PERMIT to OPERATE No. 8103-R10

and

PART 70 RENEWAL OPERATING PERMIT No. 8103-R10

SOUTH ELLWOOD FIELD SOURCE
BEACHFRONT LEASE

PRC LEASE 421
GOLETA, CALIFORNIA

OPERATORS

State Lands Commission/Beacon West Energy Group

OWNERSHIP

California State Lands Commission

Santa Barbara County
Air Pollution Control District

May 2018

TABLE OF CONTENTS

LIST OF FIGURES and TABLES

TABLE/ FIGURE **PAGE**

ABBREVIATIONS/ACRONYMS

APCO	Air Pollution Control Officer
AP-42	USEPA *Compilation of Emission Factors* 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
FWKO	Free Water Knockout
gr	grain
g	gram
gal	gallon
HHV	higher heating value
H_2S	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	piping 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_{10}	particulate matter less than 10 mm in size
$PM_{2.5}$	particulate matter less than 2.5 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 is a combined permitting action that covers both the Federal Part 70 permit (*Part 70 Operating Permit No. 8103*) as well as the State Operating Permit (*Permit to Operate No. 8103*).

The County is designated as a transitional nonattainment area for the state ozone ambient air quality standard and is designated a nonattainment area for the state PM_{10} ambient air quality standard. The County attains all federal air quality standards.

Part 70 Permitting. This is the sixth renewal of the Beachfront Lease's 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. The Beachfront Lease is a part of the *South Ellwood Field* stationary source (SSID = 1063), which is a major source for VOC[1], 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. This reevaluation incorporates greenhouse gas emission calculations for the stationary source. 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".

The Beachfront Lease'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

[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.

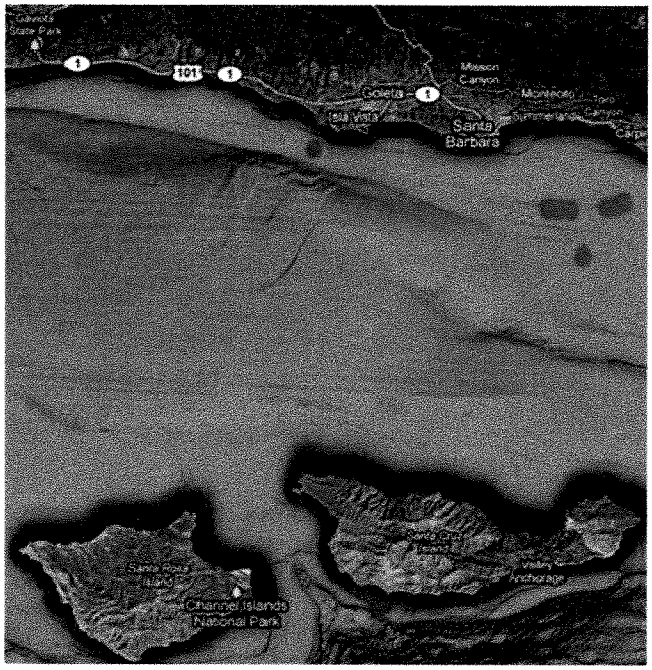
GHGs unless a project triggers federal Prevention of Significant Deterioration requirements under Rule 810.

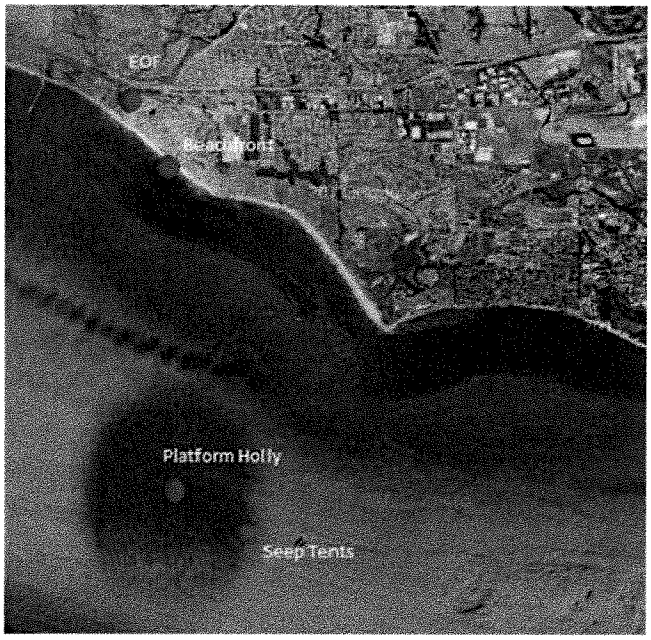
1.2 Facility Overview

1.2.1 General: The California State Lands Commission is the sole owner and operates the Beachfront Lease jointly with Beacon West Energy Group, LLC. The Beachfront Lease, located below the coastal bluff south of Sandpiper Golf Course, approximately ½ mile east of the mouth of Bell Canyon in Goleta. The Beachfront Lease is situated in the Southern Zone[2] of Santa Barbara County. Figure 1.1 shows the relative location of the Beachfront Lease shows the relative location of the facility within the county.

[2] District Rule 102, Definition: "Southern Zone"

Figure 1.1 Location Map for the Beachfront Lease





The *South Ellwood Field* stationary source consists of the following 4 facilities:

- Platform Holly (FID= 3105)
- Ellwood Onshore Facility (FID= 0028)
- Beachfront Lease (FID= 3035)
- Seep Containment Device (FID= 1065)

1.2.2 Facility Operations Overview: The Beachfront Lease was constructed prior to 1970. The basic design of the Beachfront Lease was as follows[3]:

Oil and water were produced from a coastal (beach line) well located on a pier designated SLC-421-2. The pumping unit was driven by a gas-fired IC engine. The emulsion was piped to a second adjacent pier designated SLC-421-1, where the emulsion passed through a free-water knockout vessel and entered a storage tank either directly or through a small test tank. Oil was piped to Line 96 and then sent to the Ellwood Marine Terminal[4]. The water separated from the emulsion was disposed by re-injection into the producing formation through a disposal well on SLC-421-1 using a gas-fired IC engine. The facility was capable of processing 250 barrels of dry oil per day[5]. The oil produced at Beachfront Lease was last analyzed in December 2000 at an API gravity of 35.8° and a true vapor pressure of 2.4 psia at 80° F and 5.2 psia at 120° F. Oil production operations at the facility have been shut down since 1994.

1.2.3 Current Permits/Facility Overview: ARCO obtained an NSR permit (ATC 8103) on July 20, 1990 from the District. This permit increased the oil production rate from 60 to 250 bbl/day and eliminated a water throughput limitation of 400 bbls/day. It also added the existing water injection well cellar to the equipment list. All equipment emission limits in ATC/PTO 8103 are therefore federally enforceable.

Current permitted equipment located at the facility consists of an oil and gas wellhead and a 11' diameter well cellar.

1.3 Emission Sources

The emissions from the Beachfront Lease come from a well cellar and fugitive emission components associated with an oil well head. Section 4 of the permit provides the District's engineering analysis of these emission sources. Section 5 of the permit describes the allowable emissions from each permitted emissions unit and also lists the potential emissions from non-permitted emission units.

---

[3] Although specific equipment items may be discussed herein for the process description, it should be noted that most equipment no longer exists at the site. Since removed equipment does not meet the requirements of District Rule 201.J (Absence of Permitted Equipment), it has been deleted from this District permit. The permittee will need to submit ATC permit application(s) to install or replace any emissions unit. These units include: oil production tank, crude oil test tank, oil shipping pump, oil lift pump, various piping components and the natural gas fired IC engines (unless permit exempt).

[4] Sections of the pipeline from the Beachfront Lease to Line 96 have been have been removed. As such, any operations transferring oil offsite may require the appropriate land use and District permit approvals.

[5] The gas production rates are not known.

The emission sources include:

- One well cellar
- Fugitive emission components in gas/liquid hydrocarbon service associated with the wellhead

A list of all permitted equipment is provided in Section 10.4.

1.4 Emission Control Overview

Emission controls are utilized at the Beachfront Lease for the fugitive emission units. The emission control employed at the facility is:

☞ An Inspection & Maintenance program for detecting and repairing leaks of hydrocarbons from piping components, i.e., valves, flanges and seals, consistent with the requirements of the District Rule 331, to reduce ROC emissions by approximately 80 percent.

1.5 Offsets/Emission Reduction Credit Overview

Offsets: The Beachfront Lease does not require emission offsets.

Emission Reduction Credits: The Beachfront Lease 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. Applicable requirements may apply to insignificant units.

1.6.3. Federal Potential to Emit: The federal potential to emit (PTE) of a stationary source does not include fugitive emissions of any pollutant, 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 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 its 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. A "responsible official" of the owner/operator company whose name and address is listed prominently in the Part 70 permit signs each certification. See Section 1.6.10 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 4 and 5.

1.6.9 Compliance Assurance Monitoring (CAM): The CAM 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 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. Sources subject to CAM Rule must submit a CAM Rule Compliance Plan along with their Part 70 operating permit renewal applications. (see Section 4.7.3). The District has determined that no emissions unit at this facility is subject to CAM Rule.

1.6.10 Responsible Official: The designated responsible official and their mailing address are:

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

2.0 Process Description

2.1 Process Summary

The Beachfront Lease is currently not capable of producing oil and gas due to the physical absence and/or inoperability of key process equipment such as: the oil pipeline to Line 96, oil production tank, crude oil test tank, oil shipping pump, oil lift pump, various piping components and the natural gas-fired IC engines. Even if this equipment were still present, the facility could not operate in compliance with District rules without a gas gathering system for the free-water knockout vessel or a vapor recovery system for control of the tanks. The permittee must first obtain ATC permit(s) from the District to install these process units in order for production to commence. Further, any future operations to produce and/or process oil at the Beachfront Lease may require District permit approvals.

2.2 Support Systems

The permittee has not identified any other support systems used in conjunction with the Beachfront Lease. Prior to commencing future operations, the permittee must demonstrate that the facility is in compliance with all applicable District rules and regulations.

2.3 Maintenance/Degreasing Activities

2.3.1 Paints and Coatings: Intermittent surface coating operations may be conducted at the facility for occasional structural and equipment maintenance needs, including architectural coating. All architectural coatings used must comply with District Rule 323, as verified through the rule-required recordkeeping.

2.3.2 Solvent Usage: Solvents not used for surface coating thinning may be used on the Beachfront Lease facility for daily operations. Usage includes cold solvent degreasing and wipe cleaning with rags.

2.4 Planned Process Turnarounds

The permittee has not listed any emissions from planned process turnarounds that should be permitted.

2.5 Other Processes

2.5.1 Well Cellar: Well cellars confine any oil spilled out in the area around the oil well casing. From the cellar, residual oil is skimmed off periodically as part of the maintenance operations. Normally, well cellars are kept dry.

2.5.2 Unplanned Activities/Emissions: The permittee has not identified any circumstances that would require special equipment use and result in excess emissions.

2.6 Detailed Process Equipment Listing

Refer to Section 10, 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 District approved the following exemptions:

- Section D.6 (*De Minimis*). As of October 9, 2014, the permittee has documented the total de minimis emissions increase at the stationary source to be 19.65 lbs/day of ROC. There are no de minimis increases at the Beachfront Lease. Detailed records of the de minimis emissions changes can be viewed at the District's office.

- Injection Wellhead 421-1 and its associated well cellar are exempt from permit because they are solely used for the injection of produced water.

☞ District Rule 331 (Fugitive Emissions Inspection and Maintenance): The following exemptions were applied for and approved by the District:

- Section B.2(c) for one-half inch and less stainless steel tubing fittings.
- Section B.2.b for components buried below the ground.

District Rule 344 (Petroleum Sumps, Pits and Well Cellars): The 421-1 well cellar is currently exempt under Rule 344 Section B.6.

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)}: The Beachfront Lease was constructed and permitted prior to the applicability of these regulations. ARCO obtained an NSR permit (ATC 8103) on July 20, 1990 from the District. This permit increased the oil production rate from 60 to 250 bbl/day and eliminated a water throughput limitation of 400 bbl/day. It also added the existing water injection well cellar to the equipment list. All equipment emission limits in ATC/PTO 8103 are, therefore, federally enforceable. 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}: There is no equipment in this permit subject NSPS requirements.

3.2.3 40 CFR Part 61 {NESHAP}: There is no equipment in this permit subject to NESHAP requirements.

3.2.4 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 the Beachfront facility is exempt from this 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,

therefore the only recordkeeping requirements that apply to this facility are listed in condition 9.B.12.

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 there are no emission units at this facility are currently subject to CAM. See section 4.7.3 for further information on CAM.

3.2.6 40 CFR Part 70 {Operating Permits}: This Subpart is applicable to the Beachfront Lease. Table 3.1 lists the federally enforceable District promulgated rules that are "generic" and apply to the Beachfront Lease. Table 3.2 lists the federally enforceable District promulgated rules that are "unit-specific" that apply to the Beachfront Lease. 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.

3.3 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 the Beachfront Lease 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 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 natural gas processing plants. This facility is subject to the provisions of this regulation.

The separators and tanks at this facility satisfy the requirements of the CARB regulation through the use of a vapor collection system.

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 the Beach Front Lease. Table 3.3 lists the non-federally-enforceable District rules that apply to the Beachfront Lease. Table 3.4 lists the adoption date of all rules applicable to this permit at the date of this permit's issuance.

3.4.2 Rules Requiring Further Discussion: This section provides a detailed discussion regarding the applicability and compliance of certain rules.

The following is a rule-by-rule evaluation of compliance for the Beachfront Lease:

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 10.4. 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 10.2 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.

Rule 303 - Nuisance: This rule prohibits the Beachfront Lease from causing a public nuisance due to the discharge of air contaminants. The District has not historically received nuisance complaints from the Beachfront Lease.

Rule 310 - Odorous Organic Compounds: This rule prohibits the discharge of H_2S, 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, the concentrations of hydrogen sulfide from this lease are expected to be low.

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 Beachfront Lease 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 will be required to maintain records to ensure compliance with this rule.

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 will be 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. The permittee.

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 will be required to maintain records to ensure compliance with this rule.

Rule 325 - Crude Oil Production and Separation: This rule, adopted January 25, 1994, 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 crude oil storage tank, test tanks, free-water knock out vessels and scrubber vessels. Section E requires that all produced gas be controlled at all times, except for wells undergoing routine maintenance. Compliance with this rule will be assessed via periodic inspections.

Rule 331 - Fugitive Emissions Inspection and Maintenance: This rule applies to components in liquid and gaseous hydrocarbon service at oil and gas production fields. The permittee submitted a Fugitive Inspection and Maintenance Plan and received final District approval of the Plan on May 6, 1993. Ongoing compliance with the provisions of this rule will be assessed via inspection of the Beachfront Lease by District personnel using an organic vapor analyzer and through analysis of operator records. The Beachfront Lease does not perform any routine venting of hydrocarbons to the atmosphere.

Rule 344 - Petroleum Sumps, Pits and Well Cellars: This rule regulates emissions from the well cellars at oil and gas production fields by requiring periodic clean outs and maintenance operations. Compliance with this rule is assessed during periodic inspections of the facility.

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 records maintained by the permittee.

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 the Beachfront Lease. 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.

Rule 603 - Emergency Episode Plans: Section "A" of this rule requires the submittal of 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 such a plan in July 1994. An update of this Plan may be required if the facility starts production.

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 since January 1, 1997 and was obtained from documentation contained in the District's Administrative file.

3.5.1 Facility Inspections: Routine District inspections are conducted at this facility on a periodic basis. Since the previous permit renewal, inspections were conducted on November 13, 2015 and December 14, 2016. The inspection reports indicate that there were no compliance issues resulting from these inspections.

3.5.2 Variances: There have been no variances issued for this facility since the previous permit renewal.

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

Table 3.1 - Generic Federally enforceable District Rules

Generic Requirements	Affected Emission Units	Basis for Applicability
RULE 101: Compliance by Existing Installations	All emission units	Emission of pollutants
RULE 102: Definitions	All emission units	Emission of pollutants
RULE 103: Severability	All emission units	Emission of pollutants
RULE 201: Permits Required	All emission units	Emission of pollutants
RULE 202: 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
RULE 203: Transfer	All emission units	Change of ownership
RULE 204: Applications	All emission units	Addition of new equipment or modification to existing equipment.
RULE 205: Standards for Granting Permits	All emission units	Emission of pollutants
RULE 206: Conditional Approval of Authority to Construct or Permit to Operate	All emission units	Applicability of relevant Rules
RULE 207: Denial of Applications	All emission units	Applicability of relevant Rules
RULE 208: Action on Applications - Time Limits	All emission units. Not applicable to Part 70 permit applications.	Addition of new equipment or modification to existing equipment.
RULE 212: Emission Statements	All emission units	Administrative
RULE 301: Circumvention	All emission units	Any pollutant emission
RULE 302 : Visible Emissions	All emission units	Particulate matter emissions
RULE 303: Nuisance	All emission units	Emissions that can injure, damage or offend.
RULE 317: Organic Solvents	Emission units using solvents	Solvent used in process operations.
RULE 321: Solvent Cleaning Operations	Emission units using solvents	Solvent used in process operations.
RULE 322: Metal Surface Coating Thinner and Reducer	Emission units using solvents	Solvent used in process operations.
RULE 323.1: Architectural Coatings	Paints used in maintenance and surface coating activities	Application of architectural coatings.
RULE 353: Adhesives and Sealants	Emission units using adhesives and sealants	Adhesives and sealants use.

Generic Requirements	Affected Emission Units	Basis for Applicability
RULE 505.A, B1, D: Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
RULE 603: Emergency Episode Plans	Stationary sources with PTE greater than 100 tpy	The permittee - Ellwood is a major source.
RULE 810: Federal Prevention of Significant Deterioration	All emission units	Sources subject to any requirement under 40 Code of Federal Regulations, Part 52, Section 52.21
RULE 901: New Source Performance Standards (NSPS)	All emission units	Applicability standards are specified in each NSPS.
RULE 1001: National Emission Standards for Hazardous Air Pollutants (NESHAPS)	All emission units	Applicability standards are specified in each NESHAP.
RULE 1301: General Information	All emission units	This stationary source is a major source
REGULATION VIII: New Source Review	All emission units	Addition of new equipment of modification to existing equipment. Applications to generate ERC Certificates.
REGULATION XIII (RULES 1301-1305): Part 70 Operating Permits	All emission units	The South Ellwood Field is a major source.

Table 3.2 - Unit-Specific Federally enforceable District Rules

Unit-Specific Requirements	Affected Emission Units	Basis for Applicability
RULE 325: Crude Oil Production and Separation	Storage tanks: Emission units capable of venting gases	Venting prohibited under Rule 325.E
RULE 331: Fugitive Emissions Inspection & Maintenance	Components (valves, flanges etc.) used to handle oil and gas: EQ ID # 106332	Components emit fugitive ROCs.
RULE 344: Petroleum Sumps, Pits and Well Cellars	Well Cellars, ID # 100195	Well cellars at petroleum producing facility.

Table 3.3 - Non-Federally enforceable District Rules

Requirement	Affected Emission Units	Basis for Applicability
RULE 210: Fees	All emission units	Administrative
RULE 319: Odorous Sulfides	All applicable emission units	Odorous sulfide emissions
RULE 352: Natural Gas-Fired Fan-Type Central Furnaces and Small Water Heaters	All emission units	Upon Installation
RULES 501-504: Variance Rules	All emission units	Administrative
RULE 505.B2, B3, C, E, F, G: Breakdown Conditions	All emission units	Permit limits are exceeded or rule non-compliance.
RULES 506-519: 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 1981
Rule 102	Definitions	June 21, 2012
Rule 103	Severability	October 23, 1978
Rule 201	Permits Required	June 21, 2012
Rule 202	Exemptions to Rule 201	June 21, 2012
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 302	Visible Emissions	June 1981
Rule 303	Nuisance	October 23, 1978
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	September 20, 2010
Rule 322	Metal Surface Coating Thinner and Reducer	October 23, 1978
Rule 323.1	Architectural Coatings	June 19, 2014
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 No.	Rule Name	Adoption Date
Rule 330	Surface Coating of Metal Parts and Products	January 20, 2000
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	April 17, 1997
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	August 19, 1999
Rule 359	Flares and Thermal Oxidizers	June 28, 1994
Rule 360	Emissions of Oxides of Nitrogen From Large Water Heaters and Small Boilers	January 17, 2008
Rule 361	Small Boilers, Steam Generators, and Process Heaters	January 17, 2008
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 No.	Rule Name	Adoption Date
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 Fugitive Hydrocarbon Sources

4.2.1 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.

4.2.2 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 an Inspection and Maintenance (I&M) program. The I&M program is designed to minimize leaks through controls. These 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.

4.2.3 Emission Factors: Fugitive component emissions were originally calculated using District P&P 6100.060 (*Calculation of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities by the CARB/KVB Method - Modified for the Revised ROC Definition*). However, in 2008 component leakpath counts were re-inventoried and corrected. PTO 8103-01 was issued documenting the revised number of fugitive components. Emissions associated with these components were calculated using 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. .

4.2.4 Emission Calculations: A total of 197-component leak paths at this facility were identified by PTO Mod 8103 01.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)

4.2.5 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 permittee's I&M program is consistent with the requirements of District Rule 331 and includes a component identification system. Components 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 count serves as a basis for compliance with fugitive hydrocarbon emission limits.

4.3 Well Cellar

One (1) well cellar is used to collect oil spills from the facility around the oil and gas wellhead. Fugitive emissions to atmosphere occur from the cellar, which is regulated under Rule 344. These emissions are estimated based District P&P 6100.060 (*Calculation of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities by the CARB/KVB Method - Modified for the Revised ROC Definition*). These calculations do not include fugitive emissions from the components associated with the wellhead since fugitive emissions were reassessed under PTO 8103-01 as discussed above. See Attachment 10.1 for the KVB emission calculations. The calculation is:

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

where:	ER =	emission rate (lb/period)
	EF =	ROC emission factor (lb/ft^2-day)
	SAREA =	unit surface area (ft^2)
	CE =	control efficiency
	HPP =	operating hours per time period (hrs/period)

4.4 Other Emission Sources

4.4.1 General Solvent Cleaning/Degreasing: Solvent usage (not used as thinners for surface coating) occurs on the Beachfront Lease as part of normal daily operations including 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 to be equal to the monthly emissions divided by the number of days per month.

4.4.2 Surface Coating: Surface coating operations typically include normal touch up activities. Entire facility painting programs may also be performed. Emissions are determined based on mass balance calculations assuming all solvents evaporate into the atmosphere. Emissions of $PM/PM_{10}/PM_{2.5}$ from paint overspray are not calculated due to the lack of established calculation techniques.

4.4.3 Abrasive Blasting: Abrasive blasting with CARB certified sands may be performed as a preparation step prior to surface coating. The engines used to power the compressor may be electric or diesel-fired. If diesel-fired, permits will be required unless the engine is registered with CARB. 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, PM_{10} and $PM_{2.5}$ when needed for compliance evaluations. A $PM/PM_{10}/PM_{2.5}$ ratio of 1.0 is assumed.

4.5 Vapor Recovery/Control Systems

The Beachfront Lease is not equipped with a vapor recovery system.

4.6 BACT/NSPS/NESHAP/MACT

All emission units at the Beachfront Lease were constructed prior to 1970. The 1990 ATC for the facility did not trigger any Best Available Control Technology (BACT) provisions of the District or the federal NSPS/NESHAP/MACT standards for pollutant emissions.

4.7 CEMS/Process Monitoring/CAM

4.7.1 CEMS: There are no continuous emission monitors (CEMS) at this facility.

4.7.2 Process Monitoring: There are no process monitors at this facility.

4.7.3 CAM: 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. A review of the equipment associated with the Beachfront Lease indicates that there are no emission units or activities that are subject to the rule.

4.8 Source Testing/Sampling

Since the Beachfront lease is no longer an actively producing facility, there is no ongoing source testing or sampling requirements.

4.9 Part 70 Engineering Review: Hazardous Air Pollutant Emissions

Hazardous air pollutant emissions from the different categories of emission units at the Beachfront Lease 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 the Beachfront lease are listed in Section 5. The HAP emission factor basis is detailed in Table 10.1-4. Note: HAPs emissions will be revised and included in the final permit.

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 Beachfront Lease. Section 5.6 provides the estimated emissions from permit exempt equipment and also serves as the Part 70 list of insignificant emissions. Section 5.7 provides the net emissions increase calculation for the facility and the stationary source. In order to accurately track the emissions from a facility, the District uses a computer database. Attachment 10.3 contains the District's documentation for the information entered into that database. Consistent with the District and federal rules, all marine vessel emissions are to be included in the potential to emit calculations Note: There is no marine vessel usage associated with the Beachfront Lease.

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) [6]
⇒ Reactive Organic Compounds (ROC)
⇒ Carbon Monoxide (CO)
⇒ Sulfur Oxides (SO_x) [7]
⇒ Particulate Matter (PM) [8]
⇒ Particulate Matter smaller than 10 microns (PM_{10})
⇒ Particulate Matter smaller than 2.5 microns ($PM_{2.5}$)

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

[6] Calculated and reported as nitrogen dioxide (NO_2)

[7] Calculated and reported as sulfur dioxide (SO_2)

[8] Calculated and reported as all particulate matter smaller than 100 μm

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 analyzed. This analysis considered the reasonable worst-case operating scenarios for each operating period. The equipment operating in each of the scenarios is 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:

- Well cellar for one oil and gas wellhead
- Fugitive emissions from one oil and gas well head

Annual Scenario:

- Well cellar for one oil and gas wellhead
- Fugitive emissions from one oil and gas well head

5.4 Part 70: Federal Potential to Emit for the Facility

Table 5.3 lists the federal Part 70 potential to emit. All project emissions, except fugitive emissions, are counted in the federal definition of potential to emit. However, the fugitives are counted in the federal potential to emit if the facility is subject to any applicable NSPS or NESHAP requirement promulgated after August 7, 1980.

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 10.1-1 for the basis of the HAP emission factors. Potential Facility HAP emissions are listed in Table 5.5-3. Stationary Source HAP emissions are listed in Table 5.5-4. These are based on a combination of the worst-case scenario listed in Section 5.3. Detailed HAP emission calculations are listed in in Table 5.5-2. Note: HAPs emissions will be revised and included in the final permit.

5.6 Exempt Emission Sources/Part 70 Insignificant Emissions

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

- Produced water injection well head
- Produced water injection well cellar
- Maintenance operations involving surface coating (painting operations)

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. The following emission units are exempt from permit per Rule 202, but are not considered insignificant emission units, since their emissions exceed the federal insignificance threshold:

- Solvents/Surface coating operations including thinners used for maintenance operations

Table 5.4 presents the estimated annual emissions from these exempt equipment items, including those exempt items not considered insignificant.

Table 5.1-1
Beachfront Lease PT70-APCD PTO 8103 R10
Operating Equipment Description

Equipment Category	Emissions Unit	APCD Equipment No.	Specifications Fuel	Specifications % S	Size	Units	Usage Data Capacity	Usage Data Units	Maximum Load Schedule hr	day	qtr	year	References
Fugitive Components: gas	Valves - Accessible		--	--	10	comp-lp	--	--	1	24	2190	8760	
	Connections - Accessible		--	--	43	comp-lp	--	--	1	24	2190	8760	
Fugitive Components: oil	Valves - Accessible	106451	--	--	17	comp-lp	--	--	1	24	2190	8760	A
	Valves - Unsafe		--	--	10	comp-lp	--	--	1	24	2190	8760	
	Connections - Accessible	106452	--	--	89	comp-lp	--	--	1	24	2190	8760	
	Connections - Unsafe	106453	--	--	28	comp-lp	--	--	1	24	2190	8760	
Well Cellar	Well Cellar #421-2	100195	--	--	95	sq.ft	95	sq. ft	1	24	2190	8760	B
Solvent Usage	Cleaning/degreasing	106334	--	--	1	gal/yr	1	gal/yr	1.0	1.0	1.0	1.0	C

Table 5.1-2
Beachfront Lease PT70-APCD PTO 8103 R10
Equipment Emission Factors

Equipment Category	Emissions Unit	APCD Equipment No.	Emission Factors NOx	ROC	CO	SOx	PM	PM10	Units	References
Fugitive Components: gas	Valves - Accessible		--	0.018290	--	--	--	--	lb/day/comp-lp	
	Connections - Accessible		--	0.004340	--	--	--	--	lb/day/comp-lp	
Fugitive Components: oil	Valves - Accessible	106451	--	0.000459	--	--	--	--	lb/day/comp-lp	A
	Valves - Unsafe		--	0.002296	--	--	--	--	lb/day/comp-lp	
	Connections - Accessible	106452	--	0.000224	--	--	--	--	lb/day/comp-lp	
	Connections - Unsafe	106453	--	0.001000	--	--	--	--	lb/day/comp-lp	
Well Cellar	Well Cellar #421-2	100195	--	0.041400	--	--	--	--	lb/sq. ft./day	B
Solvent Usage	Cleaning/degreasing	106334	--	250	--	--	--	--	g/l	C

Table 5.1-3
Beachfront Lease PT70-APCD PTO 8103 R10
Daily and Annual Emissions

Equipment Category	Emissions Unit	APCD Equipment No	NOx lbs/day	NOx TPY	ROC lbs/day	ROC TPY	CO lbs/day	CO TPY	SOx lbs/day	SOx TPY	PM lbs/day	PM TPY	PM10 lbs/day	PM10 TPY	Federally Enforced?
Fugitive Components: ga	Valves - Accessible		--	--	0.18	0.03	--	--	--	--	--	--	--	--	
	Connections - Accessible		--	--	0.19	0.03	--	--	--	--	--	--	--	--	
Fugitive Components: oil	Valves - Accessible	106451	--	--	0.01	0.00	--	--	--	--	--	--	--	--	FE
	Valves - Unsafe		--	--	0.02	0.00	--	--	--	--	--	--	--	--	
	Connections - Accessible	106452	--	--	0.02	0.00	--	--	--	--	--	--	--	--	
	Connections - Unsafe	106453	--	--	0.03	0.01	--	--	--	--	--	--	--	--	
				Sub-total:	0.45	0.08									
Well Cellar	Well Cellar #421-2	100195	--	--	3.93	0.72	--	--	--	--	--	--	--	--	FE
Solvent Usage	Cleaning/degreasing	106334	--	--	0.01	0.00	--	--	--	--	--	--	--	--	FE
TOTAL:			0.00	0.00	4.39	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Notes

FE = Federally enforceable

Table 5.2
Beachfront Lease PT70-APCD PTO 8103 R10
Total Permitted Facility Emissions

A. Daily (lb/day)

Equipment Category	NOx	ROC	CO	SOx	PM	PM2.5/10
Fugitive Components	--	0.45	--	--	--	--
Well Cellar	--	3.93	--	--	--	--
Solvents	--	0.01	--	--	--	--
TOTALS (lb/day)	**0.0**	**4.39**	**0.0**	**0.0**	**0.0**	**0.0**

B. Annual (Ton/year)

Equipment Category	NOx	ROC	CO	SOx	PM	PM2.5/10
Fugitive Components	--	0.08	--	--	--	--
Well Cellar	--	0.72	--	--	--	--
Solvents	--	0.00	--	--	--	--
TOTALS (ton/yr)	**0.00**	**0.80**	**0.00**	**0.00**	**0.00**	**0.00**

Table 5.5-1
Beachfront Lease: Part 70/PTO 8103-R10
Hazardous Air Pollutant Emission Factors

			Emission Factors						
Equipment Category	**Description**	**APCD Device ID**	Hexane	Benzene	Toluene	Xylene	Iso-Octane[1]	**Units**	**References**
Fugitive Components: gas	Valves - Accessible		0.2605	0.0026	--	--	0.2289	lb/lb-ROC[2]	A
	Connections - Accessible		0.2302	0.0023	--	--	0.2023	lb/lb-ROC[3]	A
Fugitive Components: oil	Valves - Accessible	106451	0.3000	0.0030	--	--	0.2636	lb/lb-ROC[4]	B
	Valves - Unsafe		0.3000	0.0030	--	--	0.2636	lb/lb-ROC[4]	B
	Connections - Accessible	106452	0.3000	0.0030	--	--	0.2636	lb/lb-ROC[4]	B
	Connections - Unsafe	106453	0.3000	0.0030	--	--	0.2636	lb/lb-ROC[4]	B
Well Cellar	Well Cellar #421-2	100195	0.0528	0.0264	0.0165	--	0.0050	lb/lb-ROC[5]	C
Solvent Usage	Cleaning/degreasing	106334	--	0.05	0.05	0.05	--	lb/lb-ROC	D

References:

A - CARB Speciation Manual Second Edition (1991), Profile Number 757 - Oil & Gas Production Fugitives - Gas Service

B - CARB Speciation Manual Second Edition (1991) Profile Number 756 - Oil & Gas Production Fugitives - Liquid Service

C - CARB Speciation Manual Second Edition (1991) Profile Number 532 - Oil & Gas Extraction - Well Heads & Cellars/Oil & Water Separators

D - 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 0.38 from *Table 2 Fugitive Emission Factors for Oil and Gas Facilities Using the Component Count Method (P&P 6100.061)*, available at https://www.ourair.org/wp-content/uploads/6100-061-1.pdf.
3. The ROC to TOC ratio used for these emission factors was 0.43 from *Table 2 Fugitive Emission Factors for Oil and Gas Facilities Using the Component Count Method (P&P 6100.061)*, available at https://www.ourair.org/wp-content/uploads/6100-061-1.pdf.
4. The ROC to TOC ratio used for these emission factors was 0.33 from *Table 2 Fugitive Emission Factors for Oil and Gas Facilities Using the Component Count Method (P&P 6100.061)*, available at https://www.ourair.org/wp-content/uploads/6100-061-1.pdf.
5. The ROC to TOC ratio used for these emission factors was 0.606 from *Table 3.2.3 Standard Assumed ROC/TOG Conversions* of P&P 6100.060.2016, available at https://www.ourair.org/wp-content/uploads/6100-060-1.pdf.

Table 5.5-2
Beachfront Lease: Part 70/PTO 8103-R10
Annual Hazardous Air Pollutant Emissions (TPY)

Equipment Category	Description	APCD Device ID	Hexane	Benzene	Toluene	Xylene	Isc-Octane
Fugitive Components: gas	Valves - Accessible		8.70E-03	8.78E-05	--	--	7.64E-03
	Connections - Accessible		7.84E-03	7.92E-05	--	--	6.89E-03
Fugitive Components: oil	Valves - Accessible	106451	4.27E-04	4.32E-06	--	--	3.75E-04
	Valves - Unsafe		1.26E-03	1.27E-05	--	--	1.10E-03
	Connections - Accessible	106452	1.09E-03	1.10E-05	--	--	9.59E-04
	Connections - Unsafe	106453	1.53E-03	1.55E-05	--	--	1.35E-03
Well Cellar	Well Cellar #421-2	100195	3.79E-02	1.90E-02	1.18E-02	--	3.55E-03
Solvent Usage	Cleaning/degreasing	106334	--	0.00E+00	0.00E+00	0.00E+00	--

Notes:
1. These are estimates only, and are not intended to represent emission limits.
2. Based on CAAA, Section 112 (n) (4) stipulations, the HAP emissions listed above can not be aggregated at the source for any purpose, including determination of HAP major source status for MACT applicability.
3. Natural gas emission calculations are based on a standard value of 1050 BTU/scf.
4. Default fuel properties for diesel are from Table 6 of the SBCAPCD's Piston IC Engine Technical Reference Document (2002), available at https://www.ourair.org/wp-content/uploads/sbcapcdicerefdoc.pdf.

Table 5.5-3
Beachfront Lease: Part 70/PTO 8103-R10
Stationary Source Hazardous Air Pollutant Emissions (TPY)

Facility	Permit #	Hexane	Benzene	Toluene	Xylene	Iso-Octane	Formaldehyde	Naphthalene	Acetaldehyde	Acrolein	1,3-Butadiene	Carbon Tetrachloride	Chlorine	Chlorobenzene	Chloroform	Ethylbenzene	Ethylene Dioxide	Hydrogen Chloride	Methanol	Methyl Ethyl Ketone	Methyl tert butyl 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	Nickel	Selenium	Total - All HAPS
00029 - Ellwood Onshore Facility	PTO 7904-R10	2.42E+01	6.28E-01	1.92E-01	8.76E-02	2.10E+01	2.48E-01	2.77E-03	9.80E-03	2.52E-03	6.36E-05	--	--	5.80E-08	--	3.04E-01	--	6.40E-05	--	--	--	--	--	--	--	--	7.26E-05	4.34E-06	3.98E-04	6.06E-04	3.04E-05	--	2.41E-05	1.38E-04	9.46E-06	7.80E-04	9.32E-06	4.67E+01
01666 - Seep Containment Device	PTO 4441-R7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00E+00
03635 - Beachfront Lease	PTO 8103-R10	5.87E-02	1.92E-02	1.18E-02	0.00E+00	2.19E-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.12E-01
03105 - Platform Holly	PTO 8234-R10	9.42E+00	4.99E-01	2.07E-01	1.25E-01	7.33E+00	5.57E+00	1.64E-02	8.85E-01	7.78E-01	8.62E-02	6.01E-03	1.23E-04	9.89E-06	4.66E-03	3.31E-02	7.28E-03	9.21E-02	3.03E-01	1.79E-05	5.55E-04	1.46E-02	5.47E-03	2.45E-03	5.57E-03	5.23E-03	9.13E-04	1.30E-06	8.61E-04	4.49E-04	9.13E-06	8.91E-07	4.10E-03	1.57E-03	1.02E-03	2.16E-03	1.09E-03	2.44E+01
Total $$ - By Individual HAPs:		3.27E+01	1.04E+00	4.11E-01	2.14E-01	2.84E+01	5.82E+00	1.83E-02	8.95E-01	7.81E-01	8.63E-02	6.01E-03	1.23E-04	9.89E-06	4.66E-03	3.37E-01	7.28E-03	9.21E-02	3.03E-01	1.79E-05	5.55E-04	1.46E-02	5.47E-03	2.45E-03	5.57E-03	5.23E-03	8.85E-04	5.64E-06	1.28E-03	8.55E-04	3.95E-05	8.91E-07	4.10E-03	1.71E-03	1.11E-03	2.92E-03	1.10E-03	7.12E+01

Notes:
1. These are estimates only, and are not intended to represent emission limits.
2. Based on CAAA, Section 112 (n) (4) stipulations, the HAP emissions listed above can not be aggregated at the source for any purpose, including determination of HAP major source status for MACT applicability.

6.0 Air Quality Impact Analyses

6.1 Modeling

Air quality modeling has not been required for this facility.

6.2 Increments

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

6.3 Monitoring

Air quality monitoring is not required for this facility.

6.4 Health Risk Assessment

The *South Ellwood Field* stationary source is subject to the Air Toxics Hot-Spots Program (AB-2588). A health risk assessment (HRA) for the Beachfront Lease was prepared by the District on April 25, 1997 under the requirements of the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588). The HRA is based on 1991 toxic emissions inventory data submitted to the District.

Based on the 1991 toxic emissions inventory for the Beachfront Lease, cancer and non-cancer toxic risks off the property were estimated to be below the District's AB 2588 significance thresholds.

7.0 CAP Consistency, Offset Requirements and ERCs

7.1 General

Based on District Rules, the *South Ellwood Field* stationary source is located in an ozone transitional nonattainment area for the state standard. Santa Barbara County has not attained the state PM10 ambient air quality standard. The County attains all federal ambient air quality standards. 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 and Ozone Plans and must not interfere with progress toward attainment of federal and state ambient air quality standards. Under District regulations, any modifications at the *South Ellwood Field* source that result in an emissions increase of any nonattainment pollutant (or its precursor) exceeding 25 lbs/day must apply BACT (NAR). Additional increases may 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 $PM_{10/2.5}$) and 25 tons/year for all non-attainment pollutants and precursors (except carbon monoxide and $PM_{2.5/10}$).

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 March 2015, the District Board adopted the 2013 Clean Air Plan. The 2013 Plan provides a three-year update to the 2010 Clean Air Plan. As Santa Barbara County has yet to attain the state eight-hour ozone standard, the 2013 Clean Air Plan demonstrates how the District plans to attain that standard. The 2013 Clean Air Plan therefore satisfies all state triennial planning requirements. In addition, in 2016, the Board approved the 2016 Ozone Plan.

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 emissions. This stationary source did not become subject to the emission offset requirements of Regulation VIII until adoption of revised Rule 802 in August 2016. Any new project emission increase for these pollutants are required to be offset with emission reduction credits.

7.4 Emission Reduction Credits

The Beachfront Lease does not generate any 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

To the best of the District's knowledge, no other governmental agency's permit requires air quality mitigation for the Beachfront Lease.

9.0 Permit Conditions

This section lists the applicable permit conditions for the Beachfront Lease. 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 the Beachfront Lease:

A.1 **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.2 **Emergency Provisions.** The permittee shall comply with the requirements of the District, Rule 505 (Upset/Breakdown rule) and/or District Rule 1303.F, whichever is applicable to the emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the permittee shall provide the District, in writing, a "notice of emergency" within 2 working days of the emergency. The "notice of emergency" shall contain the

information/documentation listed in Sections (1) through (5) of Rule 1303.F. [*Re: 40 CFR 70.6(g), District Rule 1303.F*]

A.3 **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.4 **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.5 **Severability.** The provisions of this Permit to Operate are severable and if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby. [*Re: District Rules 103 and 1303.D.1*]

A.6 **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.7 **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.8 **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,* or Rule 1303.F *Emergency Provisions.* [District Rule 1303.D.1, 40 CFR 70.6(a) (3)]

A.9 **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.10 **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 public/USEPA review [*Re: CAAA, § 502(b)(6), 40 CFR 70.6(b)*]

A.11 **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.12 **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 cause to reopen exists. 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 **Nuisance (Rule 303).** No pollutant emissions from any source at this facility create nuisance conditions. No operations shall endanger health, safety or comfort, nor shall they damage any property or business. [*Re: District Rule 303*]

B.3 **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.4 **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.5 **Architectural Coatings (Rule 323.I).** The permittee shall comply with the emission standards listed in Section D of Rule 323 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.6 **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.7 **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.8 **Oil and Natural Gas Production MACT.** The permittee shall maintain records for the Beachfront facility in accordance with 40 CFR Part 63, Subpart A, Section 63.10(b)(1) and (3). [*Re:* 40 CFR 63, Subpart HH]

B.9 **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 **Fugitive Hydrocarbon Emissions Components.** The following equipment units are included in this emissions unit category:

District ID No.	Equipment ID No.	Name
		Oil Service Components
106452	Not Applicable	Connections – Accessible (*89 comp-l-p)*
106453	Not Applicable	Connections – Unsafe (*28 comp-l-p)*
106451	Not Applicable	Valves – Accessible (*17 comp-l-p)*
111143	Not Applicable	Valves – Unsafe (*10 comp-l-p)*
		Gas-Light Liquid Service Components
111145	Not Applicable	Valves – Accessible *(10 comp-l-p)*
111146	Not Applicable	Connections – Accessible *(43 comp-l-p)*

(a) Emission Limits: Mass emissions from the components listed above shall not exceed the limits listed in Table 5.1-3. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.

(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:

The District-approved I&M Plan for the Beachfront Lease shall be implemented for the life of the project. The Plan, and any subsequent District-approved revisions, is incorporated by reference as an enforceable part of this permit.

(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, when applicable.

(d) Recordkeeping: The equipment listed in this section are subject to all the recordkeeping requirements listed in District Rule 331.G.

(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. [*Reference: District ATC 8103, District Rule 331, 40 CFR 70.6(a)(3)*]

C.2 **Well Cellar.** The following equipment is included in this emissions category:

District ID No.	Equipment ID No.	Equipment
100195	SLC 421-2	Oil / Gas Well Cellar (11 ft. diameter, 95 sq. ft. area)

(a) Emission Limits: Mass emissions from the well cellar shall not exceed the limits listed in Table 5.1-3. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.

(b) Operational Limits: All process operations associated with the equipment listed in this section shall meet the requirements of District Rule 344.D.3. Compliance with this provision shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.

(c) Monitoring: The equipment listed in this section is subject to all the monitoring requirements listed in District Rule 344.F. In addition, the well cellar shall be inspected on a weekly basis to ensure that the liquid depth and the oil/petroleum depth does not exceed the limits in Rule 344.D.3.C.

(d) Recordkeeping: The equipment listed in this section is subject to all the recordkeeping requirements listed in District Rule 344.G.2.

(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 Compliance Verification Reports condition of this permit. [*Re: ATC 8103, District Rule 344 and 1303, 40 CFR 70.6(a)(3)*]

C.3 **Solvent/Coating Use.** The following equipment is included in this emissions unit category:

District ID No.	Name
106334	Solvents - Cleaning/Degreasing (*not as part of regular maintenance*)
106334	Surface Coating (*that also includes solvents used as thinners)*

(a) Emission Limits: 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.

(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.

(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.4 **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 Beachfront Lease. These records or logs shall be readily accessible and be made available to the District upon request. [*Re: District Rule 1303, ATC 8103, PTO 8103 40 CFR 70.6*]

C.5 **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) *Fugitive Hydrocarbons*. Rule 331/Enhanced Monitoring fugitive hydrocarbon I&M program data (on a quarterly basis):

(1) Inspection summary.
(2) Record of leaking components.
(3) Record of leaks from critical components.
(4) Record of leaks from components that incur five repair actions within a continuous 12-month period.
(5) Record of component repair actions including dates of component re-inspections.
(6) An updated FHC I&M inventory due to change in component list or diagrams.
(7) Listing of components installed as BACT under District Rule 331 and/or Regulation VIII as approved by the District.

(b) *Well Cellar*. The following records are required to reported:

(1) All records required by District Rule 344.

(c) *Solvent Usage*. The following records are required to reported:

(1) 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.

(2) 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.

(3) Information required by the Solvent Reclamation Plan, if any.

(d) *General Reporting Requirements*. The following records are required to reported:

(1) On quarterly and annual basis, the emissions from each permitted emission unit for each criteria pollutant and a quarterly and annual emissions summary for each criteria pollutant.
(2) On quarterly and annual basis, the emissions from each exempt emission unit for each criteria pollutant and a quarterly and annual emissions summary for each criteria pollutant.
(3) A copy of the Rule 202 De Minimis Log for the stationary source.

See Section 9.D for additional District required reporting requirements.
[*Re: Rule 202, Rule 317, Rule 325, Rule 331, Rule 344*]

C.6 **Permitted Equipment.** Only those equipment items listed in Attachment 10.4 are covered by the requirements of this permit and District Rule 201.B. [*Re: District Rule 1303, ATC 8103, PTO 8103*]

C.7 **Mass Emission Limitations**. Mass emissions for each equipment item (i.e., emissions unit) associated with the Beachfront Lease shall not exceed the values listed in Table 5.1-3. Emissions for the entire facility shall not exceed the total limits listed in Table 5.2. [*Re: District Rule 1303, ATC 8103, PTO 8103, 40 CFR 70.6*]

C.8 **Emergency Episode Plan**. As necessary, the permittee shall implement the Emergency Episode Plan for the Venoco Ellwood stationary source. Upon written request by the District, the permittee shall provide the District with an updated plan. [*Re: District Rule 603 and 1303*]

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 the Beachfront Lease 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 **Condition Acceptance.** Acceptance of this operating permit by the permittee shall be considered as acceptance of all terms, conditions, and limits of this permit.

D.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*.

D.3 **Defense of Permit.** The permittee agrees, as a condition of the issuance and use of this PTO, to defend at its sole expense any action brought against the District because of the issuance of this permit. The permittee shall reimburse the District for any and all costs including, but not limited to, court costs and attorney's fees that the District may be required by a court to pay as a result of such action. The District may, at its sole discretion, participate in the defense of any such action, but such participation shall not relieve the permittee of its obligation under this condition. The District shall bear its own expenses for its participation in the action.

D.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 and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the permittee as required by Rule 210.

D.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.

D.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.

D.7 **Consistency with Analysis.** Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application and supplements thereof (as documented in the District's project file) and the District's analyses under which this permit is issued.

D.8 **Consistency with Federal, State and Local Permits.** Nothing in this permit shall relax any air pollution control requirement imposed on the Beachfront Lease 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.

D.9 **Odorous Organic Sulfides (Rule 310).** The permittee shall not discharge into atmosphere H_2S and organic sulfides that result in a ground level impact beyond the property boundary in excess of 0.06 ppmv averaged over 3 minutes or 0.03 ppmv averaged over 1 hour. [*Re: District Rule 310*]

D.10 **CARB GHG Regulation Recordkeeping.** The permittee shall maintain at least 5 years of records that document the following:

i. The number of crude oil or natural gas wells at the facility.

ii. 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.

iii. The annual crude oil, natural gas, and produced water throughput of the facility.

iv. A list identifying all reciprocating and centrifugal natural gas compressors at the facility.

D.11 **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, the annual report shall include a completed *District Annual Emissions Inventory* questionnaire or submitted electronically via the District website. In addition to the information required from Section 9.C of this permit, the semi-annual compliance reports shall include the following information:

(a) *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.

(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.12 **Operation/Throughput Limitations.** The following throughput limitations shall apply:

Oil Production [a] (dry)	250 bbl/day
Gas Production	0.0 SCFD

a. Calculated as monthly production divided by the number of production days.

Before resuming oil production under District-approved permits, the permittee shall obtain District approval of an Oil Production Metering Plan that specifies how the permittee will demonstrate compliance with the throughput limit of this condition.

D.13 **Abrasive Blasting Equipment.** All abrasive blasting activities performed at the facility shall comply with the requirements of the California Administrative Code Title 17, Sections 92000 through 92530.

D.14 **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.15 **Documents Incorporated by Reference.** The document listed below, including any District-approved updates thereof, is incorporated herein and shall have the full force and effect of a permit condition for this operating permit:

Fugitive Components Inspection and Maintenance Plan (dated March, 2003 and approved by the District in August 2005)

AIR POLLUTION CONTROL OFFICER

Date

MAY 11 2018

NOTES:

(a) Permit Reevaluation Due Date: December, 2020

RECOMMENDATION

It is recommended that this permit be issued with the conditions specified in the permit.

J. Menno	May 2018		May 2018
AQ Engineer	Date	Engineering Supervisor	Date

THIS PAGE LEFT BLANK INTENTIONALLY

10.0 Attachments

10.1 Emission Calculation Documentation

10.2 Fee Calculations

10.3 IDS Database Emission Tables

10.4 Equipment List

10.5 District Permit Exempt / Part 70 Insignificant Equipment List

10.6 Public Comments on Draft Permit and District Responses

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-C refer to Tables 5.1-1 and 5.1-2.

Reference A - Fugitive Components (Component Leak Path Method)

- The maximum operating schedule is in units of hours
- All safe to monitor components are credited an 80 percent control efficiency. Unsafe to monitor components (as defined in Rule 331) are considered uncontrolled.
- The component leak path definition differs from the Rule 331 definition of a component. A typical leak path count for a valve would be equal to 4 (one valve stem, a bonnet connection and two flanges).
- Leak path counts are provided by applicant. The leak path count was established by PTO Mod 8103 01. This count represents the permittee's best estimated count for the component-leak-paths for this facility as of that date.

Reference B - Well Cellar

- The maximum load schedule is in units of hours.
- Emission calculation methodology based on the CARB/KVB report *Emission Characteristics of Crude Oil Production Operations in California (1/83)* as implemented in District P&P 6100.060 and the District spreadsheet (attached).
- Calculations are based on surface area of the cellar. Control efficiency of 70% assumed for compliance with Rule 344.

Reference C - Solvents

- All solvents not used in or to thin surface coatings are included in this equipment category.
- Annual emission rates per prior permit. Daily number is annualized.

FUGITIVE HYDROCARBON EMISSION CALCULATIONS - CARB/KVB METHOD (Ver. 6.0)

Attachment: 10.1-1
Permit Number: 8013-R10
Facility: Beachfront Lease

Input Data

Facility Information	*Value*	*Units*	*Reference*
Number of Active Wells at Facility	0	wells	Permit Application
Facility Gas Production	0	scf/day	Permit Application
Facility Dry Oil Production	250	bbls/day	Permit Application
Facility Gas to Oil Ratio (if > 500 then default to 501)	0	scf/bbl	Permit Application
API Gravity	34.6	degrees API	Permit Application
Facility Model Number	1	dimensionless	User Input
No. of Steam Drive Wells with Control Vents	0	wells	Permit Application
No. of Steam Drive Wells with Uncontrolled Vents	0	wells	Permit Application
No. of Cyclic Steam Drive Wells with Control Vents	0	wells	Permit Application
No. of Cyclic Steam Drive Wells with Uncontrolled Vents	0	wells	Permit Application
Composite Valve and Fitting Emission Factor	2.4868	lb/day-well	Table Below

Emission Factor Based on Lease Model

Lease Model	Valve Without Ethane	Fitting Without Ethane	Composite Without	Units
1	1.4921	0.9947	2.4868	lbs/day-well
2	0.6999	0.6092	1.3091	lbs/day-well
3	0.0217	0.0673	0.0890	lbs/day-well
4	4.5090	2.1319	6.6409	lbs/day-well
5	0.8628	1.9424	2.8053	lbs/day-well
6	1.7079	2.5006	4.2085	lbs/day-well

Model #1: Number of wells on lease is less than 10 and the GOR is less than 500.
Model #2: Number of wells on lease is between 10 and 50 and the GOR is less than 500.
Model #3: Number of wells on lease is greater than 50 and the GOR is less than 500.
Model #4: Number of wells on lease is less than 10 and the GOR is greater than 500.
Model #5: Number of wells on lease is between 10 and 50 and the GOR is greater than 500.
Model #6: Number of wells on lease is greater than 50 and the GOR is greater than 500.

Reference: CARB speciation profiles numbers 529, 530, 531, 532

CARB KVB ROC Potential to Emit

Emission Source	lb/day	TPY
Valves and Fittings[a]	0.00	0.00
Sumps, Wastewater Tanks and Well Cellars[b]	3.93	0.72
Oil/Water Separators[b]	0.00	0.00
Pumps/Compressors/Well Heads[a]	0.00	0.00
Enhanced Oil Recovery Fields	0.00	0.00
Total ROC Potential to Emit [c]	**3.93**	**0.72**

Notes:

a. Emissions amount reflect an 80% reduction due to Rule 331 implementation.
b. Emissions reflect control efficiencies where applicable.
c. Due to rounding, the totals may not appear correct

Unit Type Emission Calculations

Pumps, Compressors, and Well Heads Uncontrolled Emission Calculations

	Value	Units	Reference
Number of Wells	0	wells	Permit Application
Wellhead Emissions	0	lb-ROC/day	Calculated Value
FHC from Pumps	0	lb-ROC/day	Calculated Value
FHC from Compressors	0	lb-ROC/day	Calculated Value
Total ROC Emissions	**0.00**	lb-ROC/day	Calculated Value

Well Cellars, Sumps, Covered Wastewater Tanks, and Oil/Water Separators

Separation Level	Heavy Oil Service	Light Oil Service	Units
Primary	0.0941	0.1380	lb ROC/ft^2-day
Secondary	0.0126	0.0180	lb ROC/ft^2-day
Tertiary	0.0058	0.0087	lb ROC/ft^2-day

WELL CELLARS			Level of Separation		
Equipment Type	**Number**	**Total Area (ft^2)**	**Primary**	**Secondary**	**Tertiary**
Well Cellars[a]	1	95	3.93		
				0.00	
					0.00
Daily ROC Emissions (lb/day)			**3.93**	**0.00**	**0.00**

Notes:

a. A 70% reduction is applied for implementation of Rule 344 (Sumps, Pits, and Well Cellars).

COVERED WASTEWATER TANKS			Level of Separation		
Equipment Type	**Number**	**Total Area (ft^2)**	**Primary**	**Secondary**	**Tertiary**
Covered Wastewater Tank[a]	0	0	0.00		
	0	0		0.00	
	0	0			0.00
Daily ROC Emissions (lb/day)			**0.00**	**0.00**	**0.00**

Notes:

a. A 85% reduction is applied.

COVERED WASTEWATER TANK WITH VAPOR RECOVERY			Level of Separation		
Equipment Type	**Number**	**Total Area (ft^2)**	**Primary**	**Secondary**	**Tertiary**
Covered Wastewater Tank with Vapor Recovery[a]	0	0	0.00		
	0	0		0.00	
	0	0			0.00
Daily ROC Emissions (lb/day)			**0.00**	**0.00**	**0.00**

Notes:

a. A 95% reduction is applied.

OIL AND WATER SEPERATORS		Type		
Equipment Type	**Total Throughput (MMgal)**	**Covered**	**Vapor Recovery**	**Open Top**
Oil and Water Separators [a][b]	0	0.00		
	0		0.00	
	0			0.00
Daily ROC Emissions (lb/day)		**0.00**	**0.00**	**0.00**

Notes:

a. A 85% reduction is applied for covered, 85% for connected to vapor recovery, and 0% for open top.

b. Emission Factor of 560 lb-ROC/Mmgal

Processed By: JJM

Date: 11/2/17

Reference D - Hazardous Air Pollutants

To be revised in included in the final permit.

10.2 Fee Calculations:

All permit fees for the reevaluation of the Beachfront Lease are based on the fee schedules of Rule 210. The District has calculated these fees based on the CPI adjusted Rule 210 fee schedules and current equipment lists.

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.

FEE STATEMENT

PT-70/Reeval No. 08103 - R10
FID: 03035 Beachfront Lease / SSID: 01063

Santa Barbara County
Air Pollution Control District

Permit Fee

Minimum Reeval Fee	**$429.00**

Fee Statement Grand Total = $429

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 Emission Tables

PERMIT POTENTIAL TO EMIT

	NO_x	ROC	CO	SO_x	PM	$PM_{2.5/10}$
lb/day		4.39				
lb/hr						
TPQ						
TPY		0.80				

FACILITY POTENTIAL TO EMIT

	NO_x	ROC	CO	SO_x	PM	$PM_{2.5/10}$
lb/day		4.39				
lb/hr						
TPQ						
TPY		0.80				

STATIONARY SOURCE POTENTIAL TO EMIT

	NO_x	ROC	CO	SO_x	PM	$PM_{2.5/10}$
lb/day	1991.41	951.48	3157.93	237.87	239.41	150.12
lb/hr						
TPQ						
TPY	207.68	161.06	113.69	28.73	18.41	17.92

10.4 Equipment List

PT-70/Reeval 08103 R10 / FID: 03035 Beachfront Lease / SSID: 01063

A PERMITTED EQUIPMENT

1 Oil & Gas Wellhead: SLC-421-2

Device ID #	**100194**	***Device Name***	**Oil & Gas Wellhead: SLC-421-2**
Rated Heat Input		*Physical Size*	
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note	Located on Pier SLC-421-2.		
Device Description	Wellhead located on Pier SLC-421-2.		

2 Oil and Gas Well Cellar: SLC 421-2

Device ID #	**100195**	***Device Name***	**Oil and Gas Well Cellar: SLC 421-2**
Rated Heat Input		*Physical Size*	95.03 Square Feet Cellar Area
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description	Serving SLC-421-2, diameter 11', located on Pier SLC-421-2.		

3 Fugitive Components - Leak Paths Method

3.1 Components in Oil Service

3.1.1 Valves -- Accessible

Device ID #	**106451**	***Device Name***	**Valves -- Accessible**
Rated Heat Input		*Physical Size*	17.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

3.1.2 Connections -- Accessible

Device ID #	**106452**	***Device Name***	**Connections -- Accessible**
Rated Heat Input		*Physical Size*	89.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

3.1.3 Connections -- Unsafe

Device ID #	**106453**	***Device Name***	**Connections -- Unsafe**
Rated Heat Input		*Physical Size*	28.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

3.2 Components in Gas Service

3.2.1 Valves - Accessible

Device ID #	**111145**	***Device Name***	**Valves - Accessible**
Rated Heat Input		*Physical Size*	10.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

3.2.2 Connections - Accesible

Device ID #	**111146**	***Device Name***	**Connections - Accessible**
Rated Heat Input		*Physical Size*	43.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

3.2.3 Valves - Unsafe

Device ID #	**111143**	***Device Name***	**Valves - Unsafe**
Rated Heat Input		*Physical Size*	10.00 Component Leakpath
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Location Note			
Device Description			

B EXEMPT EQUIPMENT

1 Injection Wellhead 421-1

Device ID #	**001854**	*Device Name*	**Injection Wellhead 421-1**
Rated Heat Input		*Physical Size*	1.00 Total Wells
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*District Rule Exemption:* 202.L.13 H2O Well/Filtration Sys/Reverse Osmosis	
Location Note			
Device Description	Produced water injection wellhead. Located on Pier SLC-421-1.		

2 Injection Well Cellar 421-1

Device ID #	**001855**	*Device Name*	**Injection Well Cellar 421-1**
Rated Heat Input		*Physical Size*	95.00 Square Feet
Manufacturer		*Operator ID*	
Model		*Serial Number*	
Part 70 Insig?	No	*District Rule Exemption:* 202.L.13 H2O Well/Filtration Sys/Reverse Osmosis	
Location Note			
Device Description	Produced water cellar. Serving SLC-421-1, located on Pier SLC-421-1.		

10.5 District Permit Exempt / Part 70 Insignificant Equipment List

The list below designates Rule 202 permit exempt list of emissions units at the Beachfront Lease. Unless where otherwise noted by a double asterisk (**), this list also serves to designate those emission units as Insignificant under Part 70.

1 **Injection Well Cellar 421-1**
Device Number: 001855 Operator ID Number:
Number of Devices: 1
Manufacturer: Make: Model: Serial No:
Parameter Size:
Device Description: Produced water cellar. Serving SLC-421-1, located on Pier SLC-421-1.

2 **Injection Wellhead 421-1**
Device Number: 001854 Operator ID Number:
Number of Devices: 1
Manufacturer: Make: Model: Serial No:
Parameter Size:
Device Description: Produced water injection wellhead. Serving SLC-421-1, located on Pier SLC-421-1

10.6 Public Comments on Draft Permit and District Responses

The draft permit was open for public review from March 11, 2018 until April 26, 2018. No public comments were received on this permit. The District received comments on the proposed Part 70 Significant Modification 7904-06, which was incorporated directly into the Ellwood Onshore Facility PT-70/PTO 7904-R11. Summaries of those public comments and the District's responses can be found in attachment 10.9 of PT-70/PTO 7904-R11.