLES	92
10.4	Equipment List	92

LIST OF FIGURES and TABLES

<u>TABLE/ FIGURE</u>	<u>PAGE</u>
FIGURE 1.1 - LOCATION MAP FOR PLATFORM HOLLY	2
TABLE 3.1 - GENERIC FEDERALLY-ENFORCEABLE DISTRICT RULES	19
TABLE 3.2 - UNIT-SPECIFIC FEDERALLY ENFORCEABLE DISTRICT RULES	20
TABLE 3.3 - NON-FEDERALLY ENFORCEABLE DISTRICT RULES.....	21
TABLE 3.4 - ADOPTION DATES OF DISTRICT RULES APPLICABLE AT ISSUANCE OF PERMIT	21
TABLE 5.1-1 - OPERATING EQUIPMENT DESCRIPTION	46
TABLE 5.1-2 - EMISSION FACTORS	46
TABLE 5.1-3 – DAILY AND ANNUAL EMISSIONS.....	46
TABLE 5.2 - TOTAL PERMITTED FACILITY EMISSIONS.....	45
TABLE 6.1-1 - WORST CASE FLARING SCENARIO	51
TABLE 9.1 - FLARE VOLUME LIMITS	60

ABBREVIATIONS/ACRONYMS

APCO	Air Pollution Control Officer
AP-42	USEPA <i>Compilation of Emission Factors</i> document
API	American Petroleum Institute
AQAP	Air Quality Attainment Plan
ASTM	American Society for Testing and Materials
ATC	Authority to Construct
bbl	barrel (42 gallons per barrel)
BS&W	Basic water and sediment
bhp	brake horsepower
bpd	barrels per day
BSFC	brake-specific fuel consumption
Btu	British thermal unit
CAAA	Clean Air Act Amendments of 1990
CAP	Clean Air Plan
CARB	California Air Resources Board
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
clp	component leak-path
CO	carbon monoxide
CO ₂	carbon dioxide
COA	corresponding offshore area
District	Santa Barbara County Air Pollution Control District
EOF	Ellwood Onshore Facility
ERC	emission reduction credit
FHC	fugitive hydrocarbon
FR	Federal Register
gr	grain
g	gram
gal	gallon
HHV	higher heating value
H ₂ S	hydrogen sulfide
H&SC	California Health and Safety Code
IC	internal combustion
I&M	inspection and maintenance
k	thousand
kV	kilovolt
lb	pound
LHV	lower heating value
MCC	motor control center
MM, mm	million
MSDS	Material Safety Data Sheet
MW	molecular weight
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NGL	natural gas liquids
NO _x	oxides of nitrogen (calculated as NO ₂)
NSPS	New Source Performance Standards
PFD	process flow diagram
P&ID	pipng and instrumentation diagram
ppmv	parts per million volume (concentration)

psia	pounds per square inch absolute
psig	pounds per square inch gauge
PM	particulate matter
PM _{2.5}	particulate matter less than 2.5 mm in size
PM ₁₀	particulate matter less than 10 mm in size
PSV	pressure safety valve
PTO	Permit to Operate
PRD	pressure relief device
PVRV	pressure vacuum relief valve
ROC	reactive organic compounds
scf	standard cubic feet
scfd	standard cubic feet per day
scfm	standard cubic feet per minute
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SO _x	sulfur oxides
TEG	triethylene glycol
TOC	total organic compounds
tpq	tons per quarter
tpy	tons per year
TVP	true vapor pressure
USEPA	United States Environmental Protection Agency or EPA
UPS	uninterrupted power supply
VRS	vapor recovery system
wt %	weight percent

1.0 Introduction

1.1 Purpose

General. The Santa Barbara County Air Pollution Control District (District) is responsible for implementing all applicable federal, state, and local air pollution requirements that affect any stationary source of air pollution in Santa Barbara County. The federal requirements include regulations listed in the Code of Federal Regulations: 40 CFR Parts 50, 51, 52, 55, 60, 61, 63, 68, 70, and 82. The State regulations may be found in the California Health & Safety Code, Division 26, Section 39000 et seq. The applicable District enforceable regulations can be found in the District's Rules and Regulations. This combined permitting action covers both the Federal Part 70 permit (*Part 70 Operating Permit No. 8234*) as well as the State Operating Permit (*Permit to Operate No. 8234*).

The County is designated a non-attainment area for the state Ozone and PM₁₀ ambient air quality standards.

Part 70 Permitting. This is the eighth renewal of Platform Holly's (Holly) Part 70 operating permit and satisfies the permit issuance requirements of the District's Part 70 operating permit program. The District triennial permit reevaluation has been combined with this Part 70 Permit renewal. Platform Holly is a part of the *South Ellwood Field* stationary source (SSID = 1063), which is a major source for VOC¹, NO_x and CO. Conditions listed in this permit are based on federal, state, or District-enforceable rules and requirements. Sections 9.A, 9.B, and 9.C of this permit are enforceable by the District, the USEPA and the public since these sections are federally enforceable under Part 70. Where any reference contained in Sections 9.A, 9.B, or 9.C refers to any other part of this permit that part of the permit referred to is federally enforceable. Conditions listed in Section 9.D are "District-only" enforceable.

Pursuant to the stated aims of Title V of the CAAA of 1990 (i.e., the Part 70 operating permit program), this Part 70 permit renewal has been designed to meet two objectives. First, compliance with all conditions in this permit would ensure compliance with all federally enforceable requirements for the facility. Second, the permit would be a comprehensive document to be used as a reference by the permittee, the regulatory agencies, and the public to assess compliance.

Tailoring Rule. On January 20, 2011, the District revised Rule 1301 to include greenhouse gases (GHGs) that are "subject to regulation" in the definition of "Regulated Air Pollutants". This reevaluation incorporates greenhouse gas emission calculations for the stationary source.

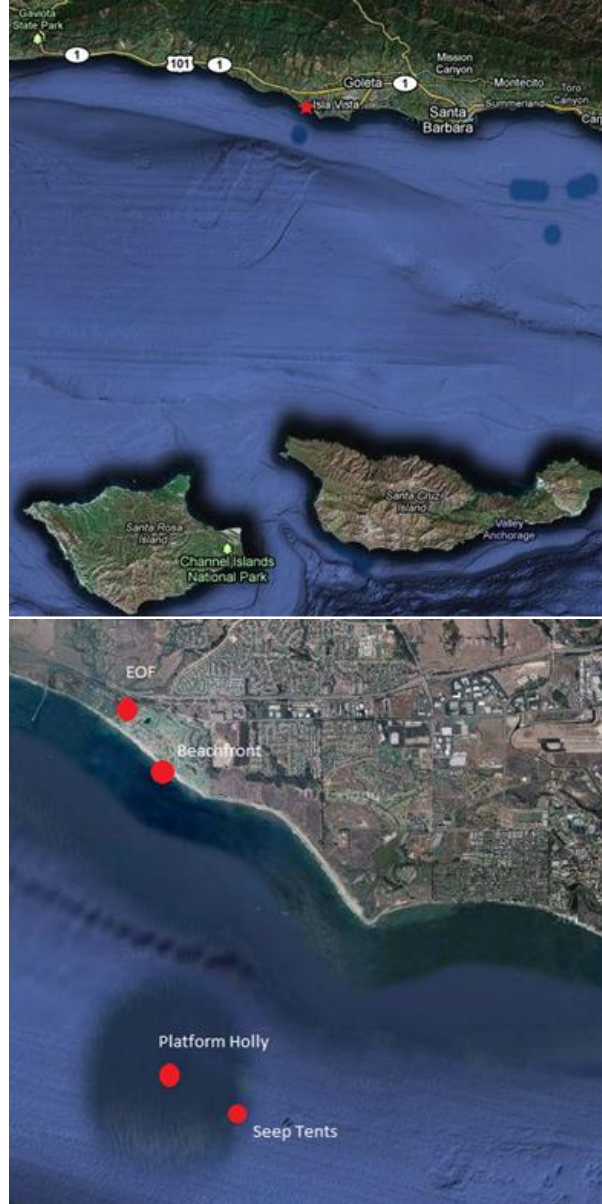
Platform Holly's potential to emit has been estimated, however the greenhouse gas PTE is not an emission limit. The facility will not become subject to emission limits for GHGs unless a project triggers federal Prevention of Significant Deterioration requirements under Rule 810.

¹ VOC as defined in Regulation XIII has the same meaning as reactive organic compounds as defined in Rule 102. The term ROC shall be used throughout the remainder of this document, but where used in the context of the Part 70 regulation, the reader shall interpret the term as VOC.

1.2 Facility Overview

- 1.2.1 General: The California State Lands Commission is the sole owner and operates Platform Holly jointly with Beacon West Energy Group. Platform Holly, located on offshore lease tract 3242-1 (with wells located in PRC 3120 and 3242), approximately two miles southwest from the Coal Oil Point, California. Holly is situated in the Southern Zone² of Santa Barbara County. Figure 1.1 shows the relative location of Holly off the Santa Barbara County coast.

Figure 1.1 Location Map for Platform Holly



² District Rule 102, Definition: “Southern Zone”

The platform consists of the following systems:

- Production wellhead and subsurface system
- Deck drain system
- Electrical system
- Safety systems
- Low-pressure flare system
- Deck crane

1.2.2 Facility Operations Overview: Platform Holly is a twelve (12) leg, thirty (30) well slot platform installed in 211 feet of water in 1966. Drilling operations began in 1966. There is currently no oil production on Platform Holly since the platform is being decommissioned. Annular gas resulting from well abandonment operations is sent to the flare system. Rain and washdown water is pumped from T-1 to T-4 and then injected into the disposal well. The platform has a design capacity of 20 million standard cubic feet gas per day and 20,000 barrels per day (bpd) of oil/water emulsion (wet crude oil). A crew boat makes periodic runs between Ellwood or Goleta Pier and Platform Holly for crew changes and a supply boat provides supplies from Port Hueneme as needed.

Additional processing equipment has been depermitted since issuance of the previous permit renewal due to platform decommissioning activities. These equipment items are listed in the Equipment List (Attachment 10.4). The associated reduction in emissions are reflected in the emission tables.

The *South Ellwood Field* stationary source consists of the following 2 facilities:

- Platform Holly (FID= 3105)
- Ellwood Onshore Facility (FID= 0028)

1.2.3 New Source Review Permitting. This permit consolidates a number of outstanding NSR permit applications as part of this combined triennial Reevaluation and Part 70 Renewal process.

Holly operates under a combined Federal Part 70 Operating Permit No. 8234 and District Permit to Operate 8234, both issued by the Santa Barbara District. The District issued the initial permit (PTO 5097) for this facility in December 1982, based on a PTO application from the permittee (ARCO). This PTO number was changed to 8234 during the 1989 triennial re-evaluation. There were no NSR permit actions prior to 1998. Since the issuance of the initial Part 70 Operating Permit on September 25, 1998, the following permit actions have occurred:

ATC 10106: Replacement of existing single VRU compressor with two new smaller capacity VRU compressors. Not a routine, equivalent replacement, therefore subject to NSR. This permit was issued on 8/20/99.

ATC/PTO 10106-01. Amends ATC 10106 to include the relocation of a heat exchanger to the Glycol Overhead Cooler. This PTO/Part 70 permit incorporates the provisions of PTO 10106-01.

ATC/PTO 10106-02. Updates the fugitive component counts for the project. The final component

count and associated air emissions were lower than originally permitted under ATC 10106. This PTO/Part 70 permit incorporates the provisions of PTO 10106-02.

ATC 10134: Temporary open-pipe flare permit. The flare was only allowed to operate for sixty days after SCDP startup. This permit was issued on 5/20/99. This ATC was modified/superseded by ATC 10128 (see below).

ATC Mod 10134-1: Operating extension for a temporary open-pipe flare permit to September 30, 1999. This permit was issued on 7/19/99. This ATC was modified/superseded by ATC 10128 (see below).

ATC 10128: Installation of a permanent Kaldair-type high-pressure flare. The ATC was issued on 9/1/99.

ATC Mod 10128-1/PTO 10128: Addition of a low-pressure flare tip to the Holly permanent flare system to handle Glycol system releases. The ATC was issued on 1/13/00. A draft District permit to operate was issued on 06/01/2001. Subsequently, the draft PTO was rolled into Part 70/District PTO 8234-R5 on 11/08/2002.

ATC/PTO 10786: Permit an increase of the number of pigging launching operations per quarter and year. It also included emissions controls consisting of purging pig launchers with nitrogen or in-plant fuel gas to the vapor recovery system prior to opening. The application was deemed complete in February 2002 and a draft ATC/PTO was issued in March 2002; subsequently, the draft ATC/PTO was rolled into Part 70/District PTO 8234-R5 on 11/08/2002.

ATC/PTO 11981: Increased the Crew Boat main engine size limit from 1020 hp to 1605 hp. This permit was issued 8/7/2006.

ATC 12804: Authorized the replacement of the existing crane on the platform with a new, larger crane, to comply with the State ATCM for stationary compression engines. ATC 12804 was issued 8/11/2008.

ATC/PTO 13475: Increased the crane's daily fuel limit from 28.5 gallons per day to 120 gallons per day and its annual limit from 10,000 gallons per year to 30,000 gallons per year. This permit was issued on 5/17/2011.

ATC/PTO 13825: Increased the allowable sulfur content during unplanned flaring.

ATC/PTO 13658: Permit fugitive component de minimis emissions to increase the availability of the de minimis exemption. This permit was issued 3/21/2012.

ATC/PTO 13825: Increased the sulfur content of planned flare gas. This permit was issued 5/9/2012.

ATC 13840: Replaced the boom boat servicing Platform Holly. This permit was issue 7/22/2012.

PTO 8235-05: Revisions to the fugitive I&M inventory. A permit was not issued. This permit was incorporated directly into the 8234-R9 permit renewal.

PTO 14181: Install a drain vessel to replace an existing lube oil tank. This permit was incorporated directly into the 8234-R9 permit renewal.

PTO 8235-06: Revise and correct the fugitive hydrocarbon component leakpath totals on the platform. This permit was issue 4/21/2016.

ATC/PTO 14794: Permit fugitive component de minimis emissions to increase the availability of the de minimis exemption. This permit was issue 8/12/2016.

PTO 8235-07: Relocate the Ellwood offsite odor monitoring station to the UCSB West Campus odor monitoring station site and transfer the offsite odor monitoring requirement to this permit from the Ellwood Onshore Facility permit.

ATC 15411: Install a coil tubing unit on Platform Holly for platform decommissioning purposes. This permit was issue 9/5/2019.

PTO 15411: Operate a coil tubing unit on Platform Holly. This permit was issue 2/24/2020.

ATC 15488: Increase auxiliary boat fuel use limit. This permit was issue 6/18/2020.

PTO 15488: Operate auxiliary boat. A PTO was not issued. These changes were incorporated directly in to this permit renewal.

PTO 8234-08: Removal of ambient air monitoring station requirements. A final permit was not issued since the requested modifications in the approved application were incorporated directly into permit renewal PTO 8234-R12.

ATC 15938: Allow for planned intermittent flaring. This permit was issued 9/16/2022.

PTO 15938: Allow for planned intermittent flaring. A final permit was not issued since the permit requirements were incorporated directly into PTO 8234 R12.

ATC 16234: Allow for use of propane for flare pilot gas. This permit was issued 04/16/2024.

PTO 16234: Allow for use of propane for flare pilot gas. A final permit was not issued since the permit requirements were incorporated directly into PTO 8234 R12.

1.3 Emission Sources

Section 4 of the permit provides the District's engineering analysis of the remaining emission sources on Platform Holly. Section 5 describes the allowable emissions from each permitted emissions unit, and lists the estimated emissions from non-permitted emission units.

Specifically, the emission sources include:

- Diesel-fired IC engines (pedestal crane and one emergency electrical generator)
- Supply boats used for transport of equipment, fuel, and supplies to and from the platform
- Crew boats used for transport of personnel and cargo to and from the platform
- Wastewater tanks (T-1 and T-4)
- Solvent and coating usage
- Low pressure flare

Two emergency firewater pumps also service Holly. These pumps are driven by electric motors. A list of all permitted equipment is provided in Section 10.4.

1.4 Emission Control Overview

Air quality emission controls are used on Holly to reduce air pollution emissions. The emission controls employed on the platform include:

- Particulate emissions from the crane engine are controlled through the use of a DCL International Diesel Particulate Filter.

1.5 Offsets/Emission Reduction Credit Overview

Offsets: Platform Holly does not require emission offsets.

Emission Reduction Credits: Platform Holly does not generate emission reduction credits.

1.6 Part 70 Operating Permit Overview

- 1.6.1. Federally-enforceable Requirements: All federally enforceable requirements are listed in 40 CFR Part 70.2 (*Definitions*) under “applicable requirements.” These include all SIP-approved District Rules, all conditions in the District-issued Authority to Construct permits, and all conditions applicable to major sources under federally promulgated rules and regulations. All these requirements are enforceable by the public under CAAA. See Tables 3.1 and 3.2 for a list of federally enforceable requirements.
- 1.6.2. Insignificant Emissions Units: Insignificant emission units are defined under District Rule 1301 as any regulated air pollutant emitted from the unit, excluding Hazardous Air Pollutants (HAPs), that are less than 2 tons per year based on the unit’s potential to emit and any HAP regulated under section 112(g) of the Clean Air Act that does not exceed 0.5 ton per year based on the unit’s ‘potential to emit.’ Insignificant activities must be listed in the Part 70 application with supporting calculations. The permittee did not list any insignificant emission units in their application.
- 1.6.3. Federal potential to emit: The federal potential to emit (PTE) of a stationary source does not include fugitive emissions unless the source is: (1) subject to a federal NSPS/NESHAP requirement promulgated prior to August 7, 1980 or (2) included in the 29-category source list specified in 40 CFR1.166 or 52.21. The federal PTE does include all emissions from any insignificant emissions units. See Section 5.4 for the federal PTE for this source.
- 1.6.4. Permit Shield: The operator of a major source may be granted a permit shield: (a) specifically stipulating any federally enforceable conditions that are no longer applicable to the source and (b)

stating the reasons for such non-applicability. The permit shield must be based on a request from the source and a detailed review by the District. Permit shields cannot be granted indiscriminately with respect to all federal requirements. The permittee has not made a request for a permit shield.

- 1.6.5. Alternate Operating Scenarios: A major source may be permitted to operate under different operating scenarios, if appropriate descriptions of such scenarios are included in its Part 70 permit application and if such operations are allowed under federally enforceable rules. The permittee made no request for permitted alternative operating scenarios.
- 1.6.6. Compliance Certification: Part 70 permit holders must certify compliance with all applicable federally enforceable requirements including permit conditions. Such certification must accompany each Part 70 permit application; and, be re-submitted semi-annually on or before March 1st and September 1st, as specified in the permit. Each certification is signed by a “responsible official” of the owner/operator company whose name and address is listed prominently in the Part 70 permit. See Section 1.6.9 below.
- 1.6.7. Permit Reopening: Part 70 permits are re-opened and revised if the source becomes subject to a new rule or new permit conditions are necessary to ensure compliance with existing rules. The permits are also re-opened if they contain a material mistake or the emission limitations or other conditions are based on inaccurate permit application data.
- 1.6.8. MACT/Hazardous Air Pollutants (HAPs): Part 70 permits also regulate emission of HAPs from major sources through the imposition of maximum achievable control technology (MACT), where applicable. The federal PTE for HAP emissions from a source is computed to determine MACT or any other rule applicability. See Sections 3.2.4, 4.9 and 5.5.
- 1.6.9 Responsible Official: The designated responsible official and their mailing address are:

Jennifer Lucchesi, Executive Officer
State Lands Commission
100 Howe Ave. Suite 100-South
Sacramento, CA 95825-8202

2.0 Process Description

2.1 Process Summary

Platform Holly (leases PRC 3120 and 3242) is located in state waters. Platform equipment consists of plugged and abandoned oil and gas wells, deck drain system, water treating equipment, and water injection pumps. There is no active oil and gas production from the wells

Initial separation of the oil/water/gas emulsion formerly occurred on the platform. Gas was separated from the oil/water emulsion and formerly sent via a 6-inch subsea pipeline to the Ellwood Onshore Facility (EOF) for further processing, however this pipeline has been removed from service. The remaining oil/water emulsion was formerly pumped to the EOF via a 6-inch subsea pipeline for additional processing, however this pipeline has been removed from service. The deck drain system water is injected down the disposal well.

- 2.1.1 Production: Platform Holly has thirty (30) well slots located in one well room. All thirty well slots have been developed into one or more of three production zones; the Rincon and Sespe zones that produce sweet gas and the Monterey zone that produces sour gas. While all 30 well slots were originally drilled for production, all production wells are shutdown and are being plugged and abandoned (P&A). One well is used for water disposal. The platform's production design rate is 20,000 bpd of oil emulsion and 20 MMSCFD of gas.

There are four production manifolds. These are:

- Lease PRC 3242 production header
- Lease PRC 3242 test header
- Lease PRC 3120 production header
- Lease PRC 3120 test header

Oil Production - There is no oil production on Platform Holly.

Gas Production - There is no gas production on Platform Holly.

- 2.1.2 Gas, Oil, and Water Separation: There is no emulsion produced at the platform. No fluids separation is required or performed on the platform.
- 2.1.3 Waste Water and Process Waste Tanks: The Drain Sump Tank (T-1) collects storm water wash down from platform drains, as well as runoff from deluge/fire suppression testing. Water is pumped from the drain sump tank to a disposal well. In the event of rain volumes in excess of what is being pumped off the bottom of the drain sump tank, it will overflow to the Overflow Sump Tank (T-4). Tank T-4 is equipped with an overflow pipe open at the bottom to the ocean.
- 2.1.4 Emulsion Breaking and Crude Oil Storage: There are no emulsion breaking or crude oil storage facilities on Holly.
- 2.1.5 Emulsion Shipping: Oil/water emulsion is no longer shipped to the EOF.

- 2.1.6 Gas Sweetening and Sulfur Recovery: The gas formerly produced from the Monterey Formation is sour. There are no gas sweetening or sulfur recovery devices on Holly.
- 2.1.7 Fuel Gas System: Fuel gas is no longer used at Holly. The pedestal crane and emergency generator use CARB Diesel, which contains less than 0.0015 percent sulfur by weight. Holly has one 1500-gallon capacity diesel storage tank (T-111) located in the crane pedestal.
- 2.1.8 Gas Relief Flare System: The permanent low pressure flare on Holly incinerates the sour gases released for planned intermittent flaring purposes. The high pressure flare has been depermitted.

2.2 Support Systems

- 2.2.1 Piping Assemblies and Pipelines: The piping on Holly is designed, tested, and installed in general accordance with API 14C and 14E. Three subsea pipelines were utilized during active operations at Holly: a 6-inch oil line, a 6-inch gas line and a 4-inch utility line; each transporting fluids to the Ellwood Onshore Facility. These pipelines have been removed from service.
- 2.2.2 Power Generation: All electrical power needs at Holly are supplied via power cable from shore. A 373 bhp emergency generator provides emergency backup power.
- 2.2.3 Diesel-Powered Crane: Holly is equipped with a crane powered by a 250 bhp diesel-fired IC engine. The crane is used to transfer supplies from supply boats to Holly.
- 2.2.4 Crew Boats: The permittee uses one crew boat for crew and light supply transport in support of Holly. The crew boat makes up to 6 round trips per day and 728 round trips per year to the platform from the Ellwood Pier or Goleta Pier in Goleta.
- 2.2.5 Supply Boats: The permittee uses supply boats for supply and equipment transport and emergency response drills in support of Holly. During well drilling or well repair activity, the supply boat activity increases to about one trip every 2 days or more (up to 192 trips per year).
- 2.2.6 Emergency Response Drills: The permittee conducts periodic and unannounced emergency response drills. Several plans have been developed for different types of emergencies that could occur on or around the platform. The plans include the Emergency Evacuation Plan and Oil Spill Contingency Plan. All of the plans have been prepared to comply with applicable rules and regulations and guidelines set forth by the appropriate regulatory agencies. Emissions from emergency response boats are documented and reported along with the supply boats information.

2.3 Oil & Gas Well Activities: Plug and Abandonment (P&A)

- 2.3.1 P&A Program: The wells on Platform Holly are being plugged and abandoned. The abandonment of the wells is expected to be fully completed within the next year.
- 2.3.2 Well P&A Program: The three gas-fired IC engines that were used to provide electrical power for the drill rig and well P&A activities have been removed from the platform.

2.4 Maintenance/Degreasing Activities

- 2.4.1 Paints and Coatings: Intermittent surface coating operations are conducted throughout the platform for occasional structural and equipment maintenance needs, including architectural coating. Normally only touch-up and equipment labeling or tagging is performed. All architectural coatings used must comply with District Rule 323, as verified through the rule-required recordkeeping.
- 2.4.2 Solvent Usage: Solvents not used for surface coating thinning may be used on the platform for daily operations. Solvent usage includes cold solvent degreasing and wipe cleaning with rags.

2.5 Planned Process Turnarounds

Process turnarounds are no longer required.

2.6 Other Processes

Pigging: Pigging operations are no longer required at the platform.

Unplanned Activities/Emissions: The permittee does not anticipate or foresee any circumstances that would require special equipment use and result in excess emissions.

2.7 Detailed Process Equipment Listing

Refer Attachment 10.4 for a complete listing of all permitted equipment.

3.0 Regulatory Review

3.1 Rule Exemptions Claimed

☞ District Rule 202 (Exemptions to Rule 201): The permittee has requested a number of exemptions under this rule. An exemption from permit, however, does not necessarily grant relief from any applicable prohibitory rule. The following exemptions were approved by the District:

- Section D.6 (De Minimis). As of May 31, 2023 the permittee documented the total de minimis emissions increase at Holly to be 10.88 lbs/day for ROC. Therefore, the total de minimis emissions from the stationary source are $9.36 \text{ (EOF)} + 10.88 = 20.24$ lbs/day of ROC. Detailed records of the de minimis emissions changes can be viewed at the District's office.
- Section U.2.a for a cold cleaner degreaser unit with an evaporative surface area of less than 1 sq.ft.
- Section V.2 for one diesel fuel #2 storage tank with a 1500-gallon capacity.

☞ District Rule 321 (Solvent Cleaning Operation): The following exemption was applied for and approved by the District:

- Section B.2.b for a cold cleaner degreaser unit with an evaporative surface area of less than 1 sq.ft.

☞ District Rule 325 (Crude Oil Production and Separation): The following exemptions were applied for and approved by the District:

- Section B.3 for wastewater tanks T-1 and T-4

3.2 Compliance with Applicable Federal Rules and Regulations

3.2.1 40 CFR Parts 51/52 {New Source Review (Non-attainment Area Review and Prevention of Significant Deterioration)}: Holly was constructed and permitted prior to the applicability of these regulations. Compliance with District Regulations VIII (New Source Review) and XIII (Part 70 Operating Permits Program) ensures that any future modifications to the facility will comply with these regulations.

3.2.2 40 CFR Part 60 {New Source Performance Standards}: The diesel-fired crane engine is subject to Subpart IIII, as a stationary CI ICE that commenced construction after July 11, 2005. This 2006 model year engine is an EPA-certified Tier 3 unit that meets the emission standards for pre-2007 non-emergency CI ICE. The engine must be operated and maintained according to the manufacturer's written instructions.

3.2.3 40 CFR Part 63 {MACT}: On June 17, 1999, EPA promulgated Subpart HH, a National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Oil and Natural Gas Production and Natural Gas Transmission and Storage. The permittee submitted information on September 18, 2001 indicating that Holly is exempt from the requirements of MACT based on its "black oil" production per section 63.670(e)(1) of the subpart. Based on the information provided, the District concurred with the black oil exemption for this facility. Thus, only recordkeeping requirements apply to this facility, as specified in condition 9.B.12.

3.2.4 40 CFR Part 63 Subpart ZZZZ {NESHAP}: Subpart ZZZZ applies to owners and operators of stationary reciprocating IC engines (RICE). For area sources of HAP emissions, stationary RICE are "existing" if construction or reconstruction commenced before June 12, 2006. Engines that are not categorized as existing are considered "new".

The crane engine meets the requirements of this NESHAP by meeting the requirements of NSPS IIII, therefore no further requirements apply to the crane engine under the NESHAP.

The emergency standby compression ignition RICE (generator) must comply with the applicable emission and operating limits of this subpart. The following operating requirements apply:

- (1) Change the oil and filter every 500 hours of operation or annually, whichever comes first;
- (2) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first;
- (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first.

3.2.5 40 CFR Part 64 {Compliance Assurance Monitoring}: This rule became effective on April 22, 1998. This rule affects emission units at the source subject to a federally-enforceable emission limit or standard that use a control device to comply with the emission standard, and either pre-control or post-control emissions exceed the Part 70 source emission thresholds. Compliance with

this rule was evaluated and it was determined that no emission units at this facility are currently subject to CAM. See section 4.10.3 for further information on CAM.

- 3.2.6 40 CFR Part 70 {Operating Permits}: This Subpart is applicable to Holly. Table 3.1 lists the federally enforceable District promulgated rules that are “generic” and apply to Holly. Table 3.2 lists the federally enforceable District promulgated rules that are “unit-specific” that apply to Holly. These tables are based on data available from the District’s administrative files and from the permittee’s Part 70 Operating Permit application No. 9553 filed in May 1996 and subsequent renewal applications. Table 3.4 includes the adoption dates of these rules.

In its Part 70 permit application, the permittee certified compliance with all existing District rules and permit conditions. This certification is also required semi-annually. Issuance of this permit and compliance with all its terms and conditions will ensure compliance with the provisions of all applicable Subparts.

- 3.2.7 CFR 60 Subpart OOOO {Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution} this subpart does not apply to operations located in territorial seas or on the outer continental shelf (OCS). As defined in 60.5365, this regulation applies to owners and operators of “onshore affected facilities” only. Platform Holly is located in State Territorial Waters (STW) and is therefore exempt from the requirements of this regulation.

3.3 Compliance with Applicable State Rules and Regulations

- 3.3.1 Division 26. Air Resources {California Health & Safety Code}: The administrative provisions of the Health & Safety Code apply to this facility and will be enforced by the District. These provisions are District enforceable only.
- 3.3.2 California Code of Regulations, Title 17, Sub-Chapter 6, Sections 92000 through 92530: These sections specify the standards by which abrasive blasting activities are governed throughout the State. All abrasive blasting activities at Holly are required to conform to these standards. Compliance will be assessed through onsite inspections. These standards are District-enforceable only. However, CAC Title 17 does not preempt enforcement of any SIP-approved rule that may be applicable to abrasive blasting activities.
- 3.3.3 California Code of Regulations, Title 17, Section 93115 – Stationary ATCM: This section specifies the airborne toxic control measure (ATCM) to reduce diesel particulate matter (PM) and criteria pollutant emissions from stationary diesel-fueled compression ignition (CI) engines. Its provisions apply to any stationary CI engine operated in California with a rated horsepower of 50 bhp or greater. Portable, off-road, or marine vessel IC engines are exempt from this ATCM. The IC engine powering the electrical generator and the IC engine powering the crane are subject to this ATCM. The original platform crane was replaced with a crane powered by a Tier 3 engine controlled by a diesel particulate filter.
- 3.3.4 California Code of Regulations, Title 17, Section 93116 – Portable ATCM: This section specifies the airborne toxic control measure (ATCM) to reduce diesel particulate matter (PM) and criteria pollutant emissions from portable diesel-fueled compression ignition (CI) engines. Its provisions apply to any portable CI engine operated in California with a rated horsepower of 50 bhp or greater.

There are no engines subject to the portable ATCM used at Holly.

- 3.3.5 Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities (CCR Title 17, Section 95665 et. Seq.): On October 1, 2017, the California Air Resources Board (CARB) finalized this regulation, which establishes greenhouse gas emission standards for onshore and offshore crude oil and natural gas production facilities. This facility is subject to the provisions of this regulation.

The storage tanks at this facility satisfy the requirements of the CARB regulation.

This facility is exempt from the leak detection and repair (LDAR) requirements of the CARB regulation per Section 95669(b)(1), which exempts components that are subject to District Rule 331 LDAR requirements prior to January 1, 2018.

This facility does not utilize circulation tanks for well stimulation treatments, reciprocating or centrifugal natural gas compressors, natural gas powered pneumatic devices or pumps, natural gas only wells, or well casing vents, and is therefore not subject to the CARB regulation standards and requirements for these equipment and processes.

3.4 Compliance with Applicable Local Rules and Regulations

- 3.4.1 Applicability Tables: Tables 3.1 and 3.2 list the federally enforceable District rules that apply to Holly. Table 3.3 lists the non-federally-enforceable District rules that apply to Holly. Table 3.4 lists the adoption date of all rules that apply to Holly.

- 3.4.2 Rules Requiring Further Discussion:

The following is a rule-by-rule evaluation of compliance for Holly:

Rule 201 - Permits Required: This rule applies to any person who builds, erects, alters, replaces, operates or uses any article, machine, equipment, or other contrivance that may cause the issuance of air contaminants. The equipment included in this permit is listed in Attachment 10.5. An Authority to Construct is required to return any de-permitted equipment to service and may be subject to New Source Review.

Rule 210 - Fees: Pursuant to Section I.B.2, District permits are reevaluated every three years. The fees for this facility are based on the District Rule 210, Fee Schedule A. Attachment 10.3 presents the fee calculations for the reevaluated permit. The fees for this reevaluation are calculated per Section I.B.2.

Rule 301 - Circumvention: This rule prohibits the concealment of any activity that would otherwise constitute a violation of Division 26 (Air Resources) of the California H&SC and District rules and regulations. To the best of the District's knowledge, the permittee is operating in compliance with this rule.

Rule 302 - Visible Emissions: This rule prohibits the discharge from any single source any air contaminants for which a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade than a reading of 1 on the Ringelmann Chart or of such opacity to obscure an observer's view to a degree equal to or greater than a reading of 1 on the Ringelmann

Chart. Sources subject to this rule include: the low pressure flare, all diesel-fired piston internal combustion engines on the platform and crew and supply boats. Compliance will be assured by requiring all engines to be maintained according to manufacturer maintenance schedules, and through visible emissions monitoring requirements. Rule 359 addresses the need for the flare to operate in a smokeless fashion.

Rule 303 - Nuisance: This rule prohibits Holly from causing a public nuisance due to the discharge of air contaminants. Compliance with this Rule is achieved based on the *Odor Abatement Agreement* between the District and the permittee (March 1995) and the *Complaint Response Plan* (May 1995), and the requirements of Abatement Order 99-6A. This permit contains federally enforceable conditions (see Permit Condition 9.B.3) to minimize the potential for additional nuisances, such as operation limits and monitoring, to ensure compliance with this rule.

Rule 305 - Particulate Matter, Southern Zone: Holly is considered a Southern Zone source. This rule prohibits the discharge into the atmosphere from any source particulate matter in excess of specified concentrations measured in gr/scf. The maximum allowable concentrations are determined as a function of volumetric discharge, measured in scfm, and are listed in Table 305(a) of the rule. Sources subject to this rule include: the flare, all diesel-fired piston internal combustion engines on the platform and crew and supply boats. Improperly maintained diesel engines have the potential to violate this rule. Compliance will be assured by requiring all engines to be maintained according to manufacturer maintenance schedules according to a District-approved *IC Engine Particulate Matter Operation and Maintenance Plan*. Rule 359 addresses the need for the flare to operate in a smokeless fashion.

Rule 309 - Specific Contaminants: Under Section "A", no source may discharge sulfur compounds and combustion contaminants in excess of 0.2 percent as SO₂ (by volume) and 0.3 gr/scf (at 12% CO₂) respectively. Sulfur emissions due to flaring of sour gas under 20,000 ppmv H₂S should comply with the SO₂ limit. All diesel-powered piston IC engines have the potential to exceed the combustion contaminant limit if not properly maintained (see discussion on Rule 305 above for compliance).

Rule 310 - Odorous Organic Compounds: This rule prohibits the discharge of H₂S and organic sulfides that result in a ground level impact beyond the property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour. No measured data exists to confirm compliance with this rule; however, all produced gas from Holly is collected for sales, re-injection or is collected by vapor recovery (i.e., no venting occurs). As a result, it is expected that compliance with this rule will be achieved. Further, the platform is equipped with numerous H₂S monitors (alarms set to 10 ppmv). If the equipment leaks sour gas, the alarm sounds and the operator will take corrective action. These H₂S monitors are connected to the District's DAS.

Rule 311 - Sulfur Content of Fuels: This rule limits the sulfur content of fuels combusted on Holly to 0.5 percent (by weight) for liquids fuels and 15 gr/100 scf (calculated as H₂S, equivalent to 239 ppmvd) for gaseous fuels. All diesel-fired IC engines on Holly and on the crew and supply boats are expected to comply with the liquid fuel limit as determined by fuel analysis documentation.

Rule 317 - Organic Solvents: This rule sets specific prohibitions against the discharge of emissions of both photochemically and non-photochemically reactive organic solvents (40 lb/day and 3,000 lb/day respectively). Solvents may be used on the platform during normal operations for degreasing by wipe cleaning and for use in paints and coatings in maintenance operations. There is the potential to exceed the limits under Section B.2 during significant surface coating activities. The permittee is required to maintain records to ensure compliance with this rule.

Rule 321 - Solvent Cleaning Operations: This rule sets equipment and operational standards for degreasers using organic solvents. There is a small (i.e., less than 1 sq.ft. evaporative surface) cold solvent degreaser unit on the platform which is permit-exempt and also exempt from the Rule requirements except to keep its surface covered when not in use. Compliance will be determined through District inspections of the platform.

Rule 322 - Metal Surface Coating Thinner and Reducer: This rule prohibits the use of photochemically reactive solvents for use as thinners or reducers in metal surface coatings. The permittee is required to maintain records during maintenance operations to ensure compliance with this rule.

Rule 323.1 (Architectural Coatings): This rule sets the standards for any architectural coating that is supplied, sold, offered for sale, or manufactured for use within the District.

Rule 324 - Disposal and Evaporation of Solvents: This rule prohibits any source from disposing more than one and a half gallons of any photochemically reactive solvent per day by means that will allow the evaporation of the solvent to the atmosphere. The permittee is required to maintain records to ensure compliance with this rule.

Rule 325 - Crude Oil Production and Separation: This rule applies to equipment used in the production, processing, separation, gathering, and storage of crude oil and gas prior to custody transfer. The primary requirements of this rule are under Sections D and E. Section D requires the use of vapor recovery systems on all tanks and vessels, including wastewater tanks, crude oil/water separators, and sumps. Section E requires that all produced gas be controlled at all times, except for wells undergoing routine maintenance.

The wastewater tanks T-1 and T-4 on the platform were determined to be exempt from Rule 325.D.1 and D.2 after an inspection in 1997 because the ROC content of the liquid entering the wastewater tanks is less than 5 milligrams per liter. Sampling in June 2002 per Rule 325.F.2 showed 7,900 mg/l of ROC, but a subsequent sample in July 2002 showed less than 1.0 mg/l ROC. Further sampling has indicated the tanks meet the Rule 325.B.3 exemption.

Rule 326 - Storage of Reactive Organic Compound Liquids: This rule applies to equipment used to store ROC liquids with a vapor pressure greater than 0.5 psia.

Rule 328 - Continuous Emissions Monitoring: This rule details the applicability and standards for the use of continuous emission monitoring systems ("CEMS"). Per Section B.2, the Venoco – Ellwood stationary source emits to the atmosphere more than 5 lb/hr of non-methane hydrocarbons, oxides of nitrogen, and sulfur oxides and more than 10 lb/hr of particulate matter, thereby triggering

the Section C.2 requirement that the need and application of CEMs be evaluated. An evaluation was made by the District and it was determined that CEMS are not required for Holly.

Rule 330 - Surface Coating of Metal Parts and Products: This rule sets standards for many types of coatings applied to metal parts and products. In addition to the ROC standards, this rule sets operating standards for application of the coatings, labeling, and recordkeeping. It is anticipated that the permittee will not trigger the requirements of this rule. Compliance shall be based on site inspections and permittee records.

Rule 331 - Fugitive Emissions Inspection and Maintenance: This rule applies to components in liquid and gaseous hydrocarbon service at oil and gas production fields. Ongoing compliance with the provisions of this rule will be assessed via platform inspection of fugitive components by the permittee and District personnel using an organic vapor analyzer and through analysis of operator records. Platform Holly does not perform any routine venting of hydrocarbons to the atmosphere.

Rule 333 - Control of Emissions from Reciprocating Internal Combustion Engines: This rule applies to all engines with a rated brake horsepower of 50 or greater. The crane engine is subject to this rule. Engines subject to Rule 333 are monitored quarterly to determine compliance with the emission limits of the rule.

Rule 352- Natural Gas-Fired Fan-Type Central Furnaces and Small Water Heaters. This rule applies to any person who manufactures, supplies, sells, offers for sale, installs, or solicits the installation of any natural gas-fired fan-type central furnaces or water heaters for use within the District. Compliance shall be based on site inspections.

Rule 353 - Adhesives and Sealants: This rule applies to the use of adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers. Compliance shall be based on site inspections and permittee records.

Rule 359 - Flares and Thermal Oxidizers: This rule applies to flares for both planned and unplanned flaring events. Compliance with this rule has been documented. A detailed review of compliance issues is as follows:

§ D.1 - Sulfur Content in Gaseous Fuels: Part (a) limits the total sulfur content of all planned flaring from South County flares to 15 gr/100 cubic feet (239 ppmv) calculated as H₂S at standard conditions.

§ D.2 - Technology Based Standard: Requires all flares to be smokeless and sets pilot flame requirements.

§ D.3 - Flare Minimization Plan: This section requires sources to implement flare minimization procedures to reduce SO_x emissions. The permittee has implemented the District-approved *Flare Minimization Plan*.

Rule 360 - Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers. This rule applies to any person who supplies, sells, offers for sale, installs, or solicits the installation of any new water heater, boiler, steam generator or process heater for use within the District with a rated

heat input capacity greater than or equal to 75,000 British thermal units per hour up to and including 2,000,000 British thermal units per hour.

Rule 361- Small Boilers, Steam Generators, and Process Heaters: On January 17, 2008, the District Board of Directors adopted Rule 361 that includes requirements for process heaters rated between 2.0 MMBtu/hr 5.0 MMBtu/hr. Units installed prior to January 17, 2008 are designated as existing units per Rule 361.

Rule 505 - Breakdown Conditions: This rule describes the procedures that the permittee must follow when a breakdown condition occurs to any emissions unit associated with Holly. A breakdown condition is defined as an unforeseeable failure or malfunction of (1) any air pollution control equipment or related operating equipment that causes a violation of an emission limitation or restriction prescribed in the District Rules and Regulations, or by State law, or (2) any in-stack continuous monitoring equipment, provided such failure or malfunction:

- a. Is not the result of neglect or disregard of any air pollution control law or rule or regulation;
- b. Is not the result of an intentional or negligent act or omission on the part of the owner or operator;
- c. Is not the result of improper maintenance;
- d. Does not constitute a nuisance as defined in Section 41700 of the Health and Safety Code;
- e. Is not a recurrent breakdown of the same equipment item.

Rule 603 - Emergency Episode Plans: Section A of this rule requires the submittal of a *Stationary Source Curtailment Plan* for all stationary sources that can be expected to emit more than 100 tons per year of hydrocarbons, nitrogen oxides, carbon monoxide, or particulate matter. The permittee submitted this plan in July 1994 and updated it in March 2002. The Plan was approved in August 2002.

Rule 810 - Federal Prevention of Significant Deterioration: This rule was adopted January 20, 2011 to incorporate the federal Prevention of Significant Deterioration rule requirements into the District's Rules and Regulations by reference. Future projects at the facility will be evaluated to determine whether they constitute a new major stationary source or a major modification.

3.5 Compliance History

This section contains a summary of the compliance history for this facility and was obtained from documentation contained in the District's Administrative file.

- 3.5.1 Platform Inspections: Routine District inspections are conducted at Platform Holly on a biennial basis. Each inspection report issued since the previous permit renewal was reviewed as a part of this permit renewal process. These inspection reports indicate that no enforcement actions were issued as a result of these inspections. There were no other significant compliance issues resulting from these inspections.

3.5.2 Variiances: There have been no variiances issued for this facility since issuance of the previous permit renewal.

3.5.3 Violations: There have been no enforcement actions issued to this facility since issuance the previous permit renewal

3.5.4 Significant Historical Hearing Board Actions: The actions taken by the District and the Hearing Board in 1998 and 1999 resulted in the issuance of Abatement Order No. 99-6(A) to in April of 1999. This Order made findings that air emissions from Holly, EOF, and the Barge Jovalan resulted in several public complaints. Condition 11.b of the Order was modified in 2001 to clarify that the SIMQAP Plan for Holly may only be modified with approval of the Control Officer. The Hearing Board ordered to the following:

1. Perform a safety audit of Holly, the Ellwood Onshore Facility, Lease 421 (aka the Beachfront Lease), the Marine Terminal and Line 96. The permittee was required to comply with the recommendations of these audits.
2. *Safety, Inspection, Maintenance and Quality Assurance Plan (SIMQAP)*. The permittee was required to prepare and implement a SIMQAP Plan for all its Ellwood stationary source facilities. The SIMQAP for Holly is reviewed by the District (the District may consult with third party experts, including members of other County Departments) every two years and is updated as needed. The permittee may only revise the SIMQAP for the other Ellwood facilities upon approval of the Systems Safety and Reliably Review Committee.
3. *Significant Gas Releases; Shutdown and Restart Protocol*. The permittee was required to suspend any production and drilling operations immediately in the event of any defined shutdown trigger events.
4. Install a permanent flare system on Holly.
5. Implement several facility improvements to address odors while loading crude oil at the Barge Jovalan.
6. Implement a number of hydrogen sulfide monitoring procedures.
7. Install an emergency backup generator at EOF.
8. Comply with the County-approved *Emergency Action Plan* for the Project.

Abatement Order measures applicable to Holly have been incorporated in the permit conditions of this permit.

Table 3.1. Generic Federally-Enforceable District Rules

Generic Requirements	Affected Emission Units	Basis for Applicability
<u>RULE 101</u> : Compliance by Existing Installations	All emission units	Emission of pollutants
<u>RULE 102</u> : Definitions	All emission units	Emission of pollutants
<u>RULE 103</u> : Severability	All emission units	Emission of pollutants
<u>RULE 201</u> : Permits Required	All emission units	Emission of pollutants
<u>RULE 202</u> : Exemptions to Rule 201	Applicable emission units, as listed in Form 1302-H in Part 70 application 9553	Insignificant activities/emissions, per size/rating/function
<u>RULE 203</u> : Transfer	All emission units	Change of ownership
<u>RULE 204</u> : Applications	All emission units	Addition of new equipment or modification to existing equipment.
<u>RULE 205</u> : Standards for Granting Permits	All emission units	Emission of pollutants
<u>RULE 206</u> : Conditional Approval of Authority to Construct or Permit to Operate	All emission units	Applicability of relevant Rules
<u>RULE 207</u> : Denial of Applications	All emission units	Applicability of relevant Rules
<u>RULE 208</u> : Action on Applications - Time Limits	All emission units. Not applicable to Part 70 permit applications.	Addition of new equipment or modification to existing equipment.
<u>RULE 212</u> : Emission Statements	All emission units	Administrative
<u>RULE 301</u> : Circumvention	All emission units	Any pollutant emission
<u>RULE 302</u> : Visible Emissions	All emission units	Particulate matter emissions
<u>RULE 303</u> : Nuisance	All emission units	Emissions that can injure, damage or offend.
<u>RULE 305</u> : PM Concentration - South Zone	Each PM source	Emission of PM in effluent gas
<u>RULE 309</u> : Specific Contaminants	All emission units	Combustion contaminant emission
<u>RULE 311</u> : Sulfur Content of Fuel	All combustion units	Use of fuel containing sulfur
<u>RULE 317</u> : Organic Solvents	Emission units using solvents	Solvent used in process operations
<u>RULE 321</u> : Solvent Cleaning Operations	Emission units using solvents	Solvent used in process operations

Generic Requirements	Affected Emission Units	Basis for Applicability
<u>RULE 322</u> : Metal Surface Coating	Emission units using solvents	Solvent used in process operations.
<u>RULE 323.1</u> : Architectural Coatings	Paints used in maintenance and surface coating activities	Application of architectural coatings.
<u>RULE 324</u> : Disposal and Evaporation of Solvents	Emission units using solvents	Solvent used in process operations.
<u>RULE 353</u> : Adhesives and Sealants	Emission units using adhesives and sealants	Adhesives and sealants use.
<u>RULE 505.A, B1, D</u> : Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
<u>RULE 603</u> : Emergency Episode Plans	Stationary sources with PTE greater than 100 tpy	The permittee – Ellwood is a major source.
<u>RULE 810</u> : Federal Prevention of Significant Deterioration	All emission units	Sources subject to any requirement under 40 Code of Federal Regulations, Part 52, Section 52.21
<u>REGULATION VIII</u> : New Source Review	All emission units	Addition of new equipment or modification to existing equipment.
<u>REGULATION XIII (RULES 1301-1305)</u> : Part 70 Operating Permits	All emission units	The South Ellwood Field Source is a major source.

Table 3.2. Unit-Specific Federally-Enforceable District Rules

Unit-Specific Requirements	Affected Emission Units	Basis for Applicability
<u>RULE 325</u> : Crude Oil Production and Separation	Storage tanks: Emission units capable of venting gases	Venting prohibited under Rule 325.E
<u>RULE 330</u> : Surface Coating of Metal Parts & Products	All surface coating used for any metal coating operations	Metal surfaces
<u>RULE 331</u> : Fugitive Emissions Inspection & Maintenance	Components (valves, flanges etc.) used to handle oil and gas: ID # 009601, 104754-104756	Components emit fugitive ROCs
<u>RULE 333</u> : Control of Emissions from Reciprocating IC Engines	Crane IC Engine, ID # 002336 Generator Engines ID #s 001930, 001931, 001932	Diesel-fired engine >50 hp. Gas-fired engines > 50 hp.
<u>RULE 359</u> : Flares and Thermal Oxidizers	ID # 007982, 009603	Flaring

Table 3.3. Non-Federally-Enforceable District Rules

Requirement	Affected Emission Units	Basis for Applicability
<u>RULE 210</u> : Fees	All emission units	Administrative
<u>RULE 310</u> : Odorous Sulfides	Process Units with emissions	Odorous sulfide emissions
<u>RULE 361</u> : Small Boilers, Steam Generators and Process Heaters	All emission units	Units rated greater than 2.0 MMBtu/hr and less than 5.0 MMBtu/hr.
<u>RULE 352</u> : Natural Gas-Fired Fan-Type Central Furnaces and Small Water Heaters	All emission units	Upon Installation
<u>RULES 501-504</u> : Variance Rules	All emission units	Administrative
<u>RULE 505.B2, B3, C, E, F, G</u> : Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
<u>RULES 506-519</u> : Variance Rules	All emission units	Administrative

Table 3.4. Adoption Dates of District Rules Applicable at Issuance of Permit

Rule No.	Rule Name	Adoption Date
Rule 101	Compliance by Existing Installations: Conflicts	June 21, 2012
Rule 102	Definitions	August 25, 2016
Rule 103	Severability	October 23, 1978
Rule 201	Permits Required	June 21, 2012
Rule 202	Exemptions to Rule 201	August 25, 2016
Rule 203	Transfer	April 17, 1997
Rule 204	Applications	August 25, 2016
Rule 205	Standards for Granting Permits	April 17, 1997
Rule 206	Conditional Approval of Authority to Construct or Permit to Operate	October 15, 1991
Rule 208	Action on Applications - Time Limits	April 17, 1997
Rule 212	Emission Statements	October 20, 1992
Rule 301	Circumvention	October 23, 1978

Rule No.	Rule Name	Adoption Date
Rule 302	Visible Emissions	June 1981
Rule 303	Nuisance	June 1981
Rule 305	Particulate Matter Concentration - Southern Zone	October 23, 1978
Rule 309	Specific Contaminants	October 23, 1978
Rule 310	Odorous Organic Sulfides	October 23, 1978
Rule 311	Sulfur Content of Fuels	October 23, 1978
Rule 317	Organic Solvents	October 23, 1978
Rule 318	Vacuum Producing Devices or Systems - Southern Zone	October 23, 1978
Rule 321	Solvent Cleaning Operations	June 21, 2012
Rule 322	Metal Surface Coating Thinner and Reducer	October 23, 1978
Rule 323.1	Architectural Coatings	January 1, 2015
Rule 324	Disposal and Evaporation of Solvents	October 23, 1978
Rule 325	Crude Oil Production and Separation	July 19, 2001
Rule 326	Storage of Reactive Organic Compound Liquids	January 18, 2001
Rule 328	Continuous Emissions Monitoring	October 23, 1978
Rule 330	Surface Coating of Metal Parts and Products	June 21, 2012
Rule 331	Fugitive Emissions Inspection and Maintenance	December 10, 1991
Rule 333	Control of Emissions from Reciprocating Internal Combustion Engines	June 19, 2008
Rule 342	Control of Oxides of Nitrogen (NOx) from Boilers, Steam Generators and Process Heaters	June 20, 2019
Rule 343	Petroleum Storage Tank Degassing	December 14, 1993
Rule 344	Petroleum Sumps, Pits and Well Cellars	November 10, 1994
Rule 346	Loading of Organic Liquid Cargo Vessels	January 18, 2001
Rule 352	Natural Gas-Fired Fan-Type Central Furnaces and Small Water Heaters	October 20, 2011
Rule 353	Adhesives and Sealants	June 12, 2012
Rule 359	Flares and Thermal Oxidizers	June 28, 1994

Rule No.	Rule Name	Adoption Date
Rule 360	Emissions of Oxides of Nitrogen From Large Water Heaters and Small Boilers	March 15, 2018
Rule 361	Small Boilers, Steam Generators, and Process Heaters	June 20, 2019
Rule 505	Breakdown Conditions (Section A, B1 and D)	October 23, 1978
Rule 603	Emergency Episode Plans	June 15, 1981
Rule 801	New Source Review	August 25, 2016
Rule 802	Nonattainment Review	August 25, 2016
Rule 803	Prevention of Significant Deterioration	August 25, 2016
Rule 804	Emission Offsets	August 25, 2016
Rule 805	Air Quality Impact and Modeling	August 25, 2016
Rule 806	Emission Reduction Credits	August 25, 2016
Rule 808	New Source Review for Major Sources of Hazardous Air Pollutants	May 20, 1999
Rule 810	Federal Prevention of Significant Deterioration	June 20, 2013
Rule 901	New Source Performance Standards (NSPS)	September 20, 2010
Rule 1301	General Information	August 25, 2016
Rule 1302	Permit Application	November 9, 1993
Rule 1303	Permits	January 18, 2001
Rule 1304	Issuance, Renewal, Modification and Reopening	January 18, 2001
Rule 1305	Enforcement	November 9, 1993

4.0 Engineering Analysis

4.1 General

The engineering analyses performed for this permit were limited to the review of:

- ☞ emission factors and calculation methods for each emissions unit
- ☞ emission control equipment (including RACT, BACT, NSPS, NESHAP, MACT)
- ☞ emission source testing, sampling, CEMS, CAM
- ☞ process monitors needed to ensure compliance

Unless noted otherwise, default ROC/THC reactivity profiles from the District's document titled "VOC/ROC Emission Factors and Reactivities for Common Source Types" dated 3/12/01 (version 1.2) was used to determine non-methane, non-ethane fraction of THC.

4.2 Stationary Internal Combustion Engines

4.2.1 General: Stationary internal combustion engines associated with Holly consist of compression ignition IC engines only.

There are two permanent diesel-fired IC engines on Holly. These include a 250 bhp pedestal crane engine and an emergency electrical generator powered by a 373 bhp ICE which provides emergency power to the platform. The 373-hp IC engine is limited by the ATCM to 20 hours per year of testing and maintenance operations. Emergency uses of the engine are not limited. Fuel usage of the crane engine is limited to 120 gallons per day and 30,000 gallons per year. The primary source of power for the platform is solar.

4.2.2 Emission Controls: The crane engine is a Tier 3-certified engine, in addition, the engine is controlled by a diesel particulate filter in order to meet the ATCM PM limit of 0.01 g/bhp-hr or, alternatively, 85% reduction across the filter.

Any diesel-fired engines brought to the platform for decommissioning activities are rented engines. The permittee must ensure that these engines meet the requirements of the ATCM and are either permitted by the district or registered in the statewide PERP.

4.2.3 Emission Factors: Emission factors for the crane engine are based on Tier 3 and ATCM standards. The manufacturer's supplied information on NO_x and ROC emissions was used to convert the Tier NO_x+NMOC standard into NO_x and ROC emission factors.

4.2.4 Calculations:

The crane engine is subject to daily and annual fuel use limits. Emissions are calculated based on the maximum rated horsepower, fuel consumption at the maximum rated horsepower, permitted emission factors, and the daily and annual fuel use limits:

$$E1, \text{ lb/day} = \text{Rating (bhp)} * \text{EF (g/bhp-hr)} / \text{Fuel Consumption (gal/hr)} * (\text{lb}/453.6 \text{ g}) * (28.5 \text{ gal/day})$$

$$E2, \text{ tpy} = \text{Rating (bhp)} * \text{EF (g/bhp-hr)} / \text{Fuel Consumption (gal/hr)} * (\text{lb}/453.6 \text{ g}) * (10,000 \text{ gal/year}) * (\text{ton}/2000 \text{ lb})$$

4.2.5 **Monitoring:** All IC engines are equipped with non-resettable hour meters. The crane engine and the ICE powering the emergency electrical generator engine are equipped with non-resettable fuel use meters. The hours of operation of all the engines at the platform are monitored. In addition, the engines that are subject to Rule 333 are monitored quarterly for NO_x and CO.

4.3 Flare Systems

4.3.1 **General:** The flare relief system consists of one low-pressure flare (H-101). Pilot gas for the flare is propane. Nitrogen is used for purging. The low-pressure flare serves to flare the buildup of annular gas during the plug and abandonment of wells. This low-pressure flare is a Kaldair model CAK-4 combined pilot/flare tip mounted to an existing flare stack boom and permit limited to flare gas flow rates of up to 30,000 SCFD. The low-pressure flare pilot system uses one pilot with a flow rate of up to 100 SCFH total and equipped with automatic igniters. Flare purge gas flow-control FCV-173 is a manual system using a pressure gauge and rotameter for up to 300 SCFH (equivalent to 7,200 SCFD).

4.3.2 **Emission Controls:** The low-pressure flare has a Kaldair CAK-4 tip, which is not a smokeless design, but it is still subject to the visible emission limits of Rule 302.

4.3.3 **Emission Factors:** NO_x, ROC and CO emission factors are from Table 13.5-1 of USEPA's AP-42. The PM/PM₁₀ factor is based on Table 3.1.1 of the District's *Flare Study Phase I Report* (7/91). SO_x emissions are based on a mass balance of total flared gas sulfur content per District document titled "*Technical Information and References Gaseous Fuel SO_x Emission Factor*" (Version 1.0, 1/31/97). The PM/PM_{10.2.5}/PM₁₀ ratio is assumed to equal 1.0.

4.3.4 **Calculations:** The emissions for flaring events are calculated using the calculation methodology below:

$$ER = [(EF \times SCFPP \times HHV) \div 10^6]$$

where:

ER =	emission rate (lb/period)
EF =	pollutant specific emission factor (lb/MMBtu)
SCFPP =	gas flow rate per operating period (scf/period)
HHV =	gas higher heating value (Btu/scf)

4.3.5 **Monitoring:** The low-pressure flare flow-metering system (FI-172) is capable of metering gas flow rates between 5 SCFM to 2000 SCFM. Flare gas will be monitored by a Houston Atlas H₂S detector or sampled for H₂S concentrations of the pilot gas and flare gas. The sulfur content of the pilot gas may not exceed 239 ppmv, and the sulfur content of the flare gas may not exceed 205 ppmv. Testing of the annular gas has indicated the gas contains significantly lower levels of H₂S than the historically produced gas, as a result the flaring of this annular gas at Platform Holly would not violate the abatement order as long as the H₂S content remains below 205 ppmv. The pilot flow rate for the low pressure flare is limited by its design flow capability based upon a fixed size flow-limiting orifice and monitored fuel gas delivery pressure.

4.3.6 Flare Planned-Intermittent Operations: As part of the plug and abandonment work at Platform Holly, wells are bled down below 20 psi, the minimum pressure required to push the gas onshore and therefore the remaining annular gas must be flared at the platform. The continuous buildup of annular gas in some wells has resulted in the need to flare this gas intermittently. This gas will be flared intermittently until the source of the buildup is removed and the wells plugged and abandoned.

4.4 Fugitive Hydrocarbon Sources

4.4.1 General: Fugitive hydrocarbon emissions occur from leaks in process components such as valves, connections, pumps and pressure relief devices. Each of these component types may be comprised of several potential "leak paths" at the facility. For example, leak paths associated with a valve include the valve stem, bonnet, and the upstream and downstream flanges. The total number of leak paths at the facility must be determined to perform fugitive emission calculations.

4.4.2 Emission Controls: A fugitive emissions control program is used to minimize potential leaks from the process components. Emission reductions are expected as a result of the implementation of a Fugitive Hydrocarbon Inspection and Maintenance (I&M) program. The I&M program is designed to minimize leaks through a combination of pre-leak and post-leak controls. Pre-leak controls include venting of leaks from compressor seals to the vapor recovery system, venting of pressure relief devices to the flare system, and plugging of open-ended lines (an open-ended line is a valve that has one side of the valve seat in contact with the process fluid, and is open to the atmosphere on the other). Post-leak controls consist of regular inspection of each leak source for leakage and repair of all components found leaking. An emission control efficiency of 80 percent is credited to all accessible and inaccessible components that are safe to monitor (as defined per Rule 331) due to the implementation of a District-approved Inspection and Maintenance program for leak detection and repair consistent with Rule 331 requirements. Unsafe to monitor components are not eligible for I&M control credit. Ongoing compliance is determined in the field by inspection with an organic vapor analyzer and verification of operator records.

4.4.3 Emission Factors: Emissions of reactive organic compounds from piping components such as valves, flanges and connections have been calculated using emission factors pursuant to District P&P 6100.061 (*Determination of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities Through the Use of Facility Component Counts - Modified for Revised ROC Definition*) for components in gas/light liquid and oil/emulsion service. The component leak paths (clps) were counted consistent with P&P 6100.061. This leak path count is not the same as the "component" count required by District Rule 331.

4.4.4 Calculations: The current component leakpath count on Platform Holly is listed in Table 5.1-1. This leak path count has been revised since issuance of the previous permit renewal (PTO 8234-R10). The calculation methodology for the fugitive emissions is:

$$ER = [(EF \times CLP \div 24) \times (1 - CE) \times (HPP)]$$

where: ER = emission rate (lb/period)
EF = ROC emission factor (lb/clp-day)
CLP = component leak path (clp)

CE = control efficiency
HPP = operating hours per time period (hrs/period)

Note that the same emission factor and ROC/THC ratio is used for all component types on offshore platforms, so it is not necessary to break down the component leak path count by type in order to calculate emissions.

- 4.4.5 **Monitoring:** Inspections are performed with an Organic Vapor Analyzer consistent with EPA Method 21. Components are required to be repaired between 1 to 14 days, depending on the severity of the leak. The I&M program is consistent with the requirements of District Rule 331. The I&M program also includes a leak path identification system. Leak paths are physically identified in the field with a tag and given a unique number. An inventory of each tag is then maintained which describes the component type, service, accessibility and all associated leak paths. The leak path inventory serves as a basis for compliance with fugitive hydrocarbon emission limits.

4.5 **Crew and Supply Vessels**

- 4.5.1 **General:** Holly is serviced by both crew and supply boats. Crew boats are used to transport personnel and light supplies between Ellwood Pier/Goleta Pier and the platform. Supply boats are used to transport equipment and supplies, between Port Hueneme and the platform. Total mileage in the state coastal waters, from Holly to Ventura’s Port Hueneme is approximately 41 miles (one way). Total mileage between the Ellwood Pier and Holly is approximately 3.2 miles (one way) and 5.8 miles to Goleta Pier (one way).

The permittee does not have dedicated crew or supply boats for servicing Holly. Instead, whatever boats are available are used, provided the boats comply with the permit conditions and emission limits of this permit. Crew and supply boats that are permitted for use at Holly are listed in the District-approved Boat Monitoring and Reporting Plan issued to this facility.

- 4.5.2 **Emission Controls:** The main and auxiliary engines for crew and supply boats are controlled and meet at minimum EPA Tier 2 marine engine emissions standards.
- 4.5.3 **Emission Factors:** The main engines for both crew and supply boats use NOx, ROC, CO and PM EPA Tier 2 marine emission factors for category 1 vessels with a displacement between 2.5 and 4.999 liters per cylinder. The auxiliary engines for supply boats use NOx, ROC, CO and PM EPA Tier 2 marine emission factors for category 1 vessels with displacement between 1.2 and 2.499 liters per cylinder. The auxiliary engines for the crew boat use NOx, ROC, CO and PM EPA Tier 2 off road emission factors for engines between 175 to 300 bhp. Sulfur oxide emissions are based on mass balance calculations assuming 0.0015 weight percent sulfur diesel fuel.
- 4.5.4 **Calculations:** The calculation methodology for the crew and supply boat main engine emissions is:

$$ER = [(EF \times EHP \times BSFC \times EL \times TM) \div (10^3)]$$

where: ER = emission rate (lbs per period)
EF = full load pollutant specific emission factor (lb/1000 gallons)
EHP = engine max. rated horsepower (bhp)
BSFC = engine brake specific fuel consumption (gal/bhp-hr)

EL = engine load factors (percent of max. fuel consumption)
 TM = time in mode (hours/period)

The calculations for the auxiliary engines are similar, except that a 50 percent engine load factor for the generators is utilized.

- 4.5.5 Monitoring: Ongoing compliance will be assessed through implementation of a District-approved Boat Monitoring and Reporting Plan. This Plan will be required to follow the District *Data Reporting Protocol for Crew and Supply Boat Activity Monitoring* document (dated June 21, 1991 and subsequent updates). The plan requirements include fuel use and hours of operation.
- 4.5.6 Emergency Response Boat: A permanently assigned emergency response vessel is associated with Holly. The engines on these vessels are uncontrolled. The total engine horsepower, including auxiliary engines, is 1,770 bhp. Emissions liability is assigned in a prorated fashion among the sixteen offshore platforms that utilize the vessel off the Santa Barbara coast. Emission factors, calculations, and compliance procedures are the same as for the supply vessels discussed above. If used, other emergency response boat fuel usage (and resulting emissions) shall be assessed against this emissions category.

4.6 Tanks/Vessels/Sumps/Separators

- 4.6.1 Tanks: Platform Holly has one diesel fuel storage tank. The diesel storage tank servicing the IC engines on the platform is not controlled. Emissions from the diesel fuel tank are small and are assumed to be less than 0.10 tpy (200 lb/year).
- 4.6.2 Sumps: The platform has a deck water drainage system that consists of two open top tanks in series (T-1 and T-4). Liquids from these tanks are pumped to a disposal well. The emissions from both of these tanks are based on the CARB/KVB Report (*Emissions Characteristics of Crude Oil Production in California*, January 1983). These vessels are classified as being in tertiary production and light oil service and are all vented to the atmosphere. The calculation method is:

$$ER = [(EF \times SAREA \div 24) \times (1 - CE) \times (HPP)]$$

where: ER = emission rate (lb/period)
 EF = ROC emission factor (lb/ft²-day)
 SAREA = unit surface area (ft²)
 CE = control efficiency
 HPP = operating hours per time period (hrs/period)

4.7 Other Emission Sources

- 4.7.1 Pigging: Pigging operations are no longer conducted on Platform Holly.
- 4.7.2 General Solvent Cleaning/Degreasing: Solvent usage (not including thinners for surface coating) occurs on Holly as part of normal daily operations and consists of small cold solvent degreasing and wipe cleaning. Mass balance emission calculations are used assuming all the solvent used evaporates to the atmosphere. Emission estimates and compliance are based on monthly usage

data. For the purposes of calculations, the daily emissions are assumed equal to the monthly emissions divided by the number of days per month.

4.7.3 Surface Coating: Surface coating operations typically include normal touch up activities. Entire platform painting programs are performed once every few years. Emissions are determined based on mass balance calculations assuming all solvents evaporate into the atmosphere. Emissions of PM/PM₁₀PM_{2.5} from paint over-spray are not calculated due to the lack of established calculation techniques.

4.7.5 Abrasive Blasting: Abrasive blasting with CARB certified sands may be performed as a preparation step prior to surface coating. Particulate matter is emitted during this process. A general emission factor of 0.01 pound PM per pound of abrasive is used (*SCAQMD - Permit Processing Manual*, 1989) to estimate emissions of PM/PM₁₀PM_{2.5} when needed for compliance calculations. A PM/PM₁₀PM_{2.5} ratio of 1.0 is assumed.

4.8 BACT/NSPS/NESHAP/MACT

Holly is subject to MACT provisions prescribed under Subpart HH but qualifies for the black oil exemption. The crane engine is subject to the NSPS Subpart III.

4.9 CEMS/Process Monitoring/CAM

4.9.1 CEMS: There are no in-stack continuous emission monitors (CEMS) at Holly.

4.9.2 Process Monitoring: In many instances, ongoing compliance beyond a single (snap shot) source test is assessed by process monitoring systems. Examples of these monitors include: engine hour meters, water injection mass flow meters, fuel usage meters, flare gas flow meters, and hydrogen sulfide analyzers. Once these process monitors are in place, it is important that they be well maintained and calibrated to ensure that the required accuracy and precision of the devices are within specifications. At a minimum, the following process monitors will be required to be calibrated and maintained in good working order:

- Crew boat diesel fuel meters (main and auxiliary engines)
- Supply boat diesel fuel meters (main and auxiliary/bow thruster engines)
- Hour meters (crane, electrical generator engine)
- Flare flow meter
- Ambient H₂S sensors and LEL sensors required by the SIMQAP

To implement the above calibration and maintenance requirements, the permittee updated the existing *Process Monitor Calibration and Maintenance Plan*. The permittee is required to comply with the Plan and any subsequent District-approved update.

4.9.3 CAM: A review of the equipment associated with Holly indicates that there are no emission units or activities that are subject to the rule. This rule affects emission units at the source subject to a federally enforceable emission limit or standard that uses a control device to comply with the emission standard, and either pre-control or post-control emissions exceed the Part 70 source emission thresholds.

4.10 Source Testing/Sampling

Source Testing/Sampling/Calibration: Source testing and sampling are required in order to ensure compliance with permitted emission limits, prohibitory rules, control measures and the assumptions that form the basis of this operating permit.

Source testing of the crane engine is required only if portable analyzer monitoring exceeds a threshold of 197 ppmvd NO_x @ 15% O₂ and 60 ppmvd NO_x @ 15% O₂ respectively, and the source fails to demonstrate compliance with these thresholds by a retest within 15 days of the initial over the threshold reading. Source testing is conducted using the methods specified by Rule 333. Source test requirements are listed below in Table 4.10-1.

Table 4.10-1. Source Test Requirements

Emission & Limit Test Points	Pollutants ^(e)	Parameters ^(b)	Test Methods ^{(a)(c)}	Limit		
				Concentration (ppmvd @ 15% O ₂)	Emission Standard (g/bhp-hr)	Mass Emissions (lb/hr)
				Crane	Crane	Crane
IC Engine Exhaust ^(d)	NO _x	ppmv, lb/hr	EPA Method 7E, ARB 1-100	197	2.69	0.13
	ROC	ppmv, lb/hr	EPA Method 18	65	0.31	0.02
	CO	ppmv, lb/hr	EPA Method 10, ARB 1-100	313	2.60	0.12
	Sampling Point Det.		EPA Method 1			
	Stack Gas Flow Rate		EPA Method 2 or 19			
	O ₂	Dry, Mol. Wt	EPA Method 3			
Moisture Content		EPA Method 4				

Notes:

- (a) Alternative methods may be acceptable on a case-by-case basis.
- (b) The emission rates shall be based on EPA Methods 2 and 4, or Method 19 along with the heat input rate.
- (c) For NO_x, ROC, CO and O₂ a minimum of three 40-minute runs shall be obtained during each test.
- (d) Source testing shall be performed for the IC engine in an "as found" condition operating at a representative, District-approved, IC engine load (gal/hr).

At a minimum, the process streams below are required to be sampled and analyzed. Duplicate samples are required for wastewater when Rule 325 applicability is to be determined:

- ☞ Wastewater: Sample taken of liquid entering the wastewater surge tank (T-1) and surge skimmer tank (T-4). Analysis for: ROC content in units of mg/l (per Rule 325 methods). Samples to be taken upon request of the District, except for Tank T-1, which is to be taken annually.
- ☞ Flare Gas Stream: Sample to be taken at District-approved collection point at the platform per Process Stream Sampling Plan. Analysis for hydrogen sulfide and total sulfur. Samples to be taken for each flare event.
- ☞ Flare Pilot: Flare pilot gas is propane. Documentation shall be provided to that the propane meets commercial grade standards or sampled during each flare event.
- ☞ IC Engine Diesel Fuel: Sample to be taken at the fuel tank. Analysis for HHV per District-approved ASTM Methods. Sample to be taken annually.

4.11 Part 70 Engineering Review: Hazardous Air Pollutant Emissions

Hazardous air pollutant emissions from the different categories of emission units at Holly are based on emission factors listed in USEPA AP-42. Where no emission factors are available, the HAP fractions from the ARB VOC Speciation Manual – Second Edition (August 1991) are used in conjunction with the ROC emission factor for the equipment item in question. Potential HAP emissions from each emissions unit at Holly are listed in Section 5. The HAP emission factor basis is detailed in Table 10.1-4.

5.0 Emissions

5.1 General

Emissions calculations are divided into "permitted" and "exempt" categories. Permit exempt equipment is determined by District Rule 202. The permitted emissions for each emissions unit are based on the equipment's potential to emit (as defined by Rule 102). Section 5.2 details the permitted emissions for each emissions unit. Section 5.3 details the overall permitted emissions for the facility based on reasonable worst-case scenarios using the potential to emit for each emissions unit. Section 5.4 provides the federal potential to emit calculation using the definition of potential to emit used in Rule 1301. Section 5.5 provides the estimated HAP emissions for the platform. Section 5.6 provides the estimated emissions from permit exempt equipment and also serves as the Part 70 list of insignificant emissions. In order to track the emissions from a facility accurately, the District uses a computer database. Attachment 10.4 contains the District's documentation for the information entered into that database. Consistent with the District and federal rules, all marine vessel emissions associated with the platform are included in the potential-to-emit calculations.

5.2 Permitted Emission Limits - Emission Units

Each emissions unit associated with the facility was analyzed to determine the potential-to-emit for the following pollutants:

- ⇒ Nitrogen Oxides (NO_x)³
- ⇒ Reactive Organic Compounds (ROC)
- ⇒ Carbon Monoxide (CO)
- ⇒ Sulfur Oxides (SO_x)⁴
- ⇒ Particulate Matter (PM)⁵
- ⇒ Particulate Matter smaller than 2.5 and 10 microns (PM_{10/2.5})
- ⇒ Greenhouse Gases (GHGs)

Permitted emissions are calculated for both short term (daily) and long term (annual) time periods. Section 4.0 (Engineering Analysis) provides a general discussion of the basic calculation methodologies and emission factors used. The reference documentation for the specific emission calculations may be found in Section 4 and Attachment 10.1. Table 5.1-1 provides the basic operating characteristics. Table 5.1-2 provides the specific emission factors. Table 5.1-3 shows the permitted short-term and permitted long-term emissions for each unit or operation. In the table, the last column indicates whether the emission limits are federally enforceable. Those emissions limits that are federally enforceable are indicated by the symbol “FE”. Those emissions limits that are District-only enforceable are indicated by the symbol “A”. Emissions data that are shown for informational purposes only are not enforceable (District or federal) and are indicated by the symbol “NE”.

5.3 Permitted Emission Limits - Facility Totals

The total potential to emit for all emission units associated with the facility was analyzed. This analysis looked at the reasonable worst-case operating scenarios for each operating period. The equipment operating in each of the scenarios are presented below. Unless otherwise specified, the operating characteristics defined in Table 5.1-1 for each emission unit are assumed. Table 5.2 shows the total permitted emissions for the facility.

Daily Scenario:

- Crew and supply boat main engines
- Generator engines on crew and supply boats
- Bow thruster on supply boat
- Flaring (pilot, intermittent flare events)
- Solvent/coating usage
- ICE powering the emergency electrical generator
- Crane engine

³ Calculated and reported as nitrogen dioxide (NO₂)

⁴ Calculated and reported as sulfur dioxide (SO₂)

⁵ Calculated and reported as all particulate matter smaller than 100 μm

Annual Scenario:

- Crew and supply boat main engines
- Generator engines on crew and supply boats
- Bow thruster on supply boat
- Flaring (pilot, intermittent flare events)
- Drain Sump Tank (T-1)
- Solvent/coating usage
- ICE powering the emergency electrical generator
- Crane engine

5.4 Part 70: Federal potential to emit for the Facility

Table 5.3 lists the federal Part 70 potential to emit. Fugitive emissions are excluded from the federal definition of potential to emit unless the source belongs to one of the categories listed in 40 CFR 70.2. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels are listed in 40 CFR 70.2. This facility has a total petroleum storage capacity less than 300,000 barrels. Stationary sources that were being regulated as of August 7, 1980 under section 111 or 112 are also listed in 40 CFR 70.2. Each NSPS and NESHAP applicable to the equipment subject to this permit was promulgated after August 7, 1980 therefore fugitive emissions are not included in the federal potential to emit.

5.5 Part 70: Hazardous Air Pollutant Emissions for the Facility

Total emissions of hazardous air pollutants (HAP) are computed based on the factors listed in Table 5.5-1 for each emissions unit. Refer to Table 10.1-4 for the basis of the HAP emission factors. HAP emission factors are shown in Table 5.5-1. Facility HAP emissions are shown in Table 5.5-2. Stationary Source HAP emissions are shown in Table 5.5-3. These are based on a combination of the worst-case scenario listed in Section 5.3. HAPs emissions fugitive emissions have been revised based on revised HAPs emission factors.

5.6 Exempt Emission Sources/Part 70 Insignificant Emissions

Equipment/activities exempt from District permits pursuant to Rule 202 include:

- maintenance operations involving surface coating (painting operations)
- portable registered drilling engines
- diesel fuel tank (1500 gallons)

Insignificant emission units are defined under District Rule 1301 as any regulated air pollutant emitted from the unit, excluding HAPs, that are less than 2 tons per year based on the unit's potential to emit and any HAP regulated under section 112(g) of the Clean Air Act that does not exceed 0.5 ton per year based on the unit's potential to emit. Solvent usage and surface coating operations for maintenance are exempt from District permit per Rule 202, but are not Part 70 insignificant emission units, since they exceed the insignificant emissions threshold.

Table 5.4 presents the estimated annual emissions from these exempt equipment items, including those exempt items not considered insignificant. This permit covers the Solvents/Surface coating operations used maintenance operations.

Table 5.1-1
Platform Holly PTO 8234-R12
Operating Equipment Description

Equipment Category	Description	Equip. No	EQ No.	Device Specifications				Usage Data			Maximum Operating Schedule (in hours/time period)			References
				Fuel	% S by volume	Size	Units	Capacity	Units	Load	hr	day	year	
Combustion - LP Flare	Planned - Pilot	H-101	9603	Propane	0.0239	100	scfh	0.252	MMBtu/hr	--	1.0	4	1400	A
	Planned - Intermittent	H-101	9603	PG	0.2050	30,000	scfh	33.000	MMBtu/hr	--	1	24	8760	
IC Engine	Crane Engine	--	111506	Diesel	0.0015	250	bhp	14.1	gal/hr	--	1.0	2.0	709.2	
	Emergency Generator	--	2337	Diesel	0.0015	373	bhp	21.24	gal/hr	--	1.0	2.0	20.0	
Fugitive Components	Oil - controlled	3105-02	9601	--	--	3,760	comp-lp	--	--	--	1.0	24	8760	B
	Oil - unsafe	3105-03	104754	--	--	0	comp-lp	--	--	--	1.0	24	8760	
					sub-total =		3,760							
	Gas - controlled	3105-04	104755	--	--	8,591	comp-lp	--	--	--	1.0	24	8760	
	Gas - unsafe	3105-05	104756	--	--	0	comp-lp	--	--	--	1.0	24	8760	
					sub-total =		8,591							
Supply Boat	Main Engines	3105-AA	9789	D2	0.0015	4,920	bhp-total	270.1	gal/hr	0.65	1.0	13	2544	C
	Generator Engines	3105-BB	9790	D2	0.0015	530	bhp-total	29.1	gal/hr	0.50	1.0	24	3500	
	Bow Thruster	3105-CC	9791	D2	0.0015	530	bhp-total	29.1	gal/hr	1.00	1.0	3	500	
Crew Boat	Main Engines	3105-DD	9787	D2	0.0015	5,200	bhp-total	285.5	gal/hr	0.85	1.0	7.0	1792	D
	Auxilliary Engines	3105-EE	9788	D2	0.0015	250	bhp-total	13.7	gal/hr	0.50	1.0	7.0	1792	
Sumps/Tanks/Separators	Drain Sump Tank (T-1)	3105-09	2345	--	--	44.20	ft2	--	--	--	1.0	24	8760	F
	Overflow sump Tank (T-4)	3105-11	5882	--	--	113.20	ft2	--	--	--	1.0	24	8760	
Solvent/Coatings Usage*	Cleaning/degreasing	3105-15	5884	--	--	1,500	gal/yr	125	gal/month	--	1.0	24	8760	G

*-- *estimated solvent usage*

Table 5.1-2
Platform Holly PTO 8234-R12
Equipment Emission Factors

Emission Factors											
Equipment Category	Description	Equip. No	EQ No.	NOx	ROC	CO	SOx	PM	PM2.5/10	Units	References
Combustion - Flare	Planned - Pilot	H-101	9603	0.068	0.086	0.370	0.037	0.020	0.020	lb/MMBtu	A
	Planned - Intermittent	H-101	9603	0.068	0.086	0.370	0.031	0.020	0.020		
IC Engine	Crane Engine	--	111506	2.69	0.31	2.60	0.006	0.01	0.01	g/hp-hr	
	Emergency Generator	--	2337	14.061	1.12	3.03	0.93	0.984	0.984	g/hp-hr	
Fugitive Components	Oil - controlled	3105-02	9601	--	0.0009	--	--	--	--	lb/day-clp	B
	Oil - unsafe	3105-03	104754	--	0.0044	--	--	--	--	lb/day-clp	
	Gas - controlled	3105-04	104755	--	0.0147	--	--	--	--	lb/day-clp	
	Gas - unsafe	3105-05	104756	--	0.0736	--	--	--	--	lb/day-clp	
Supply Boat	Main Engines	3105-AA	9789	195	21.68	148.58	0.21	6.02	5.78	lb/1000 gal	C
	Generator Engines	3105-BB	9790	195	21.68	148.58	0.21	6.02	5.78	lb/1000 gal	
	Bow Thruster	3105-CC	9791	195	21.68	148.58	0.21	6.02	5.78	lb/1000 gal	
Crew Boat	Main Engines	3105-DD	9787	195	21.68	148.58	0.21	6.02	5.78	lb/1000 gal	D
	Auxilliary Engines	3105-EE	9788	181	16.06	77.86	0.21	6.02	5.78	lb/1000 gal	
Sumps/Tanks/Separators	Drain Sump Tank (T-1)	3105-09	2345	--	0.0058	--	--	--	--	lb/ft2-day	F
	Overflow Sump Tank (T--)	3105-11	5882	--	0.0058	--	--	--	--	lb/ft2-day	
Solvent/Coatings Usage	Cleaning/degreasing	3105-15	5884	--	250	--	--	--	--	g/l	G

Table 5.1-3
Platform Holly PTO 8234-R12
Daily and Annual Emissions

Equipment Category	Description	Equip. No	EQ No.	NOx		ROC		CO		SOx		PM		PM2.5/10		Federal Enforceability
				lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	lb/day	tpy	
Combustion - Flare	Planned - Pilot	H-101	9603	0.07	0.01	0.09	0.02	0.37	0.07	0.04	0.01	0.02	0.00	0.02	0.00	FE
	Planned - Intermittent	H-101	9603	2.24	0.41	2.85	0.52	12.21	2.23	1.02	0.19	0.66	0.12	0.66	0.12	
IC Engine	Crane Engine	--	2336	3.00	0.53	0.35	0.06	2.90	0.51	0.01	0.00	0.01	0.00	0.01	0.00	A
	Emergency Generator	--	2337	23.13	0.12	1.84	0.01	4.98	0.02	1.53	0.01	1.62	0.01	1.62	0.01	A
Fugitive Components	Oil - controlled	3105-02	9601	--	--	3.30	0.60	--	--	--	--	--	--	--	--	A
	Oil - unsafe	3105-03	104754	--	--	0.00	0.00	--	--	--	--	--	--	--	--	A
						sub-total =	3.30	0.60								A
	Gas - controlled	3105-04	104755	--	--	126.44	23.08	--	--	--	--	--	--	--	--	A
	Gas - unsafe	3105-05	104756	--	--	0.00	0.00	--	--	--	--	--	--	--	--	A
					sub-total =	126.44	23.08									A
Supply Boat	Main Engines	3105-AA	9789	454.00	43.58	50.43	4.84	345.64	33.18	0.49	0.05	14.00	1.34	13.44	1.29	A
	Generator Engines	3105-BB	9790	68.14	4.97	7.57	0.55	51.88	3.78	0.07	0.01	2.10	0.15	2.02	0.15	A
	Bow Thruster	3105-CC	9791	17.04	1.42	1.89	0.16	12.97	1.08	0.02	0.00	0.53	0.04	0.50	0.04	A
Crew Boat	Main Engines	3105-DD	9787	331.52	42.43	36.83	4.71	252.40	32.31	0.36	0.05	10.23	1.31	9.82	1.26	A
	Auxilliary Engines	3105-EE	9788	8.66	1.11	0.77	0.10	3.73	0.48	0.01	0.00	0.29	0.04	0.28	0.04	A
Sumps/Tanks/Separators	Drain Sump Tank (T-1)	3105-09	2345	--	--	0.26	0.05	--	--	--	--	--	--	--	--	A
	Overflow Sump Tank (T--)	3105-11	5882	--	--	0.66	0.12	--	--	--	--	--	--	--	--	A
Solvent/Coatings Usage*	<i>Cleaning/degreasing*</i>	3105-15	5884	--	--	8.56	1.56	--	--	--	--	--	--	--	--	

Notes

FE = federally enforceable

A = APCD-only enforceable

*-- These estimated emissions do not constitute any emissions limit

Table 5.2
Platform Holly PTO 8234-R12
Total Permitted Facility Emissions

A. DAILY (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	PM2.5/10
Combustion - Flare	2.31	2.94	12.58	1.06	0.68	0.68
IC Engines	26.12	2.19	7.88	1.54	1.63	1.63
Fugitive Components	--	129.74	--	--	--	--
Supply Boat	539.18	59.90	410.49	0.58	16.63	15.97
Crew Boat	340.19	37.60	256.13	0.37	10.51	10.09
Sumps/Tanks/Separators	--	0.91	--	--	--	--
<i>Solvent/Coatings Usage*</i>	--	8.56	--	--	--	--
Facility Total	907.80	241.84	687.08	3.55	29.46	28.37

B. ANNUAL (tpy)

Equipment Category	NOx	ROC	CO	SOx	PM	PM2.5/10
Combustion - Flare	0.42	0.54	2.29	0.19	0.12	0.12
IC Engines	0.64	0.07	0.53	0.01	0.01	0.01
Fugitive Components	--	23.68	--	--	--	--
Supply Boat	49.97	5.55	38.05	0.05	1.54	1.48
Crew Boat	43.54	4.81	32.78	0.05	1.35	1.29
Sumps/Tanks/Separators	--	0.17	--	--	--	--
<i>Solvent/Coatings Usage*</i>	--	1.56	--	--	--	--
Facility Total	94.58	36.38	73.66	0.30	3.02	2.91

*-- These estimated emissions do not constitute any emissions limit

Table 5.3
Platform Holly PTO 8234-R12
Federal Potential to Emit

A. DAILY (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	PM2.5/10
Combustion - Flare	2.31	2.94	12.58	1.06	0.68	0.68
IC Engines	26.12	0.64	2.19	0.07	7.88	0.53
Fugitive Components	--	--	--	--	--	--
Supply Boat	539.18	59.90	410.49	0.58	16.63	15.97
Crew Boat	340.19	37.60	256.13	0.37	10.51	10.09
Sumps/Tanks/Separators	--	--	--	--	--	--
Solvent Usage	--	--	--	--	--	--
Exempt Eqpt.	0.00	0.00	0.00	0.00	0.00	0.00
Facility Total	907.80	101.07	681.39	2.08	35.71	27.27

B. ANNUAL (tpy)

Equipment Category	NOx	ROC	CO	SOx	PM	PM2.5/10
Combustion - Flare	0.42	0.54	2.29	0.19	0.12	0.12
IC Engines	0.64	2.19	0.07	7.88	0.53	1.54
Fugitive Components	--	--	--	--	--	--
Supply Boat	49.97	5.55	38.05	0.05	1.54	1.48
Crew Boat	43.54	4.81	32.78	0.05	1.35	1.29
Sumps/Tanks/Separators	--	0.17	--	--	--	--
Solvent Usage	--	1.56	--	--	--	--
Exempt Equipment	0.00	5.00	0.00	0.00	0.00	0.00
Facility Total	94.58	19.82	73.19	8.17	3.54	4.43

Table 5.4
Platform Holly PTO 8234-R12
Estimated APCD Permit Exempt Emissions

A. DAILY (lb/day)

Equipment Category	EQ No.	NOx	ROC	CO	SOx	PM	PM _{10/2.5}
Surface Coating - Maintenance	10-3	--	27.78	--	--	--	--
		0.00	27.78	0.00	0.00	0.00	0.00

Equipment Category	EQ #	NOx	ROC	CO	SOx	PM	PM _{10/2.5}
Surface Coating - Maintenance	10-3	--	5.00	--	--	--	--
		0.00	5.00	0.00	0.00	0.00	0.00

Please refer Table 10.1-1 for documentation of emission estimates.

(*) Based on Mitigated Negative Declaration for Platform Holly Re-drilling Project for first year, Table 14.3-3, May 15, 2001.

Table 5.5-1
Platform Holly: Part 70/PFO 8234-R12
Hazardous Air Pollutant Emission Factors

Equipment Category	Description	Venoco Equip No.	EQ No.	Emission Factors																												Units	References					
				Hexane	Benzene	Toluene	Xylene	iso-Octane ¹	Formaldehyde	Hydrocarbons	Acetaldehyde	Acetone	1,3-Butadiene	Carbon Tetrachloride	Chlorobenzene	Chloroform	Ethylbenzene	Ethylene Dichloride	Hydrogen Chloride	Methane	Methyl Ethyl Ketone	Methyl Isobutyl ether	Methylene Chloride	Styrene	Vinyl Chloride	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	Arsenic	Beryllium	Cadmium	Total Chromium			Cobalt	Copper	Lead	Manganese	Mercury
Combustion - Flare	Planned - Pilot	H-100/101	7882/9603	0.0290	0.1590	0.0580	0.0290	--	1.1690	0.0110	0.0430	0.0100	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0E-04	1.2E-05	1.1E-03	1.4E-03	8.4E-05	--	--	3.8E-04	2.8E-04	2.1E-03	2.4E-05	lb/MMscf	A
	Planned - Intermittent	H-100/101	7882/9603	0.0290	0.1590	0.0580	0.0290	--	1.1690	0.0110	0.0430	0.0100	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0E-04	1.2E-05	1.1E-03	1.4E-03	8.4E-05	--	--	3.8E-04	2.8E-04	2.1E-03	2.4E-05	lb/MMscf	A
IC Engine	Crane Engine	111506	0.0269	0.1863	0.1054	0.0424	--	1.7261	0.0197	0.7833	0.0339	0.2174	--	--	0.0002	--	0.0109	--	0.1863	--	--	--	--	--	0.0016	--	0.0015	0.0006	--	--	0.0083	0.0031	0.0020	0.0039	0.0022	0.0022	lb/1000 gal	B
	Emergency Generator	2337	0.0269	0.1863	0.1054	0.0424	--	1.7261	0.0197	0.7833	0.0339	0.2174	--	--	0.0002	--	0.0109	--	0.1863	--	--	--	--	--	0.0016	--	0.0015	0.0006	--	--	0.0083	0.0031	0.0020	0.0039	0.0022	0.0022	lb/1000 gal	B
Fugitive Components	Oil - controlled	3105-02	9601	0.1768	0.0018	--	--	0.2636	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC ²	D	
	Oil - unsafe	3105-03	104754	0.1768	0.0018	--	--	0.2636	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC ²	D	
	Gas - controlled	3105-04	104755	0.1877	0.0032	--	--	0.1394	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC ²	E	
	Gas - unsafe	3105-05	104756	0.1877	0.0032	--	--	0.1394	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC ²	E
Supply Boat	Main Engines	3105-AA	9789	1.96E-04	8.33E-04	4.09E-04	2.85E-04	--	1.18E-03	8.48E-05	7.87E-04	9.25E-05	3.91E-05	--	1.46E-06	--	7.96E-05	--	1.36E-03	--	--	--	--	--	--	1.17E-05	--	1.09E-05	4.38E-06	--	--	6.06E-05	2.26E-05	1.46E-05	2.85E-05	1.61E-05	lb/MMBtu	F
	Generator Engines	3105-BB	9790	1.96E-04	8.33E-04	4.09E-04	2.85E-04	--	1.18E-03	8.48E-05	7.87E-04	9.25E-05	3.91E-05	--	1.46E-06	--	7.96E-05	--	1.36E-03	--	--	--	--	--	--	1.17E-05	--	1.09E-05	4.38E-06	--	--	6.06E-05	2.26E-05	1.46E-05	2.85E-05	1.61E-05	lb/MMBtu	F
	Bow Thruster	3105-CC	9791	1.96E-04	8.33E-04	4.09E-04	2.85E-04	--	1.18E-03	8.48E-05	7.87E-04	9.25E-05	3.91E-05	--	1.46E-06	--	7.96E-05	--	1.36E-03	--	--	--	--	--	--	1.17E-05	--	1.09E-05	4.38E-06	--	--	6.06E-05	2.26E-05	1.46E-05	2.85E-05	1.61E-05	lb/MMBtu	F
Crew Boat	Main Engines	3105-DD	9787	1.96E-04	8.33E-04	4.09E-04	2.85E-04	--	1.18E-03	8.48E-05	7.87E-04	9.25E-05	3.91E-05	--	1.46E-06	--	7.96E-05	--	1.36E-03	--	--	--	--	--	--	1.17E-05	--	1.09E-05	4.38E-06	--	--	6.06E-05	2.26E-05	1.46E-05	2.85E-05	1.61E-05	lb/MMBtu	F
	Auxiliary Engines	3105-EE	9788	1.96E-04	8.33E-04	4.09E-04	2.85E-04	--	1.18E-03	8.48E-05	7.87E-04	9.25E-05	3.91E-05	--	1.46E-06	--	7.96E-05	--	1.36E-03	--	--	--	--	--	--	1.17E-05	--	1.09E-05	4.38E-06	--	--	6.06E-05	2.26E-05	1.46E-05	2.85E-05	1.61E-05	lb/MMBtu	F
Sumps/Tanks/Separators	Drain Sump Tank (T-1)	3105-09	2345	0.0528	0.0264	0.0165	--	0.0050	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC ³	G	
	Overflow sump Tank (T-4)	3105-11	5882	0.0528	0.0264	0.0165	--	0.0050	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC ³	G	
Solvent/Coatings Usage	Cleaning/degreasing	3105-15	5884	--	0.05	0.05	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	lb/lb-ROC	H

References:
A1 - VCAPCD, All 2508 Combustion Emission Factors (2001) - Natural Gas Fired External Combustion Equipment (flare)
A2 - USEPA, AP-42 Table 1.4.4: Emission Factors for Solids from Natural Gas Combustion
B - VCAPCD, All 2508 Combustion Emission Factors (2001) - Diesel Combustion Factors (internal combustion)
C1 - SCAQMD, Reporting Procedures for All 2508 Facilities for Reporting their Quadrennial Air Toxics Emissions Inventory (2016) - Table B-1 Default EF for Natural Gas Combustion, Stationary and Portable Internal Combustion Engines
C2 - USEPA, AP-42 Table 1.4.4: Emission Factors for Solids from Natural Gas Combustion
D - The emission factors, originally in units of lb/lb-TOC, were converted to lb/lb-ROC using an ROC/TOC fraction of 0.31 from Table 2 of the Districts P&P 6100.061.
E - The emission factors, originally in units of lb/lb-TOC, were converted to lb/lb-ROC using an ROC/TOC fraction of 0.56 from Table 2 of the Districts P&P 6100.061.
F1 - USEPA, AP-42 Table 3.2: Operated Organic Compound Emission Factors for Uncontrolled Diesel Engines
F2 - VCAPCD All 2508 Combustion Emissions Factors (2001) - Diesel Combustion Factors (internal combustion)
F3 - SCAQMD P100 H/C Engine Technical Reference Document (2002) - Table 5: Default Fuel Properties
G - CERI, Operation Manual Second Edition (1991) Profile Number 532 - Oil & Gas Extraction - Vessel Heads & Columns/Oil & Water Separators
H - APCD: Solvents assumed to contain 5% benzene, 5% toluene, 5% xylene

Notes:
1. The weight fraction for iso-Octane (i.e., 2,2,4-trimethylpentane) is based on the conservative assumption that all isomers of octane are iso-Octane.
2. The ROC to TOC ratio used for these emission factors was 0.31 from Table 2 Fugitive Emission Factors for Oil and Gas Facilities (Using the Component Count Method) (P&P 6100.061), available at <https://www.sourin.org/wp-content/uploads/6100-061-1.pdf>.
3. The ROC to TOC ratio used for these emission factors was 0.606 from Table 3.3 Standard Assumed ROC/TOC Conversions of P&P 6100.060.2016, available at <https://www.sourin.org/wp-content/uploads/6100-060-1.pdf>.

6.0 Air Quality Impact Analyses

6.1 Modeling

Air quality impact analyses were not performed for the issuance of this permit. *The only flaring that is currently permitted is from the low pressure flare due to the need to flare any annulus gas that may remain as part of well plug and abandonment activities.*

Modeling was previously performed under ATC 10128 per District policy No. 6100.004 which requires that an air quality impact analysis for certain planned and unplanned flaring events be performed. Only the reasonable credible worst-case flaring event of sour gas was analyzed. The planned purge and pilot operations were not analyzed because of their low daily and annual emissions rates.

The District used the EPA Screen3 model to assess the ambient air quality impact of the reasonable worst-case credible flaring event defined in Section 4 of this permit. The Screen3 model is an appropriate tool to evaluate air emission impacts from this flare. The analysis results are summarized in Table 6.1-1 below and show that no adverse impact or exceedance of any applicable hourly, 8-hour or 24-hour standard will be caused by the worst-case event usage of the flare (that is 20,000 SCF in 66 seconds). The table below only compares compliance with state standards because they are more stringent than corresponding federal standards.

Table 6.1-1 - Analysis Results of Worst-Case Flaring at Holly

Pollutant Name	Symbol	Emission Rate (lb/min)	AQIA Impacts (micrograms/m3)		Compliance w/ Standards	Applicable State Standards (micrograms/m3)		
			1-hour	8 or 24-hour		1-hour	8-hour	24-hour
Sulfur Dioxide	SO ₂	51.87	132.9	53.2	Yes	655	N/A	105
Nitrogen Dioxide	NO ₂	1.35	3.5	N/A	Yes	470	N/A	N/A
Carbon Monoxide	CO	7.35	18.8	13.2	Yes	23,000	10,000	N/A

6.2 Increments

An air quality increment analysis has not been required for this stationary source.

6.3 Monitoring

Pursuant to Abatement Order 99-6(A), the permittee installed two ambient air monitoring stations, approved by the District, to monitor meteorological and odorous organic sulfide concentrations in the vicinity of the Ellwood Onshore Facility. As part of a Part 70 Significant Modification (re: PT-70 Mod 7904-06), the Ellwood offsite odor monitoring station was relocated to the UCSB West Campus odor monitoring station site, and the offsite odor monitoring requirement was transferred from the Ellwood Onshore Facility permit to this permit. The District determined that West Campus odor monitoring station, in combination with the existing 14 onsite H₂S monitors and meteorological station, is better suited to serve the public during the next phase of operations of the South Ellwood Field source. The remaining ambient air monitoring station is equipped to continuously monitor and telemeter the data to the District in a manner consistent with the District's Ambient Air Monitoring Protocol. This monitor is identified and described in Table 9.C.13-1 of Permit Condition 9.C.13 of this permit.

6.4 Health Risk Assessment

Platform Holly is subject to the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588). The most recent HRA for the facility was prepared by the District on October 28, 1993 under the Air Toxics “Hot Spots” program. The HRA was based on 1991 toxic emissions inventory data submitted to the District by Mobil, the previous owners of Holly.

Cancer risk and chronic and acute non-cancer Hazard Index (HI) risk values were calculated based on the 1991 inventory and compared to *significance thresholds* for cancer and chronic and acute non-cancer risk adopted by the District’s Board of Directors. The calculated risk values and applicable thresholds are as follows:

	Holly Max Risks	Significance Threshold
Cancer risk:	8.0 /million	>10/million
Chronic non-cancer risk:	0.04	> 1
Acute non-cancer risk:	6.0	> 1

Based on the 1991 toxic emissions inventory, a cancer risk of 8.0 per million was estimated for the Holly facility. The cancer risk is primarily due to emissions of polycyclic aromatic hydrocarbon (PAH) from internal combustion devices (e.g., cranes, crew boat activities). Approximately 2.0 pounds of PAH were emitted from Holly devices in 1991. This risk was determined to occur approximately 3,400 meters northwest of the platform (over the ocean).

The District has estimated a chronic non-cancer hazard risk of 0.04 and an acute hazard risk of 6.0. The acute hazard risk is over the District’s significance threshold of 1. This significant acute hazard index is due to H₂S emissions from fugitive sources. Approximately 21,340 pounds of H₂S were emitted from Holly devices in 1991. The peak acute hazard risk was determined to occur approximately 280 meters northwest of the platform (over the ocean).

7.0 CAP Consistency, Offset Requirements and ERCs

7.1 General

Santa Barbara County has not attained the state PM₁₀ air quality standards. Therefore, emissions from all emission units at the stationary source and its constituent facilities must be consistent with the provisions of the USEPA and State approved Clean Air Plans (CAP) and must not interfere with progress toward attainment of federal and state ambient air quality standards. Under District regulations, any modifications at the source that result in an emission increase of any nonattainment pollutant exceeding 25 lbs/day must apply BACT (NAR). Increases above offset thresholds will trigger offsets at the source or elsewhere so that there is a net air quality benefit for Santa Barbara County. These offset threshold levels are 240 lbs/day for all attainment pollutants and precursors (except carbon monoxide and PM_{2.5}) and 25 tons/year for all non-attainment pollutants and precursors (except carbon monoxide and PM_{2.5}).

7.2 Clean Air Plan

The 2007 Clean Air Plan, adopted by the District Board on August 16, 2007, addressed both federal and state requirements, serving as the maintenance plan for the federal eight-hour ozone standard and as the state triennial update required by the Health and Safety Code to demonstrate how the District will expedite attainment of the state eight-hour ozone standard. The plan was developed for Santa Barbara County as required by both the 1998 California Clean Air Act and the 1990 Federal Clean Air Act Amendments.

In December 2019 the District Board adopted the 2019 Ozone Plan. The 2019 Plan provides a three-year update to the 2010 Clean Air Plan. The 2019 Clean Air Plan therefore satisfies all state triennial planning requirements.

7.3 Offset Requirements

The South Ellwood Field stationary source exceeds the emission offset thresholds of Regulation VIII for NO_x, ROC and SO_x. This stationary source did not become subject to the emission offset requirements of Regulation VIII until adoption of revised Rule 802 in August 2016, therefore the permittee is not required to offset existing facility emissions. Any new project emission increase for these pollutants are required to provide emission reduction credits for the project.

7.4 Emission Reduction Credits

Platform Holly is not a source of emission reduction credits.

8.0 CEQA and Lead Agency Permit Consistency

8.1 CEQA

The District is the lead agency under CEQA for this permit, and has prepared a Notice of Exemption. This project is exempt from CEQA pursuant to the Environmental Review Guidelines for the Santa Barbara County APCD (revised April 30, 2015). Appendix 1.A.i (*APCD Projects Exempt from CEQA and Equipment or Operations Exempt from CEQA*) provides an exemption specifically for permits to operate and reevaluations thereof. A copy of the final Notice of Exemption is filed with the Santa Barbara County Clerk of the Board.

8.2 Lead Agency Permit Consistency

The installation of Platform Holly predates the California Environmental Quality Act (CEQA) as the platform was installed in 1966 and the act was adopted in 1970. The State Lands Commission approved the construction of Holly on April 28, 1966. In 1974, an environmental impact report (EIR) was completed for Holly.

TABLE OF CONTENTS

Page

9.A STANDARD ADMINISTRATIVE CONDITIONS.....51

 Condition A.1 Condition Acceptance.....51

 Condition A.2 Grounds for Revocation.....51

 Condition A.3 Severability.....51

 Condition A.4 Reimbursement of Costs.....51

 Condition A.5 Access to Records and Facilities..... 51

 Condition A.6 Compliance.....52

 Condition A.7 Consistency with Analysis.....52

 Condition A.8 Consistency with Federal, State and Local Permits..... 52

 Condition A.9 Compliance with Permit Conditions.....52

 Condition A.10 Emergency Provisions.....53

 Condition A.11 Compliance Plan.....53

 Condition A.12 Right of Entry..... 53

 Condition A.13 Permit Life.....53

 Condition A.14 Payment of Fees..... 53

 Condition A.15 Deviation from Permit Requirements.....54

 Condition A.16 Reporting Requirements/Compliance Certification..... 54

 Condition A.17 Federally Enforceable Conditions..... 54

 Condition A.18 Recordkeeping Requirements.....54

 Condition A.19 Conditions for Permit Reopening.....55

9.B GENERIC CONDITIONS..... 55

 Condition B.1 Circumvention (Rule 301)..... 55

 Condition B.2 Visible Emissions (Rule 302)..... 55

 Condition B.3 Nuisance (Rule 303).....56

 Condition B.4 PM Concentration - South Zone (Rule 305).....56

 Condition B.5 Specific Contaminants (Rule 309).....56

 Condition B.6 Sulfur Content of Fuels (Rule 311).....56

 Condition B.7 Organic Solvents (Rule 317)..... 56

 Condition B.8 Metal Surface Coating Thinner and Reducer (Rule 322)..... 56

 Condition B.9 Architectural Coatings (Rule 323.I).....56

 Condition B.10 Disposal and Evaporation of Solvents (Rule 324).....56

 Condition B.11 Adhesives and Sealants (Rule 353)..... 56

 Condition B.12 Oil and Natural Gas Production MACT).....57

 Condition B.13 CARB Registered Portable Equipment 57

9.C REQUIREMENTS AND EQUIPMENT SPECIFIC CONDITIONS.....57

 Condition C.1 Crane Engine.....57

 Condition C.2 Combustion Equipment – Flare..... 60

 Condition C.3 Wastewater/Process..... 62

 Condition C.4 Solvent/Coating..... 63

 Condition C.5 Recordkeeping..... 64

 Condition C.6 Fugitive Hydrocarbon Emissions Components..... 64

 Condition C.7 Semi-Annual Monitoring/Compliance Verification Reports.....65

Condition C.8	Permitted Equipment	68
Condition C.9	Diesel IC Engines - Particulate Matter Emissions.....	68
Condition C.10	Process Monitoring Systems - Operation and Maintenance....	68
Condition C.11	Ambient Air Monitoring Station.....	68
Condition C.12	Data Acquisition System.....	69
Condition C.13	Data Acquisition System Operation and Maintenance Fee.....	69
Condition C.14	Ambient Monitoring Station Data Review and Audit Fee.....	70
Condition C.15	Emergency Episode Plan	71
Condition C.16	Documents Incorporated by Reference.....	71
Condition C.17	Safety/Inspection/Maintenance Plan (SIMQAP).....	72
Condition C.18	Source Testing	72
Condition C.19	Visible Emission.....	73
Condition C.20	Abrasive Blasting Equipment.....	74
9.D DISTRICT-ONLY CONDITIONS.....		74
Condition D.1	Compliance Verification Reports.....	75
Condition D.2	Emission Factor Revisions	75
Condition D.3	Odor Abatement Agreement and Complaint Response.....	76
Condition D.4	Crew and Supply Boats.....	76
Condition D.5	Emergency/ Standby Diesel IC Engine (E/S-DICE).....	78
Condition D.6	Permitted Equipment.....	82
Condition D.7	Documents Incorporated by Reference.....	82
Condition D.8	GHG Emission Standards for Crude Oil Facilities.....	82
Condition D.9	CARB GHG Regulation Recordkeeping.....	82
Condition D.10	CARB GHG Regulation Reporting.....	82

9.0 Permit Conditions

This section lists the applicable permit conditions for Holly. Section A lists the standard administrative conditions. Section B lists ‘generic’ permit conditions, including emission standards, for all equipment in this permit. Section C lists conditions affecting specific equipment. Section D lists non-federally-enforceable (i.e., District only) permit conditions. Conditions listed in Sections A, B and C are enforceable by the USEPA, the District, the State of California, and the public. Conditions listed in Section D are enforceable only by the District and the State of California. Where any reference contained in Sections 9.A, 9.B or 9.C refers to any other part of this permit that part of the permit referred to is federally enforceable. In case of a discrepancy between the wording of a condition and the applicable federal or District rule(s), the wording of the rule shall control.

For the purposes of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this permit, nothing in the permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

9.A Standard Administrative Conditions

The following federally enforceable administrative permit conditions apply to Platform Holly:

- A.1 **Condition Acceptance.** Acceptance of this operating permit by the permittee shall be considered as acceptance of all terms, conditions, and limits of this permit. [*Re: ATC/PTO Mod 10106-01/-02*]
- A.2 **Grounds for Revocation.** Failure to abide by and faithfully comply with this permit shall constitute grounds for revocation pursuant to California Health & Safety Code Section 42307 *et seq.* [*Re: ATC/PTO 10106-01/-02*]
- A.3 **Severability.** In the event that any condition herein is determined to be invalid, all other conditions shall remain in force. [*Re: District Rules 103 and 1303.D.1*]
- A.4 **Reimbursement of Costs.** All reasonable expenses, as defined in District Rule 210, incurred by the District, District contractors, and legal counsel for all activities related to the implementation of Regulation XIII (*Part 70 Operating Permits*) that follow the issuance of this PTO permit, including but not limited to permit condition implementation, compliance verification, implementation of Abatement Order 99-6A, and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the permittee as required by Rule 210. [*Re: ATC/PTO 10106-01/-02, District Rule 210*]
- A.5 **Access to Records and Facilities.** As to any condition that requires for its effective enforcement the inspection of records or facilities by the District or its agents, the permittee shall make such records available or provide access to such facilities upon notice from the District. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A. [*Re: ATC/PTO 10106-01/-02*]

- A.6 **Compliance.** Nothing contained within this permit shall be construed to allow the violation of any local, State or Federal rule, regulation, ambient air quality standard or air quality increment. [Re: ATC/PTO 10106-01/-02]
- A.7 **Consistency with Analysis.** Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application, supplements thereof (as documented in the District's project file), and the District's analyses under which this permit is issued. [Re: ATC/PTO 10106-01/-02]
- A.8 **Consistency with Federal, State and Local Permits.** Nothing in this permit shall relax any air pollution control requirement imposed by the State of California or the California Coastal Commission in any consistency determination for the Project with the California Coastal Act, or by any other governmental agency. [Re: ATC/PTO 10106-01/-02]
- A.9 **Compliance with Permit Conditions.**
- (a) The permittee shall comply with all permit conditions in Sections 9.A, 9.B and 9.C.
 - (b) This permit does not convey property rights or exclusive privilege of any sort.
 - (c) Any permit noncompliance with sections 9.A, 9.B, or 9.C constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
 - (d) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - (e) A pending permit action or notification of anticipated noncompliance does not stay any permit condition.
 - (f) Within a reasonable time period, the permittee shall furnish any information requested by the Control Officer, in writing, for the purpose of determining:
 - (i) compliance with the permit, or
 - (ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action.
 - (g) In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible.

[Re: 40 CFR Part 70.6.(a)(6), District Rules 1303.D.1]

A.10 **Emergency Provisions.** Revoked.

A.11 **Compliance Plan.**

- (a) The permittee shall comply with all federally enforceable requirements that become applicable during the permit term in a timely manner.
- (b) For all applicable equipment, the permittee shall implement and comply with any specific compliance plan required under any federally enforceable rules or standards.

[*Re: District Rule 1302.D.2*]

A.12 **Right of Entry.** The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises where a Part 70 Source is located or where records must be kept:

- (a) To inspect the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;
- (b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;
- (c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times. Monitoring of emissions can include source testing.

[*Re: District Rule 1303.D.2*]

A.13 **Permit Life.** The Part 70 permit shall become invalid three years from the date of issuance unless a timely and complete renewal application is submitted to the District. Any operation of the source to which this Part 70 permit is issued beyond the expiration date of this Part 70 permit and without a valid Part 70 operating permit (or a complete Part 70 permit renewal application) shall be a violation of the CAAA, § 502(a) and 503(d) and of the District rules.

The permittee shall submit an application for renewal of the Part 70 permit not later than 6 months before the date of the permit expiration. Upon submittal of a timely and complete renewal application, the Part 70 permit shall remain in effect until the Control Officer issues or denies the renewal application. [*Re: District Rule 1304.D.1*]

A.14 **Payment of Fees.** The permittee shall reimburse the District for all its Part 70 permit processing and compliance expenses for the stationary source on a timely basis. Failure to reimburse on a timely basis shall be a violation of this permit and of applicable requirements and can result in forfeiture of the Part 70 permit. Operation without a Part 70 permit subjects the source to potential enforcement action by the District and the USEPA pursuant to section 502(a) of the Clean Air Act. [*Re: District Rules 1303.D.1 and 1304.D.11, 40 CFR 70.6(a)(7)*]

A.15 **Deviation from Permit Requirements.** The permittee shall submit a written report to the District documenting each and every deviation from the federally enforceable requirements of this permit or any applicable federal requirements within 7 days after discovery of the violation, but not later than 180 days after the date of occurrence. The report shall clearly document 1) the probable cause and extent of the deviation, 2) equipment involved, 3) the quantity of excess pollutant emissions, if any, and 4) actions taken to correct the deviation.

The requirements of this condition shall not apply to deviations reported to District in accordance with Rule 505, *Breakdown Conditions*. [District Rule 1303.D.1, 40 CFR 70.6(a)(3)]

A.16 **Reporting Requirements/Compliance Certification.** The permittee shall submit compliance certification reports to the USEPA and the Control Officer every six months. A paper copy, as well as, a complete PDF electronic copy of these reports, shall be in a format approved by the District. These reports shall be submitted on District forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations (excluding emergency upsets) from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1 and March 1, respectively, each year. Supporting monitoring data shall be submitted in accordance with the “Semi-Annual Compliance Verification Report” condition in section 9.C. The permittee shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [*Re: District Rules 1303.D.1, 1302.D.3, 1303.2.c*]

A.17 **Federally Enforceable Conditions.** Each federally enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the District-only enforceable section of this permit are federally enforceable or subject to the public/USEPA review. [*Re: CAAA, § 502(b)(6), 40 CFR 70.6(b)*]

A.18 **Recordkeeping Requirements.** The permittee shall maintain records of required monitoring information that include the following:

- (a) The date, place as defined in the permit, and time of sampling or measurements;
- (b) The date(s) analyses were performed;
- (c) The company or entity that performed the analyses;
- (d) The analytical techniques or methods used;
- (e) The results of such analyses; and
- (f) The operating conditions as existing at the time of sampling or measurement;

The records, as well as all supporting information including calibration and maintenance records, shall be maintained for a minimum of five (5) years from date of initial entry by the permittee and shall be made available to the District upon request.

[*Re: District Rule 1303.D.1.f, 40 CFR 70.6(a)(3)(ii)(A)*]

A.19 **Conditions for Permit Reopening.** The permit shall be reopened and revised for cause under any of the following circumstances:

- (a) Additional Requirements: If additional applicable requirements (e.g., NSPS or MACT) become applicable to the source that has an unexpired permit term of three (3) or more years, the permit shall be reopened. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. However, no such reopening is required if the effective date of the requirement is later than the date on

which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended. All such re-openings shall be initiated only after a 30-day notice of intent to reopen the permit has been provided to the permittee, except that a shorter notice may be given in case of an emergency.

- (b) Inaccurate Permit Provisions: If the District or the USEPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit, the permit shall be reopened. Such re-openings shall be made as soon as practicable.
- (c) Applicable Requirement: If the District or the USEPA determines that the permit must be revised or revoked to assure compliance with any applicable requirement including a federally enforceable requirement, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

Administrative procedures to reopen a permit shall follow the same procedures as apply to initial permit issuance. Re-openings shall affect only those parts of the permit for which causes to reopen exist. If the permit is reopened, and revised, it will be reissued with the expiration date that was listed in the permit before the re-opening. [Re: 40 CFR 70.7(f), 40 CFR 70.6(a)]

9.B Generic Conditions

The generic conditions listed below apply to all emission units, regardless of their category or emission rates. These conditions are federally enforceable. Compliance with these requirements is discussed in Section 3. In case of a discrepancy between the wording of a condition and the applicable federal or District rule(s), the wording of the rule shall control.

- B.1 **Circumvention (Rule 301)**. A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of District Rule 303. [Re: District Rule 301]
- B.2 **Visible Emissions (Rule 302)**. The permittee shall not discharge into the atmosphere from any single source of emission any air contaminants for a period or periods aggregating more than three minutes in any one hour that is:
 - (a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
 - (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection B.2(a) above.

For all combustion sources listed in Section 9.C, the permittee shall comply with the requirements of this Rule in accordance with the monitoring and compliance recordkeeping procedures in Condition 9.C.22. [Re: District Rule 302]

- B.3 **Nuisance (Rule 303).** No pollutant emissions from any source at this facility shall create nuisance conditions. No operations shall endanger health, safety, or comfort, nor shall they damage any property or business. [*Re: District Rule 303*]
- B.4 **PM Concentration - South Zone (Rule 305).** The permittee shall not discharge into the atmosphere, from any source, particulate matter in excess of the concentrations listed in Table 305(a) of Rule 305. [*Re: District Rule 305*]
- B.5 **Specific Contaminants (Rule 309).** The permittee shall not discharge into the atmosphere from any single source sulfur compounds, carbon monoxide and combustion contaminants in excess of the applicable standards listed in Sections A, E and G of Rule 309. [*Re: District Rule 309*].
- B.6 **Sulfur Content of Fuels (Rule 311).** The permittee shall not burn fuels with a sulfur content in excess of 0.5% (by weight) for liquid fuels and 239 ppmvd or 15 gr/100 scf (calculated as H₂S) for gaseous fuel. Compliance with this condition shall be based on daily measurements of the fuel gas using (sulfur detection tubes, ASTM, or other District-approved) methods and diesel fuel billing records or other data showing the certified sulfur content for each shipment. [*Re: District Rule 311*]
- B.7 **Organic Solvents (Rule 317).** The permittee shall comply with the emission standards listed in Section B of Rule 317. Compliance with this condition shall be based on compliance with the Solvent Usage condition of this permit. [*Re: District Rule 317*]
- B.8 **Metal Surface Coating Thinner and Reducer (Rule 322).** The use of photochemically reactive solvents as thinners or reducers in metal surface coatings is prohibited. Compliance with this condition shall be based on compliance with the Solvent Usage condition of this permit and facility inspections. [*Re: District Rule 322*]
- B.9 **Architectural Coatings (Rule 323.I).** The permittee shall comply with the emission standards listed in Section D of Rule 323.I as well as the Administrative requirements listed in Section F of Rule 323. Compliance with this condition shall be based on compliance with the Solvent Usage condition of this permit and facility inspections. [*Re: District Rules 323, 317, 322, 324*]
- B.10 **Disposal and Evaporation of Solvents (Rule 324).** The permittee shall not dispose through atmospheric evaporation of more than one and a half gallons of any photochemically reactive solvent per day. Compliance with this condition shall be based on compliance with the Solvent Usage condition of this permit and facility inspections. [*Re: District Rule 324*]
- B.11 **Adhesives and Sealants (Rule 353).** The permittee shall not use adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers, unless the permittee complies with the following:
- (a) Such materials used are purchased or supplied by the manufacturer or suppliers in containers of 16 fluid ounces or less; or alternately,
 - (b) When the permittee uses such materials from containers larger than 16 fluid ounces and the materials are not exempt by Rule 353, Section B.1, the total reactive organic compound emissions from the use of such material shall not exceed 200 pounds per year unless the substances used and the operational methods comply with Sections D,

E, F, G, and H of Rule 353. Compliance shall be demonstrated by recordkeeping in accordance with Section B.2 and/or Section O of Rule 353.

[Re: District Rule 353]

B.12 Oil and Natural Gas Production MACT. The permittee shall comply with the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Oil and Natural Gas Production and Natural Gas Transmission and Storage (promulgated June 17, 1999). At a minimum, The permittee shall maintain records of ‘API Gravity’ and ‘Initial GOR’ for the facility to demonstrate the ‘black oil’ exemption [Re: 40 CFR 63.760 (e)(1) & 63.761]. Such record keeping shall meet the requirements of 40 CFR Part 63, Subpart A, Section 63.10 (b) (1) and (3). [Re: 40 CFR 63, Subpart HH]

B.13 CARB-Registered Portable Equipment. State registered portable equipment shall comply with State registration requirements. A copy of the State registration shall be readily available whenever the equipment is at the facility. [Re: District Rule 202]

9.C Equipment Specific Conditions

This section includes non-generic federally enforceable conditions, including emissions and operations limits, monitoring, recordkeeping and reporting are included in this section for each specific equipment group. This section may also contain other non-generic conditions.

C.1 Crane Engine. The following equipment is included in this emissions unit category:

District ID No.	Equip ID No.	Name
111506	Crane Engine	Caterpillar C7-ACERT, IND-C
111508	Diesel Particulate Filter	DCL Mine-X Sootfilter

- (a) Emission Limits: Mass emissions from the crane engine listed above shall not exceed the limits listed in Table 5.1-3. Compliance with the mass emission limits shall be based on the operational, monitoring, source testing, recordkeeping and reporting conditions:
 - (i) Diesel PM Standard. The stationary prime diesel fueled CI engine subject to this permit shall emit diesel PM at a rate that demonstrates compliance with the 0.01 grams diesel PM per brake-horsepower-hour (g/bhp-hr) emission standard in California Code of Regulations Title 17, Section 93115.7. Compliance with the PM emission limit shall be based on the source testing requirements of this permit.
 - (ii) Emission concentrations. Exhaust concentrations from the engine, corrected to 15% O₂, shall not exceed any of the following: NO_x (as NO₂) - 197 ppmv, ROC - 65 ppmv, or CO - 313 ppmv. (Note: these limits are based on the permitted g/bhp-emission factors. Compliance with these limits ensures compliance with the Rule 333 limits of 700 ppmv NO_x, 750 ppmv ROC, and 4,500 ppmv CO, all corrected to 15% O₂.) Compliance with the emission concentration limits shall be based on the source testing requirements of this permit.

- (b) Operational Limits: The following operational limits apply to the crane engine:
- (i) Fuel Usage Limits. Daily fuel usage shall not exceed 120 gallons per day and annual fuel usage shall not exceed 30,000 gallons per year.
 - (ii) Fuel and Fuel Additive Requirements. The permittee may only add fuel and/or fuel additives that comply with the Stationary Diesel Engine ATCM to the engine, or to any fuel tank directly attached to the engine.
 - (iii) Diesel Fuel Sulfur Limit. The total sulfur content of the diesel fuel used shall not exceed 15 ppmw in accordance with the requirements of the Stationary Diesel Engine ATCM for CARB diesel.
 - (iv) Diesel Particulate Filter (DPF) Operations: The DPF shall be in place at all times the engine is operational. The DPF backpressure shall not exceed 40 inches water column. The DPF shall be operated according to the District-approved *DPF Operation Plan*.
 - (v) Visual Leak Check. The permittee shall perform a visual check of the exhaust system every 200 hours of operation checking for signs of exhaust leaks such as evidence of soot. The components to be checked include the piping, fittings, clamps, and gaskets. Corrective action shall be taken within 24 hours when leaks are found.
 - (vi) Pressure Transmitter Check. The permittee shall check the pressure transmitter every 200 hours of operation. The pressure transmitter shall be removed and pressure applied to the line in order to check the function of the DPF transmitter and the line for leaks.
 - (vii) Backpressure Monitor Alarm Response Actions. The response actions defined in the approved *DPF Operation Plan* shall be taken in the event of an alarm condition.
- (c) Monitoring: The following monitoring conditions apply to the engine:
- (i) Non-Resettable Hour Meter. A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed on the engine. A log shall be maintained that records the hours of operation and the number of operating days per month for the engine.
 - (ii) Fuel Usage Metering. The volume of diesel fuel (in gallons) burned in the engine shall be measured through the use of a District-approved calibrated non-resettable fuel meter. A log shall be maintained that records the fuel usage of the engine.
 - (iii) Back Pressure Monitoring. The backpressure from the engine shall be monitored using the Backpressure Monitor installed with the diesel particulate filter.
 - (iv) Diesel Fuel Sulfur Content. Compliance with the *Diesel Fuel Sulfur Limit* condition shall be based upon vendor analysis or documentation for each fuel shipment that the fuel meets California Code of Regulations, Title 13, Section

2281 standards (i.e., ARB "Clean Diesel"). Alternately, the permittee shall annually sample and perform a fuel total sulfur analysis consistent with appropriate ASTM procedures.

- (v) Portable Analyzer Monitoring. The permittee shall perform quarterly portable analyzer NO_x and CO monitoring during each calendar quarter in which a source test is not performed and the engine is operated in excess of 20 hours per quarter. The compliance procedures outlined in Section F.3 of Rule 333 shall be followed for the portable analyzer monitoring. Portable analyzer instrument readings shall not exceed the limits specified in condition 9C.1(a)(ii) of this permit.
 - (vi) ICE Inspection and Maintenance Plan. The permittee shall implement the District approved *ICE Inspection and Maintenance (I&M) Plan* as required by Rule 333, Section F.
 - (vii) Visible Emissions Monitoring. A person shall perform a visible emissions evaluation at least once per calendar quarter. The evaluation shall be conducted for at least six consecutive minutes while the engine is operating and start at least 5 minutes after startup of the engine. The hydraulic dummy load may be used to load the engine during monitoring. If any visible emissions reading of 5% opacity or greater is detected by the observer at any time during the 6 minute observation, then the permittee shall conduct a source test for diesel PM emissions from the engine within 60 days of the observation.
 - (viii) District Inspections. The operator shall make the inside of the downstream section of the DPF housing available for District inspection upon request. If inspection of the DPF indicates that particulate matter is blowing by the gasket around the filter elements, or that the filter elements may not be operating properly, the District may require a source test to verify compliance with permitted emission limits.
- (d) Recordkeeping: The following recordkeeping conditions apply to the crane engine:
- (i) Operating Hours. A log shall be maintained that details the number of operating hours and days for each month that the engine is operated and the cumulative total annual hours.
 - (ii) Fuel Use. The total amount of diesel fuel combusted in the engine shall be recorded on a daily and annual basis in units of gallons.
 - (iii) Diesel Particulate Filter. A log shall be maintained that records all required leak and pressure transmitter checks, maintenance activities, regenerations using the "dummy load" circuit, visible emission evaluations, filter cleaning, and corrective actions for the DPF.
 - (iv) Diesel Fuel Purchase. The owner or operator shall retain fuel purchase records that account for all fuel used in the engine. The vendor analysis or fuel purchase records for each fuel shipment shall demonstrate that the fuel meets California Code of Regulations, Title 13, Section 2281 standards (i.e., ARB "Clean Diesel"). Alternately, the permittee shall submit on an annual basis a fuel total sulfur analysis consistent with appropriate ASTM procedures. On an annual

basis, the higher heating value of the diesel fuel (Btu/gal) shall be recorded as provided by diesel fuel suppliers.

- (v) Engine Inspection and Maintenance Logs. IC engine inspection and maintenance logs shall be maintained, including quarterly inspection results, consistent with the reporting requirements incorporated in the I&M Plan.
- (vi) Portable Analyzer Monitoring Results. Results of the portable analyzer monitoring required by Rule 333 and specified in Condition 9C.2(c)(v) (*Portable Analyzer Monitoring*) of this permit.
- (e) Reporting: On a semi-annual basis, a report detailing the previous six month’s activities shall be provided to the District. The report must list all data required by the *Semi-Annual Compliance Verification Reports* condition of this permit.

C.2 **Combustion Equipment - Flare.** The following equipment is included in this emissions unit category:

District ID No.	Equip ID No.	Name
9603	H-101	Low-pressure Flare (H-101)

- (a) Emission Limits: Mass emissions from the flare systems listed above shall not exceed the limits listed in Table 5.1-3. Compliance shall be based on the operational, monitoring, recordkeeping, and reporting conditions of this permit
- (b) Operational Limits:
 - (i) *Flaring* - The combined daily and annual gas flow daily and annual gas flow to the flare shall not exceed the limits listed in Table 9.1. Mass emissions from the flares shall not exceed the limits listed in Table 5.1-3. Mass emissions from the flares due to planned intermittent flaring shall not exceed the limits listed in Tables 5.1-3.

Table 9.1

FLARE CATEGORY	VOLUME LIMIT
Intermittent – Planned Flaring	30,000 SCF per day
Intermittent – Planned Flaring	10,950,000 SCF per year

- (ii) *Flare Purge Gas* - Only nitrogen shall be used as flare purge gas.
- (iii) *Planned Intermittent Flare Event Sulfur Limit* - The total sulfur content (calculated as H₂S-equivalents at standard conditions, 60 F and 14.7 psia) of any planned intermittent flare event gas shall not exceed 205 ppmv. Compliance with this condition for each planned intermittent flaring event shall be based on the measurement of the combined produced gas H₂S content as described in in Section C.3(c)(vii) below.
- (iv) *Flare Pilot Operation* - The permittee shall comply with the provisions of Rule 359.D.2 for flare pilots at all times.

- (v) The pilot *Low Temperature Alarm (TSL-170)* shall be connected to the District DAS.
 - (vi) The permittee shall comply with their District-approved *Rule 359 - Flare Minimization Plan*. The plan may only be revised upon written approval of the District.
- (c) **Monitoring:** The following monitoring conditions apply to the flare relief system:
- (i) *Purge Gas Metering (H-101)* - The permittee shall install and operate a dedicated flow rate controller, FCV-173, or other District-approved equivalent, to control the purge gas flow to the low-pressure flare system. The controller shall be operated consistent with the *Process Monitor Calibration and Maintenance Plan*.
 - (ii) *Flare Gas Metering (H-101)* - The permittee shall install and operate a dedicated, totalizing, non-resettable type meter, FI-172, or other District-approved equivalent, to meter total flare gas flows, including purge gases. The flare flow meter shall be calibrated to accurately meter flare gas flows when they exceed 5.0 SCFM and up to 2000 SCFM. The flow meter shall be equipped with a UPS. The UPS shall allow the flare flow meter to accurately meter flows whenever and for as long as utility power is lost to Holly and the flare remains operating.
 - (iii) *Planned Intermittent Flare Event Gas Hydrogen Sulfide Content* - Produced gas shall be monitored for hydrogen sulfide for each planned intermittent flaring event by taking measurements using colorimetric gas detection tubes, a POLI MP400/MP400P gas monitor or other District approved methods. Measurements shall be taken from each individual wellhead undergoing flaring or from the combined gas stream prior to entering the flare if multiple wells will be flared concurrently. Measurements shall be taken as follows for each intermittent flaring event:
 - (1) *Pre-Event Monitoring:* The permittee shall take a measurement of the hydrogen sulfide content of the gas prior to the start of the planned flaring event. The permittee shall only proceed with the planned flaring event if the results of the hydrogen sulfide sampling demonstrate compliance with the limits in Condition C.2b(iii).
 - (2) *Event Monitoring:* Hydrogen sulfide monitoring shall be conducted within 60 minutes of the start of each planned intermittent flaring event and at least once every 60 minutes thereafter until the end of the event. Notwithstanding the above, if the first six (6) hourly readings after the start of the flaring event each indicate H₂S concentrations less than 50 ppmv in the gas, monitoring thereafter shall be reduced to once every six (6) hours. Monitoring shall revert to hourly for the remainder of the event if any future reading indicates H₂S concentrations equal to or above 50 ppmv. Alternative procedures may be used to monitor the planned intermittent flaring hydrogen sulfide content as approved by the District. The permittee shall add the most recent analysis results for the non-H₂S fraction of total sulfur compounds to derive the total sulfur content. The permittee shall notify the District (engr@sbcapcd.org or (805) 979-8050) within 24 hours

of detecting an exceedance of the planned intermittent flaring gas sulfur content limit listed in Condition 2.b

- (d) **Recordkeeping:** The following recordkeeping conditions apply to the flare relief system:
- (i) *Flare Event Volumes* - All flaring events shall be recorded in a District-approved log. The log shall include: date; duration of each flaring event (start and stop time); quantity of gas flared per event in units of standard cubic feet; cumulative total volume flared for all events to date through the year (by category); the H₂S content of the gas flared; reason/cause for the flaring event and whether there were visible emissions.
 - (ii) *Sulfur Content of Planned Intermittent Flaring Events* – The records of colorimetric gas detection tube and/or POLI MP400/MP400P gas monitor sampling of the produced gas H₂S content from each planned intermittent flare event, including records of sampling conducted prior to the start and during the planned intermittent flaring event. Records shall indicate the date and time and results of the sampling.
- (e) **Reporting:** On a semi-annual basis, a report detailing the previous six month’s activities shall be provided to the District. The report must list all data required by the *Semi-Annual Compliance Verification Reports* condition of this permit.
(*Re: District Rules 359 and 1303, ATC 10128, ATC 10128-01, PTO 10128, 40 CFR 70.6*)

C.3 Wastewater/Process Water Tanks. The following equipment is included in this emissions category:

District ID No.	Equip ID No.	Equipment Name	KVB Service
2345	T-1	Drain Sump (vented to atmosphere)	Deck drain water from storm water and wash down
5882	T-4	Overflow sump tank (vented to atmosphere)	Deck drain water from storm water and wash down

- (a) **Emission Limits:** Mass emissions from the sump and sump tank shall not exceed the limits listed in Table 5.1-3.
- (b) **Operational Limits:** All process operations from the equipment listed in this section are exempt from Sections D.1 and D.2 of Rule 325 as long as they satisfy the requirements of Section B.3; however, they shall meet the requirements of District Rule 325, Sections D.4 and E. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. In addition, the following requirements apply:
- (i) *ROC Content* - The reactive organic compound content of the liquid entering the wastewater tanks listed herein shall be less than 5 milligrams per liter or the ROC emissions from each tank shall be maintained at less than 0.25 tons per year. Compliance with this limit shall be verified by annual sampling of the liquid.

(ii) *Liquid Tight* - All tanks shall be maintained in a liquid-tight condition.

Other District-enforceable limits for these items are listed in Section 9.D.

- (c) Monitoring: The ROC content of the liquid entering tank T-1 shall be determined *annually* using the test methods outlined in District Rule 325.G.3. The District shall be notified at least 3 days in advance of sampling. The tank T-1 data shall be used to determine Rule 325 compliance/applicability of both tanks T-1 and T-4.
- (d) Recordkeeping: The equipment listed in this section is subject to all the recordkeeping requirements listed in District Rule 325.F.2 and F.3.
- (e) Reporting: The equipment listed in this section are subject to all the reporting requirements listed in District Rule 325.I. On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the *Compliance Verification Reports* condition of this permit. [Re: District Rules 325 and 1303, 40 CFR 70.6]

C.4 **Solvent/Coating Use.** The following emission units are included in this condition:

District ID No.	Emission Unit Name, Category, etc.
Not provided	Solvents - Cleaning/Degreasing (<i>as part of regular operations</i>)
5884	Surface Coating (<i>that also includes solvents as thinners</i>)

- (a) Emission Limits: Mass emissions from solvent cleaning and surface coating operations shall not exceed the limits listed in Table 5.1-3. The solvent emission limits outlined in District Rule 317.B are federally enforceable for the entire stationary source.
- (b) Operational Limits: Use of solvents for cleaning/degreasing and maintenance surface coating shall conform to the requirements of District Rules 317, 321, 322, 323 and 324. Compliance with these rules shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit and facility inspections.
 - (i) *Containers* - Vessels or containers used for storing materials containing organic solvents shall be kept closed unless adding to or removing material from the vessel or container.
 - (ii) *Materials* - All materials that have been soaked with cleanup solvents shall be stored, when not in use, in closed containers that are equipped with tight seals.
 - (iii) *Solvent Leaks* - Solvent leaks shall be minimized to the maximum extent feasible or the solvent shall be removed to a sealed container and the equipment taken out of service until repaired. A solvent leak is defined as either the flow of three liquid drops per minute or a discernible continuous flow of solvent.
 - (iv) *Reclamation Plan* - The permittee may submit a Plan to the District for the disposal of any reclaimed solvent. If the Plan is approved by the District, all solvent disposed of pursuant to the Plan will not be assumed to have evaporated

as emissions into the air and, therefore, will not be counted as emissions from the source. The permittee shall obtain District approval of the procedures used for such a disposal Plan. The Plan shall detail all procedures used for collecting, storing, and transporting the reclaimed solvent. Further, the ultimate fate of these reclaimed solvents must be stated in the Plan.

- (c) **Recordkeeping:** The permittee shall record in a log the following on a monthly basis for each solvent and coating used: amount used; the percentage of ROC by weight (as applied); the solvent density; the amount of solvent reclaimed for District-approved disposal; whether the solvent is photochemically reactive; and, the resulting emissions to the atmosphere in units of pounds per month and pounds per day. Product sheets (MSDS or equivalent) detailing the constituents of all solvents shall be maintained in a readily accessible location on the platform.
- (d) **Reporting:** On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the *Semi-Annual Compliance Verification Reports* condition of this permit.
[Re: District Rules 317, 322, 323, 324, 1301 and 1303, 40 CFR 70.6]

C.5 **Recordkeeping.** All records and logs required by this permit and any applicable District, state or federal rule or regulation shall be maintained for a minimum of five calendar years from the date of information collection and log entry at the platform. These records or logs shall be readily accessible and be made available to the District upon request. [Re: District Rule 1303, ATC 10128, ATC 10128-01, PTO 10128, ATC 10106, ATC 10106-01, ATC/PTO 10106-02, 40 CFR 70.6]

C.6 **Fugitive Hydrocarbon Emissions Components.** The following equipment is included in this emissions unit category:

District ID No.	Equip ID No.	Name
		<i>Oil Service Components</i>
9601	3105-02	Oil - Controlled
104754	3105-03	Oil - Unsafe
		<i>Gas/Light Liquid Service Components</i>
104755	3105-04	Gas Controlled
104756	3105-05	Gas Unsafe

- (a) **Emission Limits:** Mass emissions from the gas/light liquid service and oil service components listed above shall not exceed the limits listed in Table 5.1-3.
- (b) **Operational Limits:** Operation of the equipment listed in this section shall conform to the requirements listed in District Rule 331.D and E. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. In addition, the following requirements apply:
 - (i) *I&M Program* - The District-approved I&M Plan for Holly shall be implemented for the life of the project.

- (ii) *Leak-Path Count* - Component and leak-path counts shall not exceed the District approved totals by more than five percent. This five percent range is to allow for minor differences due to component counting methods and does not constitute allowable emissions growth due to the addition of new equipment. {*Note: 'de minimis' component-leak-path count is not included in Table 5.1-1.*}
- (iii) *Venting* - All routine venting of hydrocarbons shall be routed to either the VRU compressor, flare header, injection well or other District-approved control device.
- (iv) *VRS Use* - The vapor recovery and gas collection (VR & GC) systems at Holly shall be in operation when equipment connected to these systems are in use. These systems include piping, valves, and flanges associated with the VR & GC systems. The VR & GC systems shall be maintained and operated to minimize the release of emissions from all systems, including pressure relief valves and gauge hatches.
- (c) **Monitoring:** The equipment listed in this section are subject to all the monitoring requirements listed in District Rule 331.F. The test methods in Rule 331.H shall be used. In addition, the permittee shall track the 'component-leak-path' (clp) counts for all categories of components at Holly that are listed in the table above; and, log any 'clp' count changes, including de minimis changes, in a component-leak-path inventory maintained for the facility.
- (d) **Recordkeeping:** The equipment listed in this section are subject to all the recordkeeping requirements listed in District Rule 331.G. In addition, the permittee shall record in a table at the Holly facility showing clearly all changes in the 'clp' counts, for all categories of components including the 'de minimis' components at the facility.
- (e) **Reporting:** The equipment listed in this section is subject to all the reporting requirements listed in District Rule 331.G. On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the Compliance Verification Reports condition of this permit. [Re: District Rules 331 and 1303, ATC 10128, PTO 10128, ATC 10106, ATC/PTO 10106-01, ATC/PTO 10106-02, 40 CFR 70.6

C.7 Semi-Annual Monitoring/Compliance Verification Reports. Twice a year, the permittee shall submit a compliance verification report to the District. A paper copy, as well as, a complete PDF electronic copy of these reports, shall be in a format approved by the District. Each report shall be used to verify compliance with the prior two calendar quarters. The first report shall cover calendar quarters 1 and 2 (January through June) and shall be submitted no later than September 1. The second report shall cover calendar quarters 3 and 4 (July through December) and shall be submitted no later than March 1. Each report shall contain information necessary to verify compliance with the emission limits and other requirements of this permit (if applicable for that quarter). These reports shall be in a format approved by the District. All logs and other basic source data not included in the report shall be available to the District upon request. The second report shall also include an annual report for the prior four quarters. Pursuant to Rule 212, a completed *District Annual Emissions Inventory* questionnaire shall be included in the annual report or submitted electronically via the District website. The report shall include the following information:

(a) *Internal Combustion Engines.*

- (i) All records required by the Crane Engine recordkeeping condition 9C.1(d).
- (ii) Summary results of all compliance emission source testing performed, if applicable.
- (iii) The following 40 CFR 63 Subpart ZZZZ records for the emergency generator ICE:
 - (1) The date of engine oil and filter change, the number of hours of operation since the last oil and filter change, and the date and results of each oil analysis;
 - (2) The date of spark plug inspections, the number of hours of operation since the last inspection and dates of all spark plug replacements;
 - (3) The date of engine hose and belts inspection and the number of hours of operation since the last hose and belt inspection. Indicate if any hose or belt was replaced as a result of the inspection

The log for any engine subject to 40 CFR 63 Subpart ZZZZ that had a malfunction. The log shall include the date, number, duration, and a brief description for each type of malfunction that occurred and what caused or may have caused any applicable emission limitation to be exceeded. The log must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63 Subpart ZZZZ §63.6605(b), including actions taken to correct a malfunction.

(b) *Flare Relief System.*

- (i) The date, duration of each flaring event (start and stop time); quantity of gas flared per event in units of standard cubic feet; cumulative total volume flared for all events to date through the year (by category); the H₂S content of the gas flared; reason/cause for the flaring event and whether there were visible emissions.
- (ii) The records of colorimetric gas detection tube and/or POLI MP400/MP400P gas monitor sampling of the produced gas H₂S content from each intermittent flare event, including records of sampling conducted prior to the start and during the intermittent flaring event. Records shall indicate the date and time of sampling and whether the sampling was conducted prior to or during the flaring event.

(c) *Wastewater Tanks.*

- (i) Results of all ROC content analyses (including a copy of the lab analysis sheets), if sampling was requested by District.
 - (ii) The type of organic liquid in each tank, and
 - (iii) The results of the inspections required by Rule 325.H (if required).
- (d) *Solvent/coatings Usage.*
- (i) Solvent Cleaning Degreasing: On a monthly basis: the amount of solvent used; the percentage of ROC by weight (as applied); the solvent density; the amount of solvent reclaimed; whether the solvent is photochemically reactive; and, the resulting emissions of ROC and photochemically reactive solvents to the atmosphere in units of pounds per month.
 - (ii) Surface Coating - Maintenance: On a monthly basis: the amount of solvent and coatings used; the percentage of ROC by weight (as applied); the solvent density; the amount of solvent reclaimed; whether the solvent is photochemically reactive; and, the resulting emissions of ROC and photochemically reactive solvents to the atmosphere in units of pounds per month.
 - (iii) Information required by the Solvent Reclamation Plan, if any.
- (e) *Fugitive Hydrocarbons.* Rule 331/Enhanced Monitoring Fugitive Hydrocarbon I&M Program data (on a quarterly basis):
- (i) Inspection summary.
 - (ii) Record of leaking components.
 - (iii) Record of leaks from critical components.
 - (iv) Record of leaks from components that incur five repair actions within a continuous 12-month period.
 - (v) Record of component repair actions including dates of component re-inspections.
 - (vi) An updated FHC I&M inventory due to change in component list or diagrams.
 - (vii) Listing of components installed as BACT under District Rule 331 and/or Regulation VIII as approved by the District.
 - (viii) A table showing clearly all changes in the 'clp' counts from the count shown in Table 5.1-1 of this permit, for all categories of components including the de minimis components at the facility.

(f) *General Reporting Requirements.*

- (i) On a semi-annual and annual basis, the emissions from each permitted emission unit for each criteria pollutant. Also, include a quarterly and annual emissions summary for each criteria pollutant.
- (ii) On a semi-annual and annual basis, the emissions from each exempt emission unit for each criteria pollutant. Also, include a quarterly and annual emissions summary for each criteria pollutant.
- (iii) A copy of the Rule 202 De Minimis Log for the stationary source.

See also Section 9.D.1 for additional District required reporting requirements.

[*Re: Rule 202, Rule 317, Rule 325, Rule 331, Rule 333, ATC 10128, ATC 10128-01, PTO 10128, ATC 10106, ATC 10106-01, ATC/PTO 10106-02*]

C.8 **Permitted Equipment.** Only those equipment items listed in Attachment 10.5 are covered by the requirements of this permit and District Rule 201.B. [*Re: District Rule 1303, ATC 10128, ATC 10128-1, PTO 10128, ATC 10106, ATC/PTO 10106-01, ATC/PTO 10106-02*]

C.9 **Diesel IC Engines - Particulate Matter Emissions.** To ensure compliance with District Rules 205.A, 302, 309 and the California Health and Safety Code Section 41701, the permittee shall implement manufacturer recommended operational and maintenance procedures to ensure that all project diesel-fired engines minimize particulate emissions. The permittee shall implement a District-approved *IC Engine Particulate Matter Operation and Maintenance Plan* for the life of the project. This Plan shall detail the manufacturer recommended maintenance and calibration schedules that the permittee will implement. Where manufacturer guidance is not available, the recommendations of comparable equipment manufacturers and good engineering judgment shall be utilized. All project diesel-fired engines, regardless of exemption status, shall be included in this Plan. [*Re: District Rules 205.A, 302, 305, 309*]

C.10 **Process Monitoring Systems - Operation and Maintenance.** All platform process monitoring devices listed in Section 4.10.2, and any other monitoring devices that in the District's determination are necessary to accurately demonstrate compliance with the conditions of this permit, shall be properly operated, maintained, and calibrated according to manufacturer recommended specifications. The permittee shall implement the District-approved *Process Monitor Calibration and Maintenance Plan*. The permittee shall submit revisions to the plan and obtain District approval of the proposed revisions prior to changing a process monitoring device specified in the plan. Additionally, within 30 days of a District request, the permittee shall provide updates to the plan and shall obtain District approval of the updated plan within 90 days of receipt of the District's request. [*ATC 10128*]

C.11 **Ambient Air Monitoring Station.** The permittee shall install and maintain an ambient air monitoring station, approved by the District, in the area of Coal Oil Point. The monitoring station shall be equipped to continuously monitor and telemeter the data identified in Table 9.C.11-1 below to the District in a manner consistent with the District's Ambient Air Monitoring Protocol. The permittee shall connect all ambient and meteorological parameters to the District central data acquisition system (DAS) as documented in Table 9.C.11-1 below.

Table 9.C.11-1. Ambient Air Monitoring Station Requirements

Ambient Air Monitoring Station	Required Parameters (by "bullet" item)
Coal Oil Point Area (location of station approved by the District)	<ul style="list-style-type: none"> ▪ Ambient Air Total Hydrocarbon Concentration ▪ Wind Speed (Scalar Average) ▪ Wind Direction (Scalar Average) ▪ Wind Speed (Resultant) ▪ Wind Direction (Resultant) ▪ Sigma Theta (Wind Variation) ▪ Station Temperature (Inside) ▪ Hydrogen Sulfide ▪ Total Reduced Sulfur ▪ Sulfur Dioxide

The permittee shall reimburse the District's costs for the review and audit of the station's data in accordance with the cost reimbursement provisions of District Rule 210 and the conditions of this permit.

C.12 **Data Acquisition System.** The permittee shall install, connect to the District central data acquisition system (DAS), and maintain the process and alarm systems and ambient air monitoring station parameters approved by the District, and identified in Table 9.C.12-1 below.

Table 9.C.12-1

Facility Location	Required Parameters
Platform Holly Coal Oil Point Area	<ul style="list-style-type: none"> ▪ Flare Flow Meter (FI-170) ▪ Flare Pilot Low Temp Alarm (TSL-170) ▪ Holly H₂S Detector Alarms ▪ Low-pressure Flare Flow Meter (FI-172) ▪ Ambient Air Total Hydrocarbon Concentration ▪ Wind Speed (Scalar Average) ▪ Wind Direction (Scalar Average) ▪ Wind Speed (Resultant) ▪ Wind Direction (Resultant) ▪ Sigma Theta (Wind Variation) ▪ Station Temperature (Inside) ▪ Hydrogen Sulfide ▪ Total Reduced Sulfur ▪ Sulfur Dioxide

C.13 Data Acquisition System Operation and Maintenance Fee. The permittee is required to connect certain parameters to the District central data acquisition system (DAS). In addition, the permittee shall reimburse the District for the cost of operating and maintaining the DAS. The permittee shall be assessed an annual fee, based on the District’s fiscal year, collected semi-annually.

Pursuant to Rule 210 III.A, the permittee shall pay fees specified in Table 9.C.15-1 below. The District shall use these fees to operate, maintain, and upgrade the DAS in proper running order. Fees shall be due and payable pursuant to governing provisions of Rule 210, including CPI adjustments.

All ongoing costs and anticipated future capital upgrades will be the District’s responsibility and will be accomplished within the above stated DAS fee. This fee is intended to cover the annual operating budget and upgrades of the DAS and is intended to gradually phase the District into a share of the DAS costs (as outlined in the March 27, 1998, letter - *Fixed Fee Proposal for Monitoring and DAS Costs*). In the event that the assumptions used to establish this fee substantially increase or decrease, District may revisit and adjust the fee based on documentation of cost of services. Adjusted fees will be implemented by transmitting a revised Table 9.C.13-1, which will become an enforceable part of this permit.

The fees prescribed in this condition shall expire if and when the Board adopts a Data Acquisition System Operation and Maintenance Fee schedule and such fee becomes effective.

Table 9.C.13-1. FEES for DAS OPERATION and MAINTENANCE ^{(a) (b)}

FEE DESCRIPTION	FEE
Per CEM, ambient or meteorological parameter required by permit to be transmitted real-time to the District Central Data Acquisition System. See Table 9.C.14-1.	\$2,037 annually

- (a) All fees shall be due and payable pursuant to the governing provisions of Rule 210, including CPI adjustments.
 - (b) The fees in this table are based on the District’s March 27, 1998 letter (*Fixed Fee Proposal for Monitoring and DAS Costs*), adjusted for CPI, and may be updated pursuant to Rule 210 and shall be effective when issued and shall not require a modification to this permit.
- [ATC 10128, ATC 10128-1, PTO 10128]

C.14 Ambient Monitoring Station Data Review and Audit Fee. The permittee shall submit data from the ambient air monitoring station described in permit condition 9.C.11, to the District for quality assurance review and shall have the station audited quarterly by the District, or its contractor. In addition, the permittee shall reimburse the District for the cost of this service. The permittee shall be assessed an annual fee, based on the District’s fiscal year, collected semi-annually.

Pursuant to Rule 210 III.A., the permittee shall pay fees specified in Table 9.C.13-1. The District will use this fee to pay staff costs to review and quality assure the monitoring data collected by The permittee and the contractor or staff costs to audit the monitoring equipment. This fee shall not cover any District time necessary to issue or respond to any Notice of Violation, which will be billed on a reimbursable basis. Fees shall be due and payable pursuant to governing provisions of Rule 210, including CPI adjustments.

In the event that the permittee consistently requires services in excess of those assumed in the March 27, 1998 letter (*Fixed Fee Proposal for Monitoring and DAS Costs*), the Control Officer may move the permittee to a reimbursable method of payment, subject to provisions of Rule 210. In the event that the assumptions used to establish this fee substantially increase or decrease, the District may revisit and adjust the fee based on documentation of cost of services. Adjusted fees will be implemented by transmitting a revised Table 9.C.13-1, which will become an enforceable part of the permit.

The fees prescribed in this condition shall expire if and when the Board adopts an Ambient Monitoring Station Data Review and Audit Fee and such fee becomes effective.

Table 9.C.14-1 - Fees for Data Review and Audit

FEE DESCRIPTION	FEE
<i>Monitoring Station Data Review and Audit Fee</i>	
Data review and audit activities associated with data submitted from any monitoring station in Table 9.C.11-1.	\$36,757 annually

- (a) All fees shall be due and payable pursuant to the governing provisions of Rule 210, including CPI adjustments.
- (b) The fees in this table are based on the District’s March 27, 1998 letter (*Fixed Fee Proposal for Monitoring and DAS Costs*), adjusted for CPI, and may be updated pursuant to the requirements of this permit.

C.15 **Emergency Episode Plan.** As necessary, the permittee shall implement the Emergency Episode Plan for the Stationary Source and any subsequent District-approved updates. [Re: District Rule 603 and 1303]

C.16 **Documents Incorporated by Reference.** The documents listed below, including any District-approved updates thereof, are incorporated herein, and shall have the full force and effect of a permit condition for this operating permit. These documents shall be implemented for the life of Platform Holly.

- (a) *IC Engine Particulate Matter Operation and Maintenance Plan* (Dated March 20, 2006).
- (b) *Process Monitor Calibration and Maintenance Plan* (dated 05/30/2003 and approved by the District on 06/05/2003) and any subsequent District-approved updates.
- (c) *Rule 359 Flare Minimization and Monitoring* (dated 04/04/2003 and approved 06/05/2003) and any subsequent District-approved updates.
- (d) *Emergency Episode Plan* (dated 02/10/2002 and approved by the District in 8/02) and any subsequent District-approved updates.
- (e) *Platform Holly SIMQAP* (approved by the District on 12/24/2008) and any subsequent District-approved updates [Re:AO-99-6A, District Rules 317, 331, 333,359, ATC 10128, PTO 10128]
- (f) *Platform Holly Process Stream Sampling Plan* (dated 10/07/2004 and approved on 10/11/2004 and 7/8/05 addendum) and any subsequent District-approved updates.

- (g) *Rule 333 Inspection and Maintenance Plan* (dated 03/27/2009 and revised on 07/30/2010) and any subsequent District-approved updates.
- (h) *Rule 333 Inspection and Maintenance Plan for Diesel Generator* (dated 06/20/2023) and any subsequent District-approved updates

C.17 **Safety, Inspection, Maintenance Plan (SIMQAP).** The permittee shall implement the District approved SIMQAP Plan and any subsequent District approved revisions for Platform Holly. This plan shall be reviewed by the permittee every two years (or more frequently if requested by the District), and the adequacy of the Plan shall be assessed and verified by the permittee. The written assessment and verification shall be submitted to District for review. If determined necessary by the District, the permittee shall submit a Plan update for District approval. The permittee shall respond to any District comments on the Plan within 30 days of receipt of comments by District, and shall implement any operational changes within the deadlines so stipulated by the Control Officer. The Control Officer may grant extensions to these deadlines for good cause. In the administration of the SIMQAP, the Control Officer may consult with third party experts, including members of the other County Departments. The permittee shall pay for all reasonable costs related to the District's review of the Platform Holly SIMQAP. [Re: Rule 303, Abatement Order 99-6(A)]

C.18 **Source Testing.** The following source testing provisions shall apply:

- (a) Source testing shall be required for NO_x, CO, and ROC if the result from a portable analyzer reading (required by Condition 9.C.1(c)(v) of this permit) exceeds a threshold of 197 ppmvd NO_x @ 15% O₂, unless compliance with this threshold is demonstrated by a retest within 15 days of the initial reading. A source test shall be conducted within 60 days of the initial over-the-threshold reading if triggered by this criteria. If source testing of the engine demonstrates compliance with the NO_x, CO, and ROC emission limits specified in Condition 9.C.1(a)(ii) of this permit of this permit, the engine shall not be subject to another source test for two years from the date of the initial compliant source test. After two years, source testing may again be triggered based on the result of a portable analyzer reading, unless compliance is demonstrated by a retest within 15 days of the initial reading. If the engine does not demonstrate compliance with the NO_x, CO, and ROC emission limits specified in Condition 9.C.1(a)(ii) of this permit in any source test, it shall be source tested every two years thereafter.
- (b) The permittee shall submit a written source test plan to the District for approval at least thirty (30) days prior to initiation of each source test. The source test plan shall be prepared consistent with the District's *Source Test Procedures Manual* (revised May 1990 and any subsequent revisions). The permittee shall obtain written District approval of the source test plan prior to commencement of source testing. The District shall be notified at least ten (10) calendar days prior to the start of source testing activity to arrange for a mutually agreeable source test date when District personnel may observe the test.
- (c) Source test results shall be submitted to the District within forty-five (45) calendar days following the date of source test completion and shall be consistent with the requirements approved within the source test plan. Source test results shall document the permittee's compliance status with BACT requirements, permitted mass emission rates and applicable permit conditions, rules and NSPS (if applicable). All District

costs associated with the review and approval of all plans and reports and the witnessing of tests shall be paid by the permittee as provided for by District Rule 210.

- (d) A source test for an item of equipment shall be performed on the scheduled day of testing (the test day mutually agreed to) unless circumstances beyond the control of the operator prevent completion of the test on the scheduled day. Such circumstances include mechanical malfunction of the equipment to be tested, malfunction of the source test equipment, delays in source test contractor arrival and/or set-up, or unsafe conditions on site. Except in cases of an emergency, the operator shall seek and obtain District approval before deferring or discontinuing a scheduled test, or performing maintenance on the equipment item on the scheduled test day. If the test cannot be completed on the scheduled day, then the test shall be rescheduled for another time with prior authorization by the District. Once the sample probe has been inserted into the exhaust stream of the equipment unit to be tested (or extraction of the sample has begun), the test shall proceed in accordance with the approved source test plan. In no case shall a test run be aborted except in the case of an emergency or unless approval is first obtained from the District. Failing to perform the source test of an equipment item on the scheduled test day without a valid reason and without District's authorization shall constitute a violation of this permit. If a test is postponed due to an emergency, written documentation of the emergency event shall be submitted to the District by the close of the business day following the scheduled test day.

The timelines in (a), (b), and (c) may be extended for good cause provided a written request is submitted to the District at least three (3) days in advance of the deadline, and approval for the extension is granted by the District.

C.19 **Visible Emissions.** The permittee shall not discharge any visible emissions into the atmosphere from the emission sources below for a period or periods aggregating more than three minutes in any one hour.

- (a) Diesel-Fueled IC Engine(s). Once per calendar quarter, the permittee shall perform a visible emissions observation for a six-minute period on each permitted and exempt engine when operating. If an engine does not operate during a calendar quarter, no monitoring is required. Visible emission observations shall be documented using a District-approved Visible Emissions Recordkeeping Log. If no visible emissions are detected during the six-minute observation period, no further monitoring is required. If visible emissions are detected during the six-minute period, then the visible emission inspection shall continue in accordance with the "Monitoring Procedure" below. This condition shall not apply to boats.
- (b) Monitoring Procedures: The permittee shall conduct visible emissions observations every 15 seconds (using a stop-watch) and record the observation as either "0" (no visible emissions) or "E" (visible emissions) on a Visible Emissions Recordkeeping Log. Any time visible emissions are observed at the end of a 15-second interval, it shall be assumed that the visible emissions occurred for the entire 15 seconds preceding the reading. The start time and end time of the visible emission observations shall be recorded together with the date of the observation and name of the observer. The permittee shall conduct a visible emissions observation for the length of time necessary to document three continuous minutes of no visible emissions or the presence of visible emissions for more than the aggregation of three minutes during any hour, whichever occurs first.

- (c) *Compliance*: The permittee shall be deemed in compliance with this condition if no visible emissions are observed during the initial six-minute period. If any visible emissions are observed during the initial six-minute period, the permittee shall continue with the visible emissions observation. The permittee shall be deemed to be in compliance with this condition if no more than 12 “E” notations occur within any one-hour period. For compliance purposes, “one hour period” shall mean a rolling hour.

C.20 **Abrasive Blasting Equipment.** All abrasive blasting activities performed on Holly shall comply with the requirements of the California Code of Regulations, Title 17, Sub-Chapter 6, Sections 92000 through 92530. [Re: *District Rule 303, CCR Title 17*]

9.D **District-Only Conditions**

The following section lists permit conditions that are not enforceable by the USEPA or the public. However, these conditions are enforceable by the District and the State of California. These conditions are issued pursuant to District Rule 206 (*Conditional Approval of Authority to Construct or Permit to Operate*), which states that the Control Officer may issue an operating permit subject to specified conditions. Permit conditions have been determined as being necessary for this permit to ensure that operation of Holly complies with all applicable local and state air quality rules, regulations and laws. Failure to comply with any condition specified pursuant to the provisions of Rule 206 shall be a violation of that rule, this permit, as well as any applicable section of the California Health & Safety Code and any applicable requirement.

D.1 **Compliance Verification Reports.** Twice a year, the permittee shall submit a compliance verification report to the District. A paper copy, as well as, a complete PDF electronic copy of these reports, shall be in a format approved by the District. Each report shall be used to verify compliance with the prior two calendar quarters. The first report shall cover calendar quarters 1 and 2 (January through June) and shall be submitted no later than September 1. The second report shall cover calendar quarters 3 and 4 (July through December) and shall be submitted no later than March 1. Each report shall contain information necessary to verify compliance with the emission limits and other requirements of this permit (if applicable for that quarter). These reports shall be in a format approved by the District. All logs and other basic source data not included in the report shall be available to the District upon request. The second report shall also include an annual report for the prior four quarters. Pursuant to Rule 212, a completed *District Annual Emissions Inventory* questionnaire shall be included in the annual report or submitted electronically via the District website. The report shall include the following information:

- (a) *Crew and Supply Boats.*
 - (i) Daily, monthly, and annual fuel use for the crew boat main engines and auxiliary engines while operating within the California coastal waters adjacent to Santa Barbara County.
 - (ii) Daily, monthly and annual fuel use for the supply boat vessel main engines and auxiliary engines (including the bow thruster engine) while operating within the California coastal waters adjacent to Santa Barbara County.

- (iii) The sulfur content of each delivery of diesel fuel used by the crew and supply boats.
 - (iv) Information regarding any new project boats servicing Holly as detailed in crew and supply boat permit condition herein.
 - (v) Maintenance log summaries including details on injector type and timing, setting adjustments, major engine overhauls, and routine engine tune-ups. For spot charters this shall be provided as available.
 - (vi) Summary results of all compliance emission source testing performed, if applicable.
- (b) *Emergency/Standby Diesel IC Engine.*
- (i) All records required by the Emergency/Standby IC Engine recordkeeping requirement.
 - (ii) The following records required by subpart ZZZZ for the Emergency/Standby IC Engine:
 - (1) The date of the engine oil and filter change, the number of hours of operation since the last oil and filter change, and the date and results of each oil analysis;
 - (2) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first;
 - (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first.
- (c) *General Reporting Requirements.*
- (i) Breakdowns and variances reported/obtained per Regulation V along with the excess emissions that accompanied each occurrence.
 - (ii) A summary of each and every occurrence of non-compliance with the provisions of this permit, District rules, and any other applicable air quality requirement.
 - (iii) A copy of all completed District-10 forms (*IC Engine Timing Certification Form*).
 - (iv) The fuel gas and produced wastewater process stream analyses as required by Section 9.C and Section 9.D of this permit. The process stream analyses per Section 4.11 of this permit.
- (d) *CARB GHG Regulation Reporting.* The permittee shall report all throughput data and any updates to the information recorded pursuant to the CARB GHG Regulation Recordkeeping Condition above using District Annual Report Form ENF-108.

D.2 **Emission Factor Revisions.** The District may update the emission factors for any calculation based on USEPA AP-42 or District P&P emission factors at the next permit modification or permit reevaluation to account for USEPA and/or District revisions to the underlying emission factors. Further, the permittee shall modify its permit via an ATC application if compliance data shows that an emission factor used to develop the permit’s potential to emit is lower than that documented in the field. The ATC permit shall, at a minimum, adjust the emission factor to that documented by the compliance data consistent with applicable rules, regulations, and requirements.

D.3 **Odor Abatement Agreement and Complaint Response Plan.** The permittee shall abide by the requirements of District-approved *Odor Abatement Agreement* and implement the requirements of the District-approved *Complaint Response Plan* for the life of the project. Upon written request and subsequent approval by the District, this Agreement and Plan may be revised.

D.4 **Crew and Supply Boats.** The following equipment is included in this emissions category:

District ID No.	Equipment ID No.	Name
<i>Supply Boat</i>		
9789	3105-AA	Supply Boat Main Engines - Controlled
9790	3105-BB	Supply Boat Auxiliary Engines- Controlled
9791	3105-CC	Supply Boat Bow Thruster - Controlled
<i>Crew Boat</i>		
9787	3105-DD	Crew Boat Main Engines - Controlled
9788	3105-EE	Crew Boat Auxiliary Engines - Controlled

- (a) **Emission Limits:** Mass emissions from the crew, supply, and emergency response boats listed above shall not exceed the limits listed in Table 5.1-3. Compliance with this condition shall be based on the operational, monitoring, recordkeeping, and reporting conditions in this permit. In addition, emission rates from each main engine on each crew and supply boat shall not exceed the “lb/1000 gallons” emission factors listed in Table 5.1-2.
- (b) **Operational Limits:** Operation of the equipment listed in this section shall not exceed the limits listed below. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.
 - (i) *Crew Boat Main and Auxiliary Engine Limits* - The crew boat main and auxiliary engines for Holly shall not use more than: 511 gallons per day nor 130,881 gallons per year of diesel fuel. Notwithstanding the above, Crew boat main and auxiliary engines for Holly on vessels used exclusively for platform decommissioning activities shall not use more than 1,747 gallons per day nor 447,141 gallons per year of diesel fuel.
 - (ii) *Supply Boat Main Engine Limits* - The supply boat main engines for Holly shall not use more than: 2,326 gallons per day nor 446,651 gallons per year of diesel fuel. This limit shall include fuel used by emergency response boats.
 - (iii) *Supply Boat Auxiliary Engine Limits* - The supply boat auxiliary engines (including the bow thruster) for Holly shall not use more than: 251 gallons per day nor 48,184 gallons per year of diesel fuel. This limit shall include fuel used

by emergency response boats. Notwithstanding the above, supply boat auxiliary engines (including bow thruster) for Holly on vessels used exclusively for platform decommissioning activities shall not use more than 436 gallons per day nor 65,468 gallons per year of diesel fuel.

- (iv) *Liquid Fuel Sulfur Limit* - Diesel fuel used by all IC engines shall have sulfur content no greater than 0.0015 weight percent as determined by District-approved ASTM methods.
 - (v) The M/V GOL Lightning crew vessel shall only be used in support of Platform decommissioning activities.
- (c) Monitoring:
- (i) The permittee shall comply with the *Boat Monitoring and Reporting Plan*.
 - (ii) *Fuel Use Monitoring* - The permittee shall equip all crew and supply boats servicing Holly with in-line, continuous, cumulative, non-resettable fuel meters. Alternative monitoring methods for short-term boat activities may be used if approved in advance by the District.
- (d) Recordkeeping: The following records shall be maintained in legible logs and shall be made available to the District upon request:
- (i) *Maintenance Logs* - For all main and auxiliary engines on crew and supply boats, maintenance log summaries that include details on injector type and timing, setting adjustments, major engine overhauls, and routine engine maintenance. These log summaries shall be made available to the District upon request.
 - (ii) *Crew Boat Fuel Usage* - Daily, monthly, and annual fuel use for crew boat main engines and auxiliary engines while operating within 'California Coastal Waters' adjacent to Santa Barbara County.
 - (iii) *Supply Boat Fuel Usage* - Daily, monthly, and annual fuel use for main engines and auxiliary engines (including fuel use on emergency response boats) for supply boats while operating within 'California Coastal Waters' adjacent to Santa Barbara County.
- (e) Reporting: On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all crew and supply boat data required by the *Compliance Verification Reports* condition of this permit.
- (f) *New/Replacement Boats* - The permittee may utilize any new/replacement project boat without the need for a permit revision if that boat meets the following conditions:
- (i) The main engines are of the same or less bhp rating as listed in Table 5.1-1; and
 - (ii) The combined pounds per day potential to emit (PTE) of all generator and bow thruster engines is the same or less than the sum of the pounds per day PTE for these engines as determined from the corresponding Table 5.1-3 emission line items of this permit; and

- (iii) The NO_x, ROC, CO, PM and PM₁₀ emission factors are the same or less for the main and auxiliary engines.

In order to verify that a boat meets the requirements specified in (i) – (iii) above, the permittee shall submit the following information to the District for review prior to bringing a new boat into service:

- (iv) Boat description, including the type, size, name, engine make, model, year, and rating and emission control equipment.
- (v) Engine manufacturers' data on the emission levels for the various engines and applicable engine specification curves.
- (vi) A quantitative analysis using the operating and emission factor assumptions given in Tables 5.1-1 and 5.1-2 of this permit that demonstrates criteria (b) above is met.
- (vii) Any other information the District deems necessary to ensure the new boat will operate consistent with the analyses that form the basis for this permit.
- (viii) A description of the fuel metering and emissions computation procedures for the new boat.
- (ix) The permittee shall obtain a permit before using a new/replacement crew or supply boat that does not meet the above requirements (i) - (iii). The District may require manufacturer guarantees and emission source tests to confirm compliance with (iii).
- (x) The permittee shall revise the *Boat Monitoring and Reporting Plan*, obtain District approval of such revisions, and implement the revised Plan prior to bringing any boat into service that has not been previously approved by the District. In special cases, the permittee may utilize a boat prior to revising the *Boat Monitoring and Reporting Plan* if approval to do so is obtained, in writing, from the District prior to use of the boat.
- (xi) In order to verify compliance with the mass emission limits of this permit, the permittee shall conduct a source test of any boat in service within 90 days of written request by the District.

D.5 **Emergency/ Standby Diesel IC Engine (E/S-DICE).** The equipment listed below belongs to this emissions unit category.

District ID No.	Equipment ID No.	Name
2337	62B306	Emergency Electrical Generator (373 bhp)

- (a) **Emission Limitations.** The mass emissions from the E/S-DICE (ID #2337) shall not exceed the values listed in Table 5.1-3. Compliance shall be based on the operational, monitoring, recordkeeping, and reporting conditions of this permit.

- (b) **Operational Restrictions.** The equipment E/S-DICE (ID #2337) is subject to the following operational restrictions listed below. Emergency use operations, as defined in Section (d)(25) of the ATCM⁶, have no operational hours limitations.
- (i) Maintenance & Testing Use Limit: The E/S-DICE (ID #2337) shall not be operated for more than 20 hours per year for maintenance and testing⁷ purposes.
 - (ii) Impending Rotating Outage Use: The in-use E/S-DICE (ID #2337) may be operated in response to the notification of an impending rotating outage if all the conditions cited in Section (e)(2)(B)(1) of the ATCM are met.
 - (iii) Fuel and Fuel Additive Requirements: The permittee may only add fuel and/or fuel additives to the engine or any fuel tank directly attached to the engine that comply with Section (e)(1)(B) of the ATCM.
 - (iv) The following maintenance requirements shall apply:
 - (1) Change the oil and filter every 500 hours of operation or annually, whichever comes first;
 - (2) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first;
 - (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first.
- (c) **Monitoring.** The equipment permitted herein is subject to the following monitoring requirements:
- (i) Non-Resettable Hour Meter: The E/S-DICE (ID #2337) shall have installed a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District has determined (in writing) that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history.
- (d) **Recordkeeping.** The permittee shall record and maintain the information listed below. Log entries shall be retained for a minimum of 36 months from the date of entry. Log entries made within 24 months of the most recent entry shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request. Log entries made from 25 to 36 months from most recent entry shall be made available to District staff within 5 working days from request. District Form ENF-92 (*Diesel-Fired Emergency/Standby Engine Recordkeeping Form*) can be used for this requirement.
- (i) emergency use hours of operation;
 - (ii) maintenance and testing hours of operation;

⁶ As used in the permit, "ATCM" means Section 93115, Title 17, California Code of Regulations. Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines

⁷ "maintenance and testing" is defined in Section (d)(41) of the ATCM

- (iii) hours of operation for emission testing to show compliance with Section (e)(2)(B)(3) {if specifically allowed for under this permit};
- (iv) initial start-up hours {if specifically allowed for under this permit};
- (v) hours of operation to comply with the requirements of NFPA 25/100 {if applicable};
- (vi) hours of operation for all uses other than those specified in items (i) - (iv) above along with a description of what those hours were for;
- (vii) The owner or operator shall document fuel use through the retention of fuel purchase records that demonstrate that the only fuel purchased and added to an emergency standby engine or engines, or to any fuel tank directly attached to an emergency standby engine or engines, meets the requirements of the ATCM.
- (viii) Subpart ZZZZ:
 - (1) The date of each engine oil and filter change, the number of hours of operation since the last oil and filter change, and the date and results of each oil analysis;
 - (2) The date of the air cleaner inspections, the number of hours of operation since the last inspection and dates of all filter replacements;
 - (3) The date of each engine's hose and belts inspection and the number of hours of operation since the last hose and belt inspection. Indicate if any hose or belt was replaced as a result of the inspection.
- (e) **Reporting.** On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report shall include the information required in the Recordkeeping Condition above. This reporting requirement may be satisfied by using District Form ENF-92 (*Diesel-Fired Emergency Standby Engine Recordkeeping Form*).
- (f) **Temporary Engine Replacements - DICE ATCM.** The E/S-DICE (ID #9010), subject to the requirements listed in the stationary diesel ATCM, may be replaced temporarily only if the requirements (i-viii) listed herein are satisfied.
 - (i) The permitted engine that is being temporarily replaced is in need of routine repair or maintenance.
 - (ii) The permitted engine does not have a cracked block, unless the block will be replaced under manufacturer's warranty.
 - (iii) Replacement parts are available for the permitted engine.
 - (iv) The permitted engine is returned to its original service within 180 days of installation of the temporary engine.

- (v) The temporary replacement engine has the same or lower manufacturer rated horsepower and same or lower potential to emit of each pollutant as the permitted engine. At the written request of the permittee, the District may approve a replacement engine with a larger rated horsepower if the proposed temporary engine has manufacturer guaranteed emissions (for a brand new engine) or source test data (for a previously used engine) less than or equal to the permitted engine.
- (vi) The temporary replacement engine shall comply with all rules and permit requirements that apply to the permitted engine.
- (vii) For each permitted engine to be temporarily replaced, the permittee shall submit a completed *Temporary IC Engine Replacement Notification* form (Form ENF-94) within 14 days of the temporary engine being installed. This form may be sent hardcopy, or can be e-mailed (e-mail: enr@sbcapcd.org) to the District (Attn: Engineering Supervisor).
- (viii) Within 14 days of returning the original permitted engine to service, the permittee shall submit a completed *Temporary IC Engine Replacement Report* form (Form ENF-95). This form may be sent hardcopy, or can be e-mailed (e-mail: enr@sbcapcd.org) to the District (Attn: Engineering Supervisor).

Any engine in temporary replacement service shall be immediately shut down if the District determines that the requirements of this condition have not been met. If the requirements of this condition are not met, the permittee must obtain an ATC before installing or operating a temporary replacement engine.

- (g) **Permanent Engine Replacements.** The permittee may install a new engine in place of a permitted Emergency/Standby (E/S) IC engine, fire water pump engine or engine used for an essential public service that breaks down and cannot be repaired, without first obtaining an ATC permit only if the requirements (i - v) listed herein are satisfied.
 - (i) The permitted stationary diesel IC engine is an E/S engine, a firewater pump engine, or an engine used for an essential public service (as defined by the District).
 - (ii) The engine breaks down, cannot be repaired, and needs to be replaced by a new engine.
 - (iii) The facility provides “good cause” (in writing) for the immediate need to install a permanent replacement engine prior to the time period before an ATC permit can be obtained for a new engine. The new engine must comply with the requirements of the ATCM for new engines. If a new engine is not immediately available, a temporary engine may be used while the new replacement engine is being procured. During this time period, the temporary replacement engine must meet the same guidelines and procedures as defined in the permit condition above (*Temporary Engine Replacements - DICE ATCM*).
 - (iv) An Authority to Construct application for the new permanent engine is submitted to the District within 15 days of the existing engine being replaced and the District permit for the new engine is obtained no later than 180 days from the

date of engine replacement (these timelines include the use of a temporary engine).

- (v) For each permitted engine to be permanently replaced pursuant to the condition, the permittee shall submit a completed *Permanent IC Engine Replacement Notification* form (Form ENF-96) within 14 days of either the permanent or temporary engine being installed. This form shall be sent electronically to: *temp-engine@sbcapcd.org*.

Any engine installed (either temporarily or permanently) pursuant to this permit condition shall be immediately shut down if the District determines that the requirements of this condition have not been met.

- (h) **Notification of Non-Compliance.** Owners or operators who have determined that they are operating their stationary diesel-fueled engine(s) in violation of the requirements specified in Sections (e)(2) of the ATCM shall notify the District immediately upon detection of the violation and shall be subject to District enforcement action.
- (i) **Notification of Loss of Exemption.** Owners or operators of in-use stationary diesel-fueled CI engines, who are subject to an exemption specified in Section (c) from all or part of the requirements of Section (e)(2), shall notify the District immediately after they become aware that the exemption no longer applies and pursuant to Section (e)(4)(F)(1) of the ATCM shall demonstrate compliance within 180 days after notifying the District.
- (j) **Enrollment in a DRP/ISC - January 1, 2005.** Any stationary diesel IC engine rated over 50 bhp that enrolls for the first time in a Demand Response Program/Interruptible Service Contract (as defined in the ATCM) on or after January 1, 2005, shall first obtain a District Authority to Construct permit to ensure compliance with the emission control requirements and hour limitations governing ISC engines.
[Re: District PTO 11597, issued September 2005]

D.6 **Permitted Equipment.** Only those permitted equipment items listed in Attachment 10.5 are covered by the requirements of this permit and District Rule 201.

D.7 **Documents Incorporated by Reference.** The documents listed below, including any District-approved updates thereof, are incorporated herein and shall have the full force and effect of a permit condition for this operating permit:

- (a) Boat Monitoring and Reporting Plan for Holly (approved 1/24/2006 and revised 1/21/2020).
- (b) Complaint Response Plan (approved May 1995) and any subsequent District-approved updates.

D.8 **Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities.** The equipment permitted herein shall be operated in compliance with the California Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities regulation (CCR Title 17, Section 95665 *et. Seq.*).

- D.9 **CARB GHG Regulation Recordkeeping.** The permittee shall maintain at least 5 years of records that document the following:
- (a) The number of crude oil or natural gas wells at the facility.
 - (b) A list identifying all pressure vessels, tanks, separators, sumps, and ponds at the facility, including the size of each tank and separator in units of barrels.
 - (c) The annual crude oil, natural gas, and produced water throughput of the facility.
 - (d) A list identifying all reciprocating and centrifugal natural gas compressors at the facility.
- D.10 **CARB GHG Regulation Reporting:** On an annual basis, the permittee shall report all throughput data and any updates to the information recorded pursuant to the *CARB GHG Regulation Recordkeeping* Condition above using District Annual Report Form ENF-108. This report shall be submitted by March 1 of each year detailing the previous year's activities.

AIR POLLUTION CONTROL OFFICER

 Date

NOTES:

- (a) Permit Reevaluation Due Date: December 2026
- (b) This permit supersedes: PTO 8234-R11, PTO 15938, PTO 16234

- 10.0 ATTACHMENTS
- 10.1 Emission Calculation Documentation
- 10.2 Fee Calculations
- 10.3 IDS Database Emission Tables
- 10.4 Equipment List

10.1 Emission Calculation Documentation

This attachment contains relevant emission calculation documentation used for the emission tables in Section 5. Refer to Section 4 for the general equations. Supporting calculation spreadsheets are attached to this Section as tables, where necessary. The letters A-D refer to Tables 5.1-1 and 5.1-2.

Reference A - Crane Engine

- The emission factor for NO_x and ROC is calculated as follows:

Tier 3 standard: 3.0 g NMHC+NO_x/bhp-hr

Manufacturer – supplied NO_x EF (at rated hp) = 1.32 lb/hr

Manufacturer – supplied ROC EF (at rated hp) = 0.15 lb/hr

NO_x EF = 3.0 g/bhp-hr x (1.32/(1.32 + 0.15)) = 2.69 g NO_x/bhp-hr

ROC EF = 3.0 g/bhp-hr x (0.15/(1.32 + 0.15)) = 0.31 g ROC/bhp-hr

- GHG emissions from combustion sources are calculated using emission factors found in Tables C-1 and C-2 of 40 CFR Part 98 and global warming potentials found in Table A-1 of 40 CFR Part 98. CO₂ equivalent emission factors are calculated for CO₂, CH₄, and N₂O individually then summed to calculate a total CO_{2e} emission factor. Annual CO_{2e} emission totals are presented in short tons.

For IC engines, the emission factor in lb/MMBtu heat input is converted to g/bhp-hr output based on a standard brake-specific fuel consumption.

For diesel fuel combustion the emission factor is:

(73.96 kg CO₂/MMBtu) (2.2046 lb/kg) = 163.05 lb CO₂/MMBtu

(0.003 kg CH₄/MMBtu) (2.2046 lb/kg)(21 lb CO_{2e}/lb CH₄) = 0.139 lb CO_{2e}/MMBtu

(0.0006 kg N₂O/MMBtu) (2.2046 lb/kg)(310 lb CO_{2e}/lb N₂O) = 0.410 lb CO_{2e}/MMBtu

Total CO_{2e}/MMBtu = 163.05 + 0.139 + 0.410 = 163.60 lb CO_{2e}/MMBtu

Converted to g/hp-hr:

(163.60 lb CO_{2e}/MMBtu)(453.6 g/lb)(7500 Btu/hp-hr)/1,000,000

= 556.58 g/hp-hr as CO_{2e}

Reference B - Supply Boat/Crew Boat

Supply Boat

- The maximum operating schedule is in units of hours
- Supply boat engine data based on the specifications of a boat identical to ‘American Heritage’.
- Three 1,640 bhp main engines (i.e., 4,920 bhp), two 265 bhp auxiliary engines (i.e., 530 bhp) and two 265 bhp bow thruster engines (i.e., 530 bhp) are used

- Main engine load factor based on District *Crew and Supply Boat* study (6/87)
- Supply boat bow thruster engine only operates during maneuver mode
- Supply boat generator engines provide half of total rated load, either with one engine at full load or both engines at half load

- Based on the boat trip distance from Port Hueneme to Holly, the District has computed the total time a supply boat operates (per trip) within California Coastal Waters (adjacent to Santa Barbara County) limits. This is 13.25 hours. A trip includes time to, from, and at the platform. The time is based on a typical trip consisting of: 10.75 hours cruise, 2 hours maneuver, and 0.5 hour idle. Annual supply boat usage time is 2544 hours based on 192 trips. For operations related to the decommissioning of Platform Holly, usage of the auxiliary engines is calculated at 24 hours per day for the generator engine and 3 hours per day for the bow thruster in order to allow the supply vessel to remain at the Platform for additional time.
- Main engine emission factors are based on EPA Marine Tier 2 emission factors for Category 1 engines with a displacement equal to or greater than 2.5 and less than 5 liters per cylinder
- Auxiliary engine emission factors are based on EPA Marine Tier 2 emission factors for Category 1 engines with a displacement equal to or greater than 1.2 and less than 2.5 liters per cylinder
- Supply boat engines achieve a controlled NO_x + HC emission rate of 5.4 g/bhp-hr with an allocation of 90% to NO_x and 10% to HC. This emission factor equates to 195 lb/1000 gallons for NO_x and 21.68 lb/1000 gallons for ROC:

$$\rightarrow EF_{NO_x} = (5.4 \text{ g/bhp-hr} \times 0.9 \text{ ratio}) \div (0.055 \text{ gal/bhp-hr}) \div (453.6 \text{ g/lb}) \times (1000)$$

$$\rightarrow EF_{ROC} = (5.4 \text{ g/bhp-hr} \times 0.1 \text{ ratio}) \div (0.055 \text{ gal/bhp-hr}) \div (453.6 \text{ g/lb}) \times (1000)$$

Supply boat engines achieve a controlled CO emission rate of 3.7 g/bhp-hr. This emission factor equates to 148.58 lb/1000 gallons.

$$\rightarrow EF_{CO} = (3.7 \text{ g/bhp-hr}) \div (0.055 \text{ gal/bhp-hr}) \div (453.6 \text{ g/lb}) \times (1000)$$

Supply boat engines achieve a controlled PM emission rate of 0.15 g/bhp-hr. This emission factor equates to 6.02 lb/1000 gallons.

$$\rightarrow EF_{PM} = (6.02 \text{ g/bhp-hr}) \div (0.055 \text{ gal/bhp-hr}) \div (453.6 \text{ g/lb}) \times (1000)$$

- PM_{10/2.5}:PM ratio = 0.96; ROC to TOC ratio = 1.0

- All SO_x emissions based on mass balance

$$SO_x \text{ (as } SO_2) = (0.0015 \%S / 100) \times (7.05 \text{ lb/gal}) \times (64 \text{ lbs/lb-mole } SO_2 \div 32 \text{ lbs/lb-mole } S) \times 1000 = 0.2115 \text{ lbs } S / \text{kgal.}$$

- GHG emissions from combustion sources are calculated using emission factors found in Tables C-1 and C-2 of 40 CFR Part 98 and global warming potentials found in Table A-1 of 40 CFR Part 98. CO₂ equivalent emission factors are calculated for CO₂, CH₄, and N₂O individually, then summed to calculate a total CO_{2e} emission factor. Annual CO_{2e} emission totals are presented in short tons.

For diesel fuel combustion the emission factor is:

$$(73.96 \text{ kg CO}_2/\text{MMBtu}) (2.2046 \text{ lb/kg}) = 163.05 \text{ lb CO}_2/\text{MMBtu}$$

$$(0.003 \text{ kg CH}_4/\text{MMBtu}) (2.2046 \text{ lb/kg})(21 \text{ lb CO}_{2e}/\text{lb CH}_4) = 0.139 \text{ lb CO}_{2e}/\text{MMBtu}$$

$$(0.0006 \text{ kg N}_2\text{O}/\text{MMBtu}) (2.2046 \text{ lb/kg})(310 \text{ lb CO}_{2e}/\text{lb N}_2\text{O}) = 0.410 \text{ lb CO}_{2e}/\text{MMBtu}$$

$$\text{Total CO}_{2e}/\text{MMBtu} = 163.05 + 0.139 + 0.410 = 163.60 \text{ lb CO}_{2e}/\text{MMBtu}$$

$$163.60 \text{ lb CO}_{2e}/\text{MMBtu} \times 137,000,000 \text{ Btu}/1,000 \text{ gal} = 22,413.2 \text{ lb CO}_{2e}/1,000 \text{ gal}$$

- Brake specific fuel consumption is 0.055 gal/bhp-hr [=1/(18.2 bhp-hr/gal)] for all engines.
- Main and auxiliary engine fuel use limits are determined as follows:

$$\text{Gallons/time period} = (\text{BSFC}) \times (\text{bhp}) \times (\text{hours/time period}) \times (\text{load factor})$$

Main engines:

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (4,920 \text{ bhp}) (13.25 \text{ hours/day}) (0.65) \\ &= 2,326 \text{ gallons per day} \end{aligned}$$

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (4,920 \text{ bhp}) (2544 \text{ hours/yr}) (0.65) \\ &= 446,651 \text{ gallons per year} \end{aligned}$$

Auxiliary engines – Generators

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (530 \text{ bhp}) (24 \text{ hours/day}) (0.50) \\ &= 349 \text{ gallons per day} \end{aligned}$$

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (530 \text{ bhp}) (3500 \text{ hours/yr}) (0.50) \\ &= 50,920 \text{ gallons per year} \end{aligned}$$

Auxiliary engines - Bow Thruster

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (530 \text{ bhp}) (3 \text{ hours/day}) \\ &= 87 \text{ gallons per day} \end{aligned}$$

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (530 \text{ bhp}) (500 \text{ hours/yr}) \\ &= 14,549 \text{ gallons per year.} \end{aligned}$$

Crew Boat

- The maximum operating schedule is in units of hours.

- Crew boat engine data based on the specifications of a boat identical to the M/V GOL Lightning
- Four 1,300 bhp main engines (i.e., 5,200 bhp) and two 125 bhp auxiliary engine (i.e., 250 bhp)
- Main engine load factor based on District *Crew and Supply Boat* study (6/87)
- Crew boat auxiliary engine provides half of the total rated load
- The total time a crew boat operates (per trip) is 1.0 hour, based on actual distance. Annual crew boat usage time is based on 1792 trips at 1.0 hr/trip for a total of 1,792 hours per year
- Main engine emission factors are based on EPA Marine Tier 2 emission factors for Category 1 engines with a displacement equal to or greater than 2.5 and less than 5 liters per cylinder
- Auxiliary engine emission factor is based on EPA Off-road Tier 2 emission factors for engines rated between 175 to 300 bhp
- Crew boat main engines achieve a controlled NO_x + HC emission rate of 5.4 g/bhp-hr with an allocation of 90% to NO_x and 10% to HC. This emission factor equates to 195 lb/1000 gallons for NO_x and 21.68 lb/1000 gallons for ROC:
 - $EF_{NO_x} = (5.4 \text{ g/bhp-hr} \times 0.9 \text{ ratio}) \div (0.055 \text{ gal/bhp-hr}) \div (453.6 \text{ g/lb}) \times (1000)$
 - $EF_{ROC} = (5.4 \text{ g/bhp-hr} \times 0.1 \text{ ratio}) \div (0.055 \text{ gal/bhp-hr}) \div (453.6 \text{ g/lb}) \times (1000)$
- Crew boat main engines achieve a controlled CO emission rate of 3.7 g/bhp-hr. This emission factor equates to 148.58 lb/1000 gallons:
 - $EF_{CO} = (3.7 \text{ g/bhp-hr}) \div (0.055 \text{ gal/bhp-hr}) \div (453.6 \text{ g/lb}) \times (1000)$
- Crew boat main engines achieve a controlled PM emission rate of 0.15 g/bhp-hr. This emission factor equates to 6.02 lb/1000 gallons
 - $EF_{PM} = (6.02 \text{ g/bhp-hr}) \div (0.055 \text{ gal/bhp-hr}) \div (453.6 \text{ g/lb}) \times (1000)$
- PM₁₀:PM ratio = 0.96; ROC:TOC ratio = 1.0
- All SO_x emissions based on mass balance
- $SO_x \text{ (as } SO_2) = (0.0015 \%S / 100) \times (7.05 \text{ lb/gal}) \times (64 \text{ lbs/lb-mole } SO_2 \div 32 \text{ lbs/lb-mole } S) \times 1000 = 0.2115 \text{ lbs S/ kgal}$
- Brake specific fuel consumption is 0.055 gal/bhp-hr (18.2 hp-hr/gal) for all engines
- Main and auxiliary engine fuel use limits are determined as follows

$$(\text{Gallons/time period}) = (\text{BSFC}) \times (\text{bhp}) \times (\text{hours/time period}) \times (\text{load factor})$$

Main engines:

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (5,200 \text{ bhp}) (7 \text{ hours/day}) (0.85) \\ &= 1,699 \text{ gallons per day} \end{aligned}$$

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (5,200 \text{ bhp}) (1,792 \text{ hours/yr}) (0.85) \\ &= 434,843 \text{ gallons per year} \end{aligned}$$

Auxiliary engines – Generators

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (250 \text{ bhp}) (7 \text{ hours/day}) (0.50) \\ &= 48 \text{ gallons per day} \end{aligned}$$

$$\begin{aligned} Q &= (0.055 \text{ gal/bhp-hr}) (250 \text{ bhp}) (1,792 \text{ hours/yr}) (0.50) \\ &= 12,298 \text{ gallons per year} \end{aligned}$$

Reference C - Sumps/Tanks/Separators

- Maximum operating schedule is in units of hours
- There are no oil/water separators on Holly
- Emission calculation methodology based on District P&P 6100.060 (specifically, the CARB/KVB report *Emissions Characteristics of Crude Oil Production Operations in California* (1/83) was used).
- Calculations are based on surface area of emissions unit as supplied by the applicant.
- All non-oil/water separator emission units are classified as tertiary production and light oil service

Reference D - Solvents

- Solvents are used for daily operations such as wipe cleaning or cold solvent degreasing. A low VOC cleaner, D-5, is used. Solvents used to thin surface coatings are not included in this equipment category.
- To compute ROC emissions from paints and thinners under the *worst-case scenario*, the maximum allowable ROC content in such paints/thinners (250 g/l) has been used as the emission factor for the entire group of chemicals.
- Annual emission rates per prior permit. Daily number is annualized.
- Hourly emissions based on daily value divided by an average 24-hour day. Compliance with daily value based on monthly emissions divided by the number of days per month.

10.2 Fee Calculations

All permit fees for the reevaluation of Holly are based on the fee schedules of Rule 210. The District has calculated these fees based on a CPI adjusted Rule 210 fee schedule.

All work performed with respect to implementing the requirements of the Part 70 Operating Permit program are assessed on a cost reimbursement basis pursuant to District Rule 210.



Device Fee

Device No.	Device Name	Fee Schedule	Qty of Fee Units	Fee per Unit	Fee Units	Max or Min. Fee Apply?	Number of Same Devices	Pro Rate Factor	Device Fee	Penalty Fee?	Fee Credit	Total Fee per Device
002345	Drain Sump Tank	A6	1.000	5.66	Per 1000 gallons	Min	1	1.000	98.15	0.00	0.00	98.15
005882	Overflow Sump Tank	A6	1.000	5.66	Per 1000 gallons	Min	1	1.000	98.15	0.00	0.00	98.15
111857	Catalyst	A2	1.000	98.79	Per equipment	No	1	1.000	98.79	0.00	0.00	98.79
111858	Catalyst	A2	1.000	98.79	Per equipment	No	1	1.000	98.79	0.00	0.00	98.79
111856	Catalyst	A2	1.000	98.79	Per equipment	No	1	1.000	98.79	0.00	0.00	98.79
002337	IC Engine: Emergency Generator	A4	3.530	741.08	Per 1 million Btu input	No	1	1.000	2,616.01	0.00	0.00	2,616.01
111506	Crane Engine	A4	1.920	741.08	Per 1 million Btu input	No	1	1.000	1,422.87	0.00	0.00	1,422.87
009603	Low-Pressure Flare	A4	126.000	741.08	Per 1 million Btu input	Max	1	1.000	9,915.90	0.00	0.00	9,915.90
104755	Fugitives: Gas - Controlled	A2	1.000	98.79	Per equipment	No	1	1.000	98.79	0.00	0.00	98.79
009601	Fugitives: Oil - Controlled	A2	1.000	98.79	Per equipment	No	1	1.000	98.79	0.00	0.00	98.79
009669	Motor: Drain Sump Pump, T-1	A3	7.500	51.22	Per total rated hp	No	1	1.000	384.15	0.00	0.00	384.15
009571	Firewater Pumps	A3	60.000	51.22	Per total rated hp	No	2	1.000	6,146.40	0.00	0.00	6,146.40
107276	Drain Sump Pump, T-1	A3	7.500	51.22	Per total rated hp	No	1	1.000	384.15	0.00	0.00	384.15
009594	Omnipure Wastewater Treatment Skid	A2	1.000	98.79	Per equipment	No	1	1.000	98.79	0.00	0.00	98.79
009626	Well Heads	A2	1.000	98.79	Per equipment	No	30	1.000	2,963.70	0.00	0.00	2,963.70
	Device Fee Sub-Totals =								\$24,622.23	\$0.00	\$0.00	
	Device Fee Total =											\$24,622.23

Permit Fee

Fee Based on Devices	\$24,622.23
Administrative Change Evaluation Fee for PTO 15938	\$615.00
Administrative Change Evaluation Fee for PTO 16234	\$615.00

Fee Statement Grand Total = \$25,852

Notes:

- (1) Fee Schedule Items are listed in District Rule 210, Fee Schedule "A".
- (2) The term "Units" refers to the unit of measure defined in the Fee Schedule.

10.3 IDS Database Emissions Tables

PERMIT POTENTIAL TO EMIT

	NO _x	ROC	CO	SO _x	PM	PM _{2.5/10}
lb/day	907.80	241.84	687.08	3.55	29.46	28.83
lb/hr						
TPQ						
TPY	94.58	36.38	73.66	0.30	3.02	3.02

FACILITY POTENTIAL TO EMIT

	NO _x	ROC	CO	SO _x	PM	PM ₁₀
lb/day	907.80	241.84	687.08	3.55	29.46	28.83
lb/hr						
TPQ						
TPY	94.58	36.38	73.66	0.30	3.02	3.02

STATIONARY SOURCE POTENTIAL TO EMIT

	NO _x	ROC	CO	SO _x	PM	PM ₁₀
lb/day	992.03	458.99	879.30	15.33	49.75	45.83
lb/hr						
TPQ						
TPY	108.36	75.71	104.64	3.57	6.56	6.10

10.4 Permitted Equipment List

PT-70/Reeval 08234 R12 / FID: 03105 Platform Holly / SSID: 01063

1 Storage Tanks

1.1 Drain Sump Tank

<i>Device ID #</i>	002345	<i>Device Name</i>	Drain Sump Tank
<i>Rated Heat Input</i>		<i>Physical Size</i>	44.00 Square Feet Sump Area
<i>Manufacturer</i>		<i>Operator ID</i>	T-1
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

1.2 Overflow Sump Tank

<i>Device ID #</i>	005882	<i>Device Name</i>	Overflow Sump Tank
<i>Rated Heat Input</i>		<i>Physical Size</i>	113.00 Square Feet Sump Area
<i>Manufacturer</i>		<i>Operator ID</i>	T-4
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

2 Catalyst

<i>Device ID #</i>	111857	<i>Device Name</i>	Catalyst
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Miratech	<i>Operator ID</i>	Catalytic Convertor #2
<i>Model</i>	EQ-801	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

3 Catalyst

Device ID #	111858	Device Name	Catalyst
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Miratech	<i>Operator ID</i>	Catalytic Convertor #3
<i>Model</i>	EQ-3030	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

4 Catalyst

Device ID #	111856	Device Name	Catalyst
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Miratech	<i>Operator ID</i>	Catalytic Convertor #1
<i>Model</i>	EQ-801	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

5 Supply Boat

5.1 Supply Boat - Generator Engines

Device ID #	009790	Device Name	Supply Boat - Generator Engines
<i>Rated Heat Input</i>		<i>Physical Size</i>	530.00 Brake Horsepower
<i>Manufacturer</i>		<i>Operator ID</i>	3105-BB
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

5.1.1 Supply Boat - Bow Thruster

<i>Device ID #</i>	009791	<i>Device Name</i>	Supply Boat - Bow Thruster
<i>Rated Heat Input</i>		<i>Physical Size</i>	530.00 Brake Horsepower
<i>Manufacturer Model</i>		<i>Operator ID Serial Number</i>	
<i>Location Note</i>			
<i>Device Description</i>			

5.2 Supply Boat - Main Engines - Uncontrolled

<i>Device ID #</i>	009789	<i>Device Name</i>	Supply Boat - Main Engines - Uncontrolled
<i>Rated Heat Input</i>		<i>Physical Size</i>	4920.00 Brake Horsepower
<i>Manufacturer Model</i>		<i>Operator ID Serial Number</i>	3105-AA
<i>Location Note</i>			
<i>Device Description</i>			

6 Crew Boat

6.1 Crewboat - Main Engines -Uncontrolled

<i>Device ID #</i>	009787	<i>Device Name</i>	Crewboat - Main Engines -Uncontrolled
<i>Rated Heat Input</i>		<i>Physical Size</i>	1020.00 Brake Horsepower
<i>Manufacturer Model</i>		<i>Operator ID Serial Number</i>	3105-DD
<i>Location Note</i>			
<i>Device Description</i>			

6.2 Crewboat - Auxiliary Engines

<i>Device ID #</i>	009788	<i>Device Name</i>	Crewboat - Auxiliary Engines
<i>Rated Heat Input</i>		<i>Physical Size</i>	40.00 Brake Horsepower
<i>Manufacturer</i>		<i>Operator ID</i>	3105-EE
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

7 Diesel I.C. Engines

7.1 IC Engine: Emergency Generator

<i>Device ID #</i>	002337	<i>Device Name</i>	IC Engine: Emergency Generator
<i>Rated Heat Input</i>	3.530 MMBtu/Hour	<i>Physical Size</i>	373.00 Brake Horsepower
<i>Manufacturer</i>	Caterpillar	<i>Operator ID</i>	62B306
<i>Model</i>	D-343	<i>Serial Number</i>	62B-306
<i>Location Note</i>			
<i>Device</i>	250 kW diesel stand-by generator, which is used in the event of a power outage from Southern California Edison.		
<i>Description</i>			

7.2 Crane Engine

<i>Device ID #</i>	111506	<i>Device Name</i>	Crane Engine
<i>Rated Heat Input</i>	1.920 MMBtu/Hour	<i>Physical Size</i>	250.00 Horsepower
<i>Manufacturer</i>	Caterpillar	<i>Operator ID</i>	Crane Engine
<i>Model</i>	C7-ACERT, IND-C	<i>Serial Number</i>	JTF00836
<i>Location Note</i>			
<i>Device</i>	Tier 3 Diesel IC engine		
<i>Description</i>			

8 Emergency Boat

8.1 Emergency Response Boat - All Engines

<i>Device ID #</i>	104762	<i>Device Name</i>	Emergency Response Boat - All Engines
<i>Rated Heat Input</i>		<i>Physical Size</i>	1770.00 Brake Horsepower
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

9 Diesel Particulate Filter

<i>Device ID #</i>	111508	<i>Device Name</i>	Diesel Particulate Filter
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	DCL International	<i>Operator ID</i>	
<i>Model</i>	Mine-X Sootfilter	<i>Serial Number</i>	136292
<i>Location Note</i>			
<i>Device</i>	DPF serving the Holly crane engine		
<i>Description</i>			

10 Flare Systems

10.1 Low-Pressure Flare

<i>Device ID #</i>	009603	<i>Device Name</i>	Low-Pressure Flare
<i>Rated Heat Input</i>		<i>Physical Size</i>	126.00 MMBtu/Hour
<i>Manufacturer</i>		<i>Operator ID</i>	H101
<i>Model</i>	CAK-4	<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	This low pressure flare is a combined pilot/flare tip; mounted to an existing flare stack boom with a permit limited to flare gas flow rates of up to 2000 SCFM		
<i>Description</i>			

11 Fugitive Hydrocarbon Components - CLP

11.1 Fugitives: Gas - Controlled

<i>Device ID #</i>	104755	<i>Device Name</i>	Fugitives: Gas - Controlled
<i>Rated Heat Input</i>		<i>Physical Size</i>	8591.00 Component Leakpath
<i>Manufacturer</i>		<i>Operator ID</i>	3105-04
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	8591 clps - gas service		
<i>Description</i>			

11.2 Fugitives: Gas - Unsafe

<i>Device ID #</i>	104756	<i>Device Name</i>	Fugitives: Gas - Unsafe
<i>Rated Heat Input</i>		<i>Physical Size</i>	0.00 Component Leakpath
<i>Manufacturer</i>		<i>Operator ID</i>	3105-05
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

11.3 Fugitives: Oil - Controlled

<i>Device ID #</i>	009601	<i>Device Name</i>	Fugitives: Oil - Controlled
<i>Rated Heat Input</i>		<i>Physical Size</i>	3760.00 Component Leakpath
<i>Manufacturer</i>		<i>Operator ID</i>	3105-02
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	3760 clps - oil service		
<i>Description</i>			

11.4 Fugitives: Oil - Unsafe

<i>Device ID #</i>	104754	<i>Device Name</i>	Fugitives: Oil - Unsafe
<i>Rated Heat Input</i>		<i>Physical Size</i>	0.00 Component Leakpath
<i>Manufacturer Model</i>		<i>Operator ID Serial Number</i>	3105-03
<i>Location Note</i>			
<i>Device Description</i>			

12 Electrical Motors

12.1 Motor: Drain Sump Pump, T-1

<i>Device ID #</i>	009669	<i>Device Name</i>	Motor: Drain Sump Pump, T-1
<i>Rated Heat Input</i>		<i>Physical Size</i>	7.50 Horsepower (Electric Motor)
<i>Manufacturer Model</i>	Moyund 2L3SSFCAA	<i>Operator ID Serial Number</i>	P-202
<i>Location Note</i>			
<i>Device Description</i>	Capacity = 250 gal/minute		

13 Pumps

13.1 Firewater Pumps

<i>Device ID #</i>	009571	<i>Device Name</i>	Firewater Pumps
<i>Rated Heat Input</i>		<i>Physical Size</i>	60.00 Horsepower (Electric Motor)
<i>Manufacturer Model</i>		<i>Operator ID Serial Number</i>	P-150A/B
<i>Location Note</i>			
<i>Device Description</i>	Two pumps, electric powered, 60 hp each.		

13.2 Drain Sump Pump, T-1

<i>Device ID #</i>	107276	<i>Device Name</i>	Drain Sump Pump, T-1
<i>Rated Heat Input</i>		<i>Physical Size</i>	7.50 Horsepower (Electric Motor)
<i>Manufacturer</i>		<i>Operator ID</i>	P-202
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	Pumps all deck drains to surge tank, 7.5 hp motor		
<i>Description</i>			

14 Surface Coating Operations

<i>Device ID #</i>	005884	<i>Device Name</i>	Surface Coating Operations
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	Including paints, primers, coatings solvents used for thinning and associated cleanup operations		
<i>Description</i>			

15 Omnipure Wastewater Treatment Skid

<i>Device ID #</i>	009594	<i>Device Name</i>	Omnipure Wastewater Treatment Skid
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	X-100
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

16 Well Heads

<i>Device ID #</i>	009626	<i>Device Name</i>	Well Heads
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Location Note</i>			
<i>Device</i>	2 gas-injection wells, 1 plugged/abandoned well.		
<i>Description</i>			

B EXEMPT EQUIPMENT

1 Fresh Water Supply Pumps

<i>Device ID #</i>	107288	<i>Device Name</i>	Fresh Water Supply Pumps
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	P-130 A/B
<i>Model</i>		<i>Serial Number</i>	
<i>Part 70 Insig?</i>	No	<i>District Rule Exemption:</i> 202.L.13 H2O Well/Filtration Sys/Reverse Osmosis	
<i>Location Note</i>			
<i>Device</i>	5 hp each, electric motor		
<i>Description</i>			

2 Diesel Fuel tank

<i>Device ID #</i>	009565	<i>Device Name</i>	Diesel Fuel tank
<i>Rated Heat Input</i>		<i>Physical Size</i>	1500.00 Gallons
<i>Manufacturer</i>		<i>Operator ID</i>	T-111
<i>Model</i>		<i>Serial Number</i>	
<i>Part 70 Insig?</i>	Yes	<i>District Rule Exemption:</i> 202.V.2 Storage Of Refined Fuel Oil W/Grav <=40 Api	
<i>Location Note</i>			
<i>Device</i>			
<i>Description</i>			

3 Platform Air Compressors

<i>Device ID #</i>	107285	<i>Device Name</i>	Platform Air Compressors
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer Model</i>		<i>Operator ID</i>	C-110 A/B
<i>Part 70 Insig?</i>	No	<i>Serial Number</i>	
<i>Location Note</i>		<i>District Rule Exemption:</i> 202.L.2 Air Cond/Vent System W/No Air Contaminant Removal	
<i>Device Description</i>	20 hp electric motor each		

4 Utility Air Compressor

<i>Device ID #</i>	107286	<i>Device Name</i>	Utility Air Compressor
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer Model</i>		<i>Operator ID</i>	C-110 C
<i>Part 70 Insig?</i>	No	<i>Serial Number</i>	
<i>Location Note</i>		<i>District Rule Exemption:</i> 202.L.2 Air Cond/Vent System W/No Air Contaminant Removal	
<i>Device Description</i>	10 hp electric motor		

E DE-PERMITTED EQUIPMENT

1 IC Engine: Drilling Rig Generator #1

<i>Device ID #</i>	009130	<i>Device Name</i>	IC Engine: Drilling Rig Generator #1
<i>Rated Heat Input</i>	7.590 MMBtu/Hour	<i>Physical Size</i>	803.00 Horsepower
<i>Manufacturer</i>	Caterpillar	<i>Operator ID</i>	Generator #1
<i>Model</i>	G399 SITA	<i>Serial Number</i>	
<i>Depermitted Device</i>		<i>Facility Transfer</i>	
<i>Description</i>			

2 Oil Surge Vessel

<i>Device ID #</i>	009629	<i>Device Name</i>	Oil Surge Vessel
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Natco	<i>Operator ID</i>	Mezz.V-110
<i>Model</i>		<i>Serial Number</i>	7050401-02
<i>Depermitted Device</i>		<i>Facility Transfer</i>	
<i>Description</i>	6' dia. x 20' long, 100 psi, 100°F.		

3 Pig Launcher - Gas

<i>Device ID #</i>	009794	<i>Device Name</i>	Pig Launcher - Gas
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	Sp-134
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted Device</i>		<i>Facility Transfer</i>	
<i>Description</i>	One gas pig launcher with 0.67' diameter by 4' long.		

4 IC Engine: Drilling Rig Generator #2

<i>Device ID #</i>	009131	<i>Device Name</i>	IC Engine: Drilling Rig Generator #2
<i>Rated Heat Input</i>	7.590 MMBtu/Hour	<i>Physical Size</i>	803.00 Horsepower
<i>Manufacturer</i>	Caterpillar	<i>Operator ID</i>	Generator #2
<i>Model</i>	G399 SITA	<i>Serial Number</i>	
<i>Depermitted Device Description</i>		<i>Facility Transfer</i>	

5 Pig Launcher - Oil

<i>Device ID #</i>	009792	<i>Device Name</i>	Pig Launcher - Oil
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	Sp-132
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted Device Description</i>	One oil pig launcher with 0.67' diameter by 4' long.	<i>Facility Transfer</i>	

6 Pig Launcher - Utility

<i>Device ID #</i>	009793	<i>Device Name</i>	Pig Launcher - Utility
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	Sp-133
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted Device Description</i>	One utility gas pig launcher with 0.50' diameter by 4' long.	<i>Facility Transfer</i>	

7 Water Surge Vessel

<i>Device ID #</i>	009638	<i>Device Name</i>	Water Surge Vessel
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Natco	<i>Operator ID</i>	Mezz V-109
<i>Model</i>		<i>Serial Number</i>	7050401-01
<i>Depermitted Device Description</i>	6' dia. x 20' long, 100 psi, 100°F.	<i>Facility Transfer</i>	

8 Monterey 3120 Group Trap Separator

<i>Device ID #</i>	009651	<i>Device Name</i>	Monterey 3120 Group Trap Separator
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Natco	<i>Operator ID</i>	V-107
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device Description</i>	6.5' dia. x 20' long, 250 psi, 100°F.		

9 Monterey 3242 Test Trap

<i>Device ID #</i>	009654	<i>Device Name</i>	Monterey 3242 Test Trap
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	V-106
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device Description</i>	4' dia. x 15' long, 275 psi, 100°F. Replaced V-105		

10 Annulus Separator (V-101)

<i>Device ID #</i>	009630	<i>Device Name</i>	Annulus Separator (V-101)
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>	Natco	<i>Operator ID</i>	V-101
<i>Model</i>	878	<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device Description</i>	3' dia x 10' long, 350 psi, 100°F.		

11 Stack Scrubber

<i>Device ID #</i>	009622	<i>Device Name</i>	Stack Scrubber
<i>Rated Heat Input</i>		<i>Physical Size</i>	

<i>Manufacturer</i>	Downey	<i>Operator ID</i>	V-127
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	6' dia. x 6' long, 90 psi, 80°F.		
<i>Description</i>			

12 Air Dryer Pre-Filters

<i>Device ID #</i>	107291	<i>Device Name</i>	Air Dryer Pre-Filters
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	F-136 A/B
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	6 in dia by 24 in tall		
<i>Description</i>			

13 Air Dryers

<i>Device ID #</i>	107287	<i>Device Name</i>	Air Dryers
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	V-136 A/B
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	1.5 ft dia by 4 ft tall		
<i>Description</i>			

14 Breathing Air Compressor

<i>Device ID #</i>	107289	<i>Device Name</i>	Breathing Air Compressor
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	C-120
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	10 hp electric motor		
<i>Description</i>			

15 Oil Pipeline to Shore

<i>Device ID #</i>	009595	<i>Device Name</i>	Oil Pipeline to Shore
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	Line 6-PO-454-HC-D
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>			
<i>Description</i>			

16 Fresh Air Blower - Maintenance Office

<i>Device ID #</i>	107284	<i>Device Name</i>	Fresh Air Blower - Maintenance Office
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	BL-103
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	5 hp electric motor		
<i>Description</i>			

17 Gas Pipeline to Shore

<i>Device ID #</i>	009596	<i>Device Name</i>	Gas Pipeline to Shore
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	Line 6-PO-453-HC-E
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>			
<i>Description</i>			

18 Fresh Air Blower East

<i>Device ID #</i>	107283	<i>Device Name</i>	Fresh Air Blower East
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	BL-102
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	5 hp electric motor		
<i>Description</i>			

19 Fresh Air Blower West

<i>Device ID #</i>	107282	<i>Device Name</i>	Fresh Air Blower West
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	BL-101
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	5 hp electric motor		
<i>Description</i>			

20 Diesel Day tank

<i>Device ID #</i>	009566	<i>Device Name</i>	Diesel Day tank
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	less than 10,000 gallons		
<i>Description</i>			

21 High-pressure Flare

<i>Device ID #</i>	007982	<i>Device Name</i>	High-pressure Flare
<i>Rated Heat Input</i>		<i>Physical Size</i>	1312.50 MMBtu/Hour
<i>Manufacturer</i>	Indair Self-Assisted	<i>Operator ID</i>	H-100
<i>Model</i>	1-24-H-VS-WB	<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	The pressurized flare has a 10-inch diameter inlet; mounted to the existing		
<i>Description</i>	vent stack boom; design rated to flare gas flow rates of up to 30 MMSCFD		

22 Pipeline Shipping Pump

<i>Device ID #</i>	107274	<i>Device Name</i>	Pipeline Shipping Pump
<i>Rated Heat Input</i>		<i>Physical Size</i>	250.00 Horsepower (Electric Motor)
<i>Manufacturer</i>	REDA	<i>Operator ID</i>	P-200
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device Description</i>	Oil shipping Pump, 20,000 gpm		

23 Diesel Transfer Pump

<i>Device ID #</i>	009569	<i>Device Name</i>	Diesel Transfer Pump
<i>Rated Heat Input</i>		<i>Physical Size</i>	
<i>Manufacturer</i>		<i>Operator ID</i>	
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device Description</i>	Electric powered pump.		

24 Stack Scrubber Pump

<i>Device ID #</i>	107278	<i>Device Name</i>	Stack Scrubber Pump
<i>Rated Heat Input</i>		<i>Physical Size</i>	6.00 Horsepower (Electric Motor)
<i>Manufacturer</i>		<i>Operator ID</i>	P-108
<i>Model</i>		<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device Description</i>	Pumps stack scrubber liquid to surge vessel.		

25 Motor: Pipeline Shipping Pump

<i>Device ID #</i>	009643	<i>Device Name</i>	Motor: Pipeline Shipping Pump
<i>Rated Heat Input</i>		<i>Physical Size</i>	250.00 Horsepower (Electric Motor)
<i>Manufacturer</i>	Reda	<i>Operator ID</i>	P-200
<i>Model</i>	66CT/ES	<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>	Capacity = 583 gal/hour		
<i>Description</i>			

26 Stack Scrubber Pump

<i>Device ID #</i>	009646	<i>Device Name</i>	Stack Scrubber Pump
<i>Rated Heat Input</i>		<i>Physical Size</i>	1.00 Horsepower (Electric Motor)
<i>Manufacturer</i>	Dean	<i>Operator ID</i>	P-108
<i>Model</i>	PH-211	<i>Serial Number</i>	
<i>Depermitted</i>		<i>Facility Transfer</i>	
<i>Device</i>			
<i>Description</i>			