

DRAFT

PERMIT TO OPERATE 7126-R6

and

PART 70 OPERATING PERMIT 7126

**PXP – LOMPOC/POINT PEDERNALES
LA PURISIMA LEASE**

**LOMPOC OILFIELD
SANTA BARBARA COUNTY, CALIFORNIA**

OWNER/OPERATOR

Plains Exploration & Production Co. (PXP)

**Santa Barbara County
Air Pollution Control District**

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ABBREVIATIONS/ACRONYMS

AP-42	USEPA's <i>Compilation of Emission Factors</i>
API	American Petroleum Institute
ASTM	American Society for Testing Materials
BACT	Best Available Control Technology
BOEM	Bureau of Ocean Energy Management
bpd	barrels per day (1 barrel = 42 gallons)
CAM	compliance assurance monitoring
CEMS	continuous emissions monitoring
District	Santa Barbara County Air Pollution Control District
dscf	dry standard cubic foot
EU	emission unit
°F	degree Fahrenheit
gal	gallon
gr	grain
HAP	hazardous air pollutant (as defined by CAAA, Section 112(b))
H ₂ S	hydrogen sulfide
I&M	inspection & maintenance
k	kilo (thousand)
l	liter
lb	pound
lbs/day	pounds per day
lbs/hr	pounds per hour
LACT	Lease Automatic Custody Transfer
LPG	liquid petroleum gas
M	mega (million)
MACT	Maximum Achievable Control Technology
MM	million
MW	molecular weight
NEI	net emissions increase
NG	natural gas
NSPS	New Source Performance Standards
O ₂	oxygen
OCS	outer continental shelf
ppm (vd or w)	parts per million (volume dry or weight)
psia	pounds per square inch absolute
psig	pounds per square inch gauge
PRD	pressure relief device
PTO	Permit to Operate
RACT	Reasonably Available Control Technology
ROC	reactive organic compounds, same as "VOC" as used in this permit
RVP	Reid vapor pressure
scf	standard cubic foot
scfd (or scfm)	standard cubic feet per day (or per minute)
SIP	State Implementation Plan
STP	standard temperature (60°F) and pressure (29.92 inches of mercury)
THC	Total hydrocarbons
tpy, TPY	tons per year
TVP	true vapor pressure

USEPA
VE
VRS

United States Environmental Protection Agency
visible emissions
vapor recovery system

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, 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 local 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 7126*) as well as the State Operating Permit (*Permit to Operate 7126*).

Part 70 Permitting: The initial Part 70 permit for the La Purisima Lease was issued October 17, 2000 in accordance with the requirements of the District's Part 70 operating permit program. This is the third renewal of the Part 70 permit and may include additional applicable requirements. The La Purisima Lease is a part of the PXP Lompoc/Point Pedernales Stationary Source, which is a major source for VOC¹ and NO_x. Conditions listed in this permit are based on federal, state or local 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 permit 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. Next, 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". District Part 70 operating permits are being updated to incorporate the revised definition.

1.2 Facility Overview

- 1.2.1 General Overview: The La Purisima Lease, located approximately 2.5 miles north of the city of Lompoc, was previously owned and operated by Unocal. On April 9, 1996, Unocal transferred this facility to Nuevo Energy Company as the sole owner and Torch Operating Company as the operator. On May 14, 1997 the District issued a Transfer of Ownership to reflect this change. On April 9, 1997 Bellwether Exploration Company acquired a 19.7-percent ownership in the Lompoc/Point Pedernales Stationary Source that was subsequently transferred back to Nuevo.

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.

On February 7, 2000 the District issued a transfer of ownership to reflect this change. On February 27, 2001, operatorship was

PXP- Lompoc/Point Pedernales Stationary Source

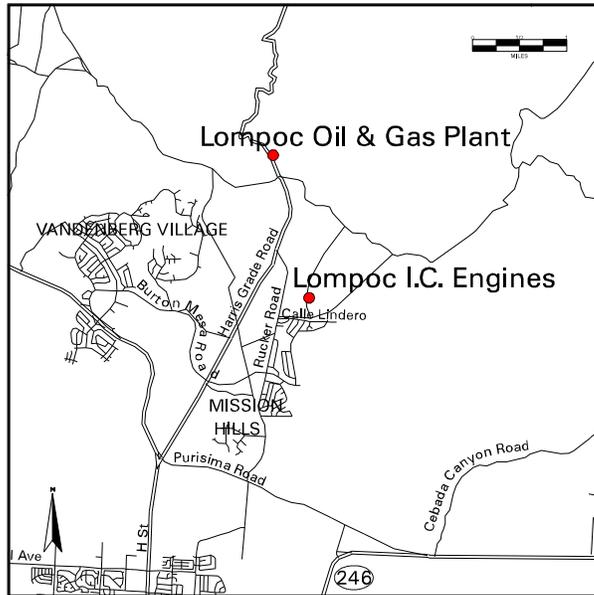
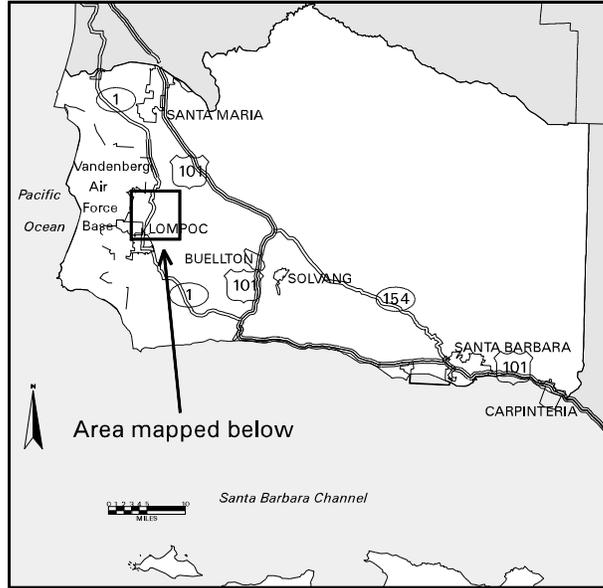


Figure 1.1 - Location Map for the La Purisima Lease

transferred from Torch to Nuevo. On September 23, 2004 ownership and operatorship was transferred from Nuevo to PXP. For District regulatory purposes, the facility location is in the Northern Zone of Santa Barbara County². Figure 1.1 shows the relative location of the facility within the county. The La Purisima Lease was constructed prior to 1979 and is a part of the *PXP Lompoc/Point Pedernales Stationary Source* (SSID 4632), which consists of the following facilities:

- La Purisima Lease (FID 3069)
- Lompoc Oil and Gas Plant (FID 3095)
- Jesus Maria “D” Lease (FID 3309)
- Orcutt Fee (FID 3310)
- Eefson Lease (FID 3802)
- Jesus Maria “A” Lease (FID 3832)
- Lompoc Fee (FID 3837)
- Hill Lease (FID 3839)
- Arkley Fee (FID 4117)
- Lompoc Internal Combustion Engines (FID 4218)
- Platform Irene (FID 8016)

The La Purisima Lease consists of the following oil and gas production systems:

- Oil/water/gas separation systems
- Oil and water storage systems
- Vapor recovery systems
- Oil shipping systems
- Wastewater injection systems
- Gas gathering, scrubbing and compression systems

There are forty seven (47) wells located at the La Purisima Lease. The well types include oil and gas production wells, water injections wells and reservoir pressure maintenance wells. Electric motors or internal combustion engines (permitted under PTO 9971) drive the pumps located at the producing wells. The produced oil, water and gas are processed through gas/liquid separators in the field prior to the liquids being piped to the La Purisima Lease tank battery. At the tank battery the oil and water, along with liquids from other onshore leases in the stationary source, pass through a freewater knockout vessel where oil and water are separated. The oil is piped to the crude tank and the water is sent to the wastewater tank. The oil is metered at the LACT unit and is shipped from the lease via pipeline. The wastewater is reinjected into the producing formation. The tanks and the LACT control vessel are connected to a vapor recovery system. The gas collected from the separators and the vapor recovery system is scrubbed to remove natural gas liquids and water, compressed, and piped to the Lompoc Oil & Gas Plant.

Requirements for IC engines used on this lease are addressed in PTO 9971. Only one piece of equipment on the La Purisima Lease, a glycol regenerator, is fired on PUC quality natural gas, and is exempt from District permit (per Rule 202.G.1.a.).

1.2.2 Facility Permitting History: The following is the permit history for this facility:

² District Rule 102, Definition: “Northern Zone”

PERMIT	FINAL ISSUED	PERMIT DESCRIPTION
ATC 07126	07/08/1988	See Permit
ATC 06869	07/30/1989	See Permit
PTO 07498	07/30/1989	See Permit
Reeval 07126 R2	08/14/1991	Permit Reevaluation
PTO 07126	09/06/1994	See Permit
PTO Mod 07126 03	05/03/1995	See Permit
ATC 09817	11/14/1997	Increase gas throughput limit
Reeval 07126 R1	06/30/1998	Permit reevaluation. Lease with 49 wells & a tank battery.
Trn O/O 07126 01	02/04/2000	See Permit
PT-70/Reeval 07126 R2	10/17/2000	See Permit
Trn O/O 07126 02	02/27/2001	Transfer of operatorship from Torch to Nuevo
PT-70/Reeval 07126 R3	12/17/2003	Reevaluation.
Trn O/O 07126 03	09/23/2004	Transfer of Owner/Operator from Nuevo to Plains Exploration & Production.
Exempt 12013	03/28/2006	Exemption request for use of a Bake tank to acidize wells.
PT-70/Reeval 07126 R4	12/08/2006	Pt70 Permit Renewal.
ATC/PTO 12877	09/04/2008	Replace one gross separator.
ATC/PTO 12891	09/22/2008	Replace one gross separator.
ATC 12900	01/06/2009	Utility tank in Lompoc Field.
PTO Mod 07126 04	05/01/2009	PTO to enforce ERCs created by removal of pig trap associated with ATC 13015.
ATC 13174	06/05/2009	Replace vapor recovery compressor.
PT-70/Reeval 07126 R5	12/23/2009	Pt70 Permit Renewal.
Exempt 13400	02/24/2010	Well servicing activities at various Lompoc Field sites. 202.D.5.
ATC/PTO 13571	12/22/2010	Replacement of a vertical scrubber vessel due to an internal corrosion problem.
Exempt 13620	02/15/2011	Well servicing activities at various Lompoc Field sites. 202.D.5.
Exempt 13670	04/11/2011	Lompoc Field Well Servicing
ATC/PTO 13660	04/18/2011	Replacement of a vertical scrubber vessel due to a damaged fitting.
Exempt 13692	06/15/2011	Use of portable tanks for servicing well work-over activities. 202.D.5.
Exempt 13771	09/07/2011	Well servicing activities at Lompoc Field, La Purisima, Eefson, Jesus Maria, Arkley, Orcutt Fee, Lompoc Fee and Hill leases.
Exempt 13772	09/19/2011	Use of a temporary tank during pipeline maintenance activities.
ATC 13788	10/27/2011	Add two wells.
ATC 13729	10/28/2011	Add a utility tank to handle both crude oil and produced water to Lompoc Field.
Exempt 13929	06/20/2012	Pipeline purging project.
ATC 13835	07/05/2012	Permit the Purisima 91 well which was previously added

PERMIT	FINAL ISSUED	PERMIT DESCRIPTION
		as a de minimis project.
ATC 13836	07/06/2012	Replace pig launcher for the tie in to the ConocoPhillips pipeline and add a pig receiver at the pipeline tie-in-point.
ATC Mod 13849 01	08/06/2012	Reactivate Purisima 71 instead and leave Purisima 84 in its current idle state. Addition 11 wells and associated test separator vessels.
PTO 13788	Pending	Add two wells
PTO 13835	Pending	Add well Purisima #91 to Permit
PTO 13729	Pending	Add a utility tank to handle both crude oil and produced water to Lompoc Field.

1.3 Emission Sources

The emissions from the La Purisima Lease come from oil and gas wells and their associated cellars, oil/water/gas separation equipment, tanks, sumps and fugitive emission components, such as process-line valves and flanges. 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.

The emission sources include:

- Oil and gas wells and well cellars
- One (1) freewater knockout vessel
- One (1) crude shipping tank
- One (1) LACT control tank
- One (1) wastewater tank
- One (1) oil-water separation pond
- One (1) wastewater pit
- Three (3) gross separators
- Gas scrubbing and compression equipment
- Fugitive emission components in gas/liquid hydrocarbon service

A list of all permitted equipment is provided in Section 10.5.

1.4 Emission Control Overview

The emission controls employed at this facility include:

- A Fugitive 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.
- A vapor recovery/gas collection (VRGC) system to collect reactive organic vapors from the gas/liquid separators and the tanks.

- A program to keep well cellars and emergency pits pumped out consistent with the requirements of District Rule 344.

1.5 Offsets/Emission Reduction Credit Overview

This facility provides emission reduction credits (ERCs) to PXP's Point Pedernales Project. These ERCs are provided through:

- Electrification of the gas compressor.
- Electrification of the engines serving wastewater injection wells 20 and 53.
- Installation of vapor recovery on the glycol regenerator vent.

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 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 were listed in the Part 70 permit renewal application with supporting calculations. Applicable requirements may apply to insignificant units. The glycol regenerator is a 1.5 MMBtu/hr. The emissions from this unit are less than the above threshold and therefore it qualifies as an insignificant emissions unit.
- 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 which was in effect as of August 7, 1980, or (2) included in the 29-category source list specified in 40 CFR 51.166 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 indiscriminately granted with respect to all federal requirements. PXP 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. PXP 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 annually on the anniversary date of the permit or on a more frequent schedule specified in the permit. A “responsible official” of the owner/operator company signs each certification whose name and address is listed prominently in the Part 70 permit. (*see Section 1.6.9 below*)

- 1.6.7 Permit Reopening: Part 70 permits are re-opened and revised if the source becomes subject to a new rule or new permit conditions are necessary to ensure compliance with existing rules. The permits are also re-opened if they contain a material mistake or the emission limitations or other conditions are based on inaccurate permit application data.
- 1.6.8 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 4.10 and 5.5*)
- 1.6.9 Responsible Officials: The designated responsible official is:

Mr. Thomas Goeres, Operations Manager
Plains Exploration & Production Company
201 South Broadway
Orcutt, California 93455

2.0 Process Description

2.1 Process Summary

- 2.1.1 Production: Oil, water, and gas are produced from wells on the La Purisima Lease. Each well is equipped with a cellar that measures approximately six feet by six feet. Electric motors and/or internal combustion engines (PTO 9971) provide power to the pumping units.
- 2.1.2 Gas, Oil, and Water Separation: The produced oil, water and gas are processed through gas/liquid separators in the field prior to the liquids being piped to the central tank battery. At the central tank battery the liquids are sent to the freewater knockout vessel where oil and water are separated. The oil is piped to the crude oil shipping tank and the water is sent to the wastewater tank. The gas from the separators and the vapor recovery system is scrubbed to remove natural gas liquids and water.
- 2.1.3 Vapor Recovery: The tanks and the LACT control vessel are connected to a vapor recovery system (VRS). The VRS is equipped with a compressor driven by a 10 hp electric motor and is assumed to have a minimum 90-percent control efficiency.
- 2.1.4 Oil and Gas Metering and Shipping: Oil from the crude storage tank is metered through a LACT metering system and is shipped from the lease via a pipeline. The oil pipeline is served by two shipping pumps, each driven by a 25 hp electric motor. The dry natural gas is compressed and piped to the Lompoc Oil and Gas Plant. The gas pipeline is served by a 400 hp compressor driven by an electric motor.
- 2.1.5 Wastewater Disposal: The water separated in the freewater knockout vessel is sent to the wastewater tank. In an emergency the water can be sent to the wastewater pit and/or the

wastewater pond. Use of the pit and the pond is limited to less than 30-days per year. The wastewater is reinjected into the producing formation.

2.2 Support Systems

There are no additional support systems on the La Purisima Lease.

2.3 Maintenance/Degreasing Activities

2.3.1 Paints and Coatings: Intermittent surface coating operations are conducted throughout the facility for occasional structural and equipment maintenance needs, including architectural coating. Normally only touch-up and equipment labeling or tagging is performed. All architectural coatings used are in compliance 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 La Purisima Lease for daily operations. Usage includes cold solvent degreasing and wipe cleaning with rags.

2.4 Planned Process Turnarounds

Maintenance of critical components is carried out according to the requirements of Rule 331 (*Fugitive Emissions Inspection and Maintenance*) during turnarounds. PXP has not listed any emissions from planned process turnarounds that should be permitted.

2.5 Other Processes

2.5.1 Pits and Sumps: The La Purisima Lease is equipped with one wastewater pit and one wastewater pond. The pit and the pond are for emergency use only and cannot operate more than 30-days per year.

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

2.6 Detailed Process Equipment Listing

Refer to Attachment 10.5 for a complete listing of all permitted equipment.

3.0 Regulatory Review

This Section identifies the federal, state and local rules and regulations applicable to the La Purisima Lease.

3.1 Rule Exemptions Claimed

District Rule 202 (*Exemptions to Rule 201*): PXP has requested one exemption under this rule. An exemption from permit, however, does not necessarily grant relief from any applicable prohibitory rule. The District approved the following exemption:

- Section G.1.a (*Combustion Equipment*): There is only one piece of combustion equipment, other than ICES, on the La Purisima Lease, a glycol regenerator that is fired on PUC quality natural gas, and is exempt from District permit.

District Rule 331 (*Fugitive Emission Inspection and Maintenance*): The following exemptions were applied for in PXP's Inspection and Maintenance Plan and approved by the District:

- Section B.2.b for components buried below the ground.

District Rule 344 (Petroleum Sumps, Pits and Well Cellars): The wastewater pit and the covered oil/water separation pond at the La Purisima Lease have surface areas greater than 1,000 sq. ft. However, they are both used less than 30-days per year and thus are exempt from this rule based on Section B.3.b.

3.2 Compliance with Applicable Federal Rules and Regulations

- 3.2.1 40 CFR Parts 51/52 {New Source Review (Nonattainment Area Review and Prevention of Significant Deterioration)}: The La Purisima Lease was constructed and permitted prior to the applicability of these regulations. All modifications are subject to the District's New Source Review regulation. Compliance with the regulation assures compliance with 40 CFR 51/52.
- 3.2.2 40 CFR Part 60 {New Source Performance Standards}: The crude storage tank at the La Purisima Lease was installed after the applicability of Subpart K and Ka. It is not subject to Subpart Kb because it has a design volume less than 1,589.874 m³ (10,000 bbls). Any new or replacement tank will be subject to subpart Kb.
- 3.2.3 40 CFR Part 61 {NESHAP}: This facility is not currently subject to the provisions of this Subpart.
- 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. PXP submitted information in October 2000 indicating this facility qualified for the "black oil" exemption per section 63.760(e)(1) of the subpart. The District approved this exemption on June 5, 2002. Thus, only the recordkeeping requirements specified in condition 9.B.12 apply.
- 3.2.5 40 CFR Part 64 {Compliance Assurance Monitoring}: This rule became effective on April 22, 1998 and affects emission units at the source subject to a federally enforceable emission limit or standard that use a control device to comply with the emission standard, and either pre-control or post-control emissions exceed the Part 70 source emission thresholds. Compliance with this rule was evaluated and it was determined that no emission units at this facility are currently subject to CAM.
- 3.2.6 Subpart ZZZZ {NESHAP - Stationary Internal Combustion Engines}: Based on the MACT, there are no emission units associated with this lease subject to this MACT.
- 3.2.7 Subpart DDDDD {Industrial/Commercial/Institutional Boilers and Process Heaters}: Based on the MACT, there are no emission units associated with this lease subject to this MACT.
- 3.2.8 Subpart EEEE {Organic Liquid Distribution}: Based on the MACT, there are no emission units associated with this lease subject to this MACT.
- 3.2.6 40 CFR Part 70 {Operating Permits}: This Subpart is applicable to the La Purisima Lease. Table 3.1 lists the federally-enforceable District promulgated rules that are "generic" and apply to the La Purisima Lease. Table 3.2 lists the federally-enforceable District promulgated rules that are "unit-specific" that apply to the La Purisima Lease. These tables are based on data

available from the District's administrative files and from PXP's Part 70 Operating Permit application. Table 3.4 includes the adoption dates of these rules.

In its Part 70 permit application (Form I), PXP certified compliance with all existing District rules and permit conditions. This certification is also required of PXP semi-annually. Issuance of this permit and compliance with all its terms and conditions will ensure that PXP complies 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 Administrative Code Title 17: These sections specify the standards by which abrasive blasting activities are governed throughout the State. All abrasive blasting activities at the La Purisima 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.

3.4 Compliance with Applicable Local Rules and Regulations

- 3.4.1 Applicability Tables: In addition to Tables 3.1 and 3.2, Table 3.3 lists the non-federally-enforceable District promulgated rules that apply to the La Purisima Lease. Table 3.4 lists the adoption date of all rules that apply 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 this facility:

Rule 210 - Fees: Pursuant to Rule 201.G, District permits are reevaluated every three years. This includes the re-issuance of the underlying permit to operate. Also included are the PTO fees. The fees for this facility are based on District Rule 210, Fee Schedule A; however Part 70 specific costs are based on cost reimbursement provisions (Rule 210.C). Attachment 10.3 presents the fee calculations for the reevaluated permit.

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 the District rules and regulations. To the best of the District's knowledge, the permittee is operating in compliance with this rule.

Rule 302 - Visible Emissions: This rule prohibits the discharge from any single source any air contaminants for which a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade than a reading of 1 on the Ringlemann Chart or of such opacity to obscure an observer's view to a degree equal to or greater than a reading of 1 on the Ringlemann Chart. All internal combustion engines are subject to this rule, and monitoring requirements for diesel engines are included in the ICE facility permit.

Rule 303 (Nuisance): Rule 303 prohibits any source from discharging such quantities of air contaminants or other material in violation of Section 41700 of the Health and Safety Code which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety or any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. Compliance with this rule is assessed through the District's enforcement staff's complaint response program. Based on the source's location, the potential for public nuisance is small.

Rule 304 (Particulate Matter - Northern Zone): A person shall not discharge into the atmosphere from any source particulate matter in excess of 0.3 grain per cubic foot of gas at standard conditions.

Rule 309 - Specific Contaminants: Under Section "A", no source may discharge sulfur compounds and combustion contaminants (particulate matter) in excess of 0.2-percent as SO₂ (by volume) and 0.3 gr/scf (at 12% CO₂) respectively.

Rule 310 - Odorous Organic Compounds: This rule prohibits the discharge of H₂S and organic sulfides that result in a ground level impact beyond the property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour. No measured data exists to confirm compliance with this rule.

Rule 311 - Sulfur Content of Fuels: This rule limits the sulfur content of fuels combusted on the La Purisima Lease to 0.5-percent (by weight) for liquids fuels and 50 gr/100 scf (calculated as H₂S) {or 796 ppmvd} for gaseous fuels. All piston IC engines on the lease are expected to be in compliance with the fuel limit as determined by required fuel analysis documentation.

Rule 317 - Organic Solvents: This rule sets specific prohibitions against the discharge of emissions of both photochemically and non-photochemically reactive organic solvents (40 lb/day and 3,000 lb/day respectively). Solvents may be used on the 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. PXP is required to maintain records to ensure compliance with this rule.

Rule 321 - Solvent Cleaning Operations: This rule was revised to fulfill the commitment in the Clean Air Plans to implement requirements for solvent cleaning machines and solvent cleaning. The revised rule contains solvent reactive organic compounds (ROCs) content limits, revised requirements for solvent cleaning machines, and sanctioned solvent cleaning devices and methods. These provisions apply to solvent cleaning machines and wipe cleaning.

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. PXP will be required to maintain records during maintenance operations to ensure compliance with this rule.

Rule 323 - Architectural Coatings: This rule sets standards for the application of surface coatings. The primary coating standard that will apply to the lease is for Industrial Maintenance Coatings which has a limit of 250 grams ROC per liter of coating, as applied. The permittee will

be required to comply with the Administrative requirements under Section F for each container on the lease.

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 into the atmosphere. PXP is 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, gathering, storage, processing and separation of crude oil and gas prior to custody transfer. The primary requirements of this rule are under Sections D and E. Section D requires the use of vapor recovery systems on all tanks and vessels, including wastewater tanks, oil/water separators and sumps. Section E requires that all produced gas be controlled at all times, except for wells undergoing routine maintenance. All of the tanks on this lease are all connected to the vapor recovery system. Compliance with Section E is met by directing all produced gas to a sales compressor, injection well or to a flare relief system.

Rule 326 - Storage of Reactive Organic Liquids: This rule applies to equipment used to store reactive organic compound liquids with a vapor pressure greater than 0.5 psia. The tanks on the La Purisima Lease are subject to Rule 325, and are therefore are not subject to this rule per Section B.1.c.

Rule 330 - Surface Coating of Metal Parts and Products: This rule sets standards for many types of coatings applied to metal parts and products. In addition to the ROC standards, this rule sets operating standards for application of the coatings, labeling and recordkeeping. Compliance with this rule will be demonstrated through inspections and recordkeeping.

Rule 331 - Fugitive Emissions Inspection and Maintenance: This rule applies to components in liquid and gaseous hydrocarbon service at oil and gas production fields. PXP submitted an I&M Plan and received District approval of this Plan on March 11, 1993. This plan was revised and approved in December 1999. Ongoing compliance with the many provisions of this rule will be assessed via inspection by District personnel using an organic vapor analyzer and through analysis of operator records. The La Purisima Lease does not perform any routine venting of hydrocarbons to the atmosphere. All gases routinely vented are directed to the vapor recovery system.

Rule 342 - Control of Oxides of Nitrogen from Boilers, Steam Generators and Process Heaters: This rule applies to boilers, steam generators and process heaters with rated heat inputs greater than or equal to 5 million Btu per hour used in all industrial, institutional and commercial operations. Compliance shall be based on source testing and site inspections.

Rule 343 - Petroleum Storage Tank Degassing: This rule applies to the degassing of any above-ground tank, reservoir or other container of more than 40,000 gallons capacity containing any organic liquid with a vapor pressure greater than 2.6 psia or between 20,000 gallons and 40,000 gallons capacity containing any organic liquid with a vapor pressure greater than 3.9 psia. This rule is not applicable to the crude storage tank and the LACT control tank.

Rule 344 - Sumps, Pits and Well Cellars: Rule 344 requires controls on sumps and pits subject to the rule and an inspection and maintenance plan for well cellars. PXP has instituted a program to monitor well cellars and pump them out if the thickness of the oil/petroleum products exceeds 2 inches or the cellar is over 50-percent full of any liquid. Compliance is determined through required recordkeeping and District inspection.

Rule 352 - Natural Gas-Fired Fan-Type Central Furnaces and Small Water Heaters: This rule applies to new water heaters rated less than 75,000 Btu/hr and new fan-type central furnaces. It requires the certification of newly installed units.

Rule 353 - Adhesives And Sealants: This rule is applicable to any person who supplies, sells, offers for sale, manufactures, solicits the application of, or uses adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers, unless otherwise specifically exempted by this rule. Compliance with this rule will be demonstrated through inspections and recordkeeping.

Rule 505 - Breakdown Conditions: This rule describes the procedures that PXP must follow when a breakdown condition occurs to any emissions unit associated with the La Purisima Lease. A breakdown condition is defined as an unforeseeable failure or malfunction of (1) any air pollution control equipment or related operating equipment which 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 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. Future projects at the facility will be evaluated to determine whether they constitute a new major stationary source or a major modification.

3.5 Compliance History

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

3.5.1 Variances: There have been no variances issued to this facility since the last permit reevaluation.

3.5.2 Violations: The following enforcement action were issued to this facility since the previous permit reevaluation:

VIOLATION TYPE	NUMBER	ISSUE DATE	DESCRIPTION OF VIOLATION
MIN	9721	05/18/2012	Exceeding the number of leaks specified in Table 1, of Section F.2, for each inspection period for major gas leaks and/or liquid leaks, as determined by District or operator inspection.

3.5.3 Significant Historical Hearing Board Actions: There have been no significant Hearing Board actions since the previous permit reevaluation.

Table 3.1 - Generic Federally-Enforceable District Rules

Generic Requirements	Affected Emission Units	Basis for Applicability
<u>RULE 101</u> : Compliance by Existing Installations	All emission units	Emission of pollutants
<u>RULE 102</u> : Definitions	All emission units	Emission of pollutants
<u>RULE 103</u> : Severability	All emission units	Emission of pollutants
<u>RULE 201</u> : Permits Required	All emission units	Emission of pollutants
<u>RULE 202</u> : Exemptions to Rule 201	Applicable emission units, as listed in form 1302-H of the Part 70 application.	Insignificant activities/emissions, per size/rating/function
<u>RULE 203</u> : Transfer	All emission units	Change of ownership
<u>RULE 204</u> : Applications	All emission units	Addition of new equipment of modification to existing equipment.
<u>RULE 205</u> : Standards for Granting Permits	All emission units	Emission of pollutants
<u>RULE 206</u> : Conditional Approval of Authority to Construct or Permit to Operate	All emission units	Applicability of relevant Rules
<u>RULE 207</u> : Denial of Applications	All emission units	Applicability of relevant Rules
<u>RULE 208</u> : Action on Applications – Time Limits	All emission units. Not applicable to Part 70 permit applications.	Addition of new equipment of modification to existing equipment.
<u>RULE 212</u> : Emission Statements	All emission units	Administrative
<u>RULE 301</u> : Circumvention	All emission units	Any pollutant emission
<u>RULE 302</u> : Visible Emissions	All emission units	Particulate matter emissions
<u>RULE 303</u> : Nuisance	All emission units	Emissions that can injure, damage or offend.
<u>RULE 304</u> : Particular Matter - Northern Zone	Each PM Source	Emissions of PM in effluent gas
<u>RULE 309</u> : Specific Contaminants	All emission units	Combustion contaminant emission
<u>RULE 311</u> : Sulfur Content of Fuel	All combustion units	Use of fuel containing sulfur
<u>RULE 317</u> : Organic Solvents	Emission units using solvents	Solvent used in process ops.
<u>RULE 321</u> : Solvent Cleaning Operations	Emission units using solvents.	Solvent used in process operations.

Generic Requirements	Affected Emission Units	Basis for Applicability
<u>RULE 322</u> : Metal Surface Coating Thinner and Reducer	Emission units using solvents.	Solvent used in process operations.
<u>RULE 323</u> : Architectural Coatings	Paints used in maintenance and surface coating activities.	Application of architectural coatings.
<u>RULE 324</u> : Disposal and Evaporation of Solvents	Emission units using solvents.	Solvent used in process operations.
<u>RULE 353</u> : Adhesives and Sealants	Emission units using adhesives and solvents.	Adhesives and sealants used in process operations.
<u>RULE 505.A, B1, D</u> : Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
<u>RULE 603</u> : Emergency Episode Plans	Stationary sources with PTE greater than 100 tpy	PXP Lompoc is a major source.
<u>REGULATION VIII</u> : New Source Review	All emission units	Addition of new equipment of modification to existing equipment. Applications to generate ERC Certificates.
<u>REGULATION XIII (RULES 1301-1305)</u> : Part 70 Operating Permits	All emission units	PXP Lompoc is a major source.

Table 3.2 - Unit-Specific Federally-Enforceable District Rules

Unit-Specific Requirements	Affected Emission Units	Basis for Applicability
<u>RULE 325</u> : Crude Oil Production and Separation	Wash tank, crude storage tanks, wastewater tanks	Pre-custody transfer oil service tanks with capacities exceeding exemption limits.
<u>RULE 331</u> : Fugitive Emissions Inspection & Maintenance	All components (valves, flanges, seals, compressors and pumps) used to handle oil and gas:	Components emit fugitive ROCs. ID# 6-1
<u>RULE 343</u> : Petroleum Storage Tank Degassing	Wash tank, crude storage tanks, wastewater tanks	Tanks used in storage of organic liquids with vapor pressure > 2.6 psia.
<u>RULE 344</u> : Petroleum Wells, Sumps and Cellars	Well cellars, sump, wastewater pits	Each well at this facility is equipped with a well cellar. Compliance with this rule provides a 70% reduction in well cellar ROC emissions. This rule also provides exemptions to sumps at this facility.

Table 3.3 - Non-Federally-Enforceable District Rules

Requirement	Affected Emission Units	Basis for Applicability
<u>RULE 210</u> : Fees	All emission units	Administrative
<u>RULES 310</u> : Odorous Organics	All emission units	Emissions of Organic Sulfides
<u>RULES 501-504</u> : Variance Rules	All emission units	Administrative
<u>RULE 505.B2, B3, C, E, F, G</u> : Breakdown Conditions	All emission units	Breakdowns where permit limits are exceeded or rule requirements are not complied with.
<u>RULES 506-519</u> : Variance Rules	All emission units	Administrative

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

Rule No.	Rule Name	Adoption Date
Rule 101	Compliance by Existing Installations: Conflicts	June 1981
Rule 102	Definitions	March 17, 2011
Rule 103	Severability	October 23, 1978
Rule 201	Permits Required	June 21, 2012
Rule 202	Exemptions to Rule 201	March 17, 2011
Rule 203	Transfer	April 17, 1997
Rule 204	Applications	April 17, 1997
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 304	Particular Matter – Northern Zone	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 321	Solvent Cleaning Operations	June 21, 2012
Rule 322	Metal Surface Coating Thinner and Reducer	October 23, 1978
Rule 323	Architectural Coatings	November 15, 2001
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	December 14, 1993

Rule No.	Rule Name	Adoption Date
Rule 331	Fugitive Emissions Inspection and Maintenance	December 10, 1991
Rule 333	Control of Emissions from Reciprocating Internal Combustion Engines	April 17, 1997
Rule 342	Control of Oxides of Nitrogen (NO _x) 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	October 13, 1992
Rule 353	Adhesives and Sealants	June 21, 2012
Rule 359	Flares and Thermal Oxidizers	June 28, 1994
Rule 360	Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers	October 17, 2002
Rule 361	Small Boilers, Steam Generators and Process Heaters	January 17, 2008
Rule 370	Potential to Emit – Limitations for Part 70 Sources	January 20, 2011
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	April 17, 1997
Rule 802	Nonattainment Review	April 17, 1997
Rule 803	Prevention of Significant Deterioration	April 17, 1997
Rule 804	Emission Offsets	April 17, 1997
Rule 805	Air Quality Impact and Modeling	April 17, 1997
Rule 806	Emission Reduction Credits	April 17, 1997
Rule 810	Federal Prevention of Significant Deterioration	January 20, 2011
Rule 901	New Source Performance Standards (NSPS)	September 20, 2010
Rule 1001	National Emission Standards for Hazardous Air Pollutants	October 23, 1993
Rule 1301	General Information	January 20, 2011
Rule 1302	Permit Application	November 9, 1993
Rule 1303	Permits	November 9, 1993
Rule 1304	Issuance, Renewal, Modification and Reopening	November 9, 1993

Rule No.	Rule Name	Adoption Date
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:

- facility process flow diagrams
- 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 July 13, 1998 (ver 1.1) was used to determine non-methane, non-ethane fraction of THC.

4.2 Stationary Combustion Sources

There are no process heaters, boilers or steam generators subject to permit on the La Purisima Lease. There is one glycol reboiler, fired on PUC quality natural gas, that is exempt from permit. The internal combustion engines on the La Purisima Lease are included in PTO 9971.

4.3 Fugitive Hydrocarbon Sources

Emissions of reactive organic compounds from piping components (e.g., valves and connections), pumps, compressors and pressure relief devices have been quantified using emission factors pursuant to District P&P 6100.061.1996 (*Determination of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities Through the Use of Facility Component Counts - Modified for Revised ROC Definition*). The component leak-path counts used in the calculations are based on an inventory compiled by Avanti Environmental dated March 11, 1998. PXP submitted this inventory with the application for PTO 9817.

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)

An emission control efficiency of 80-percent is credited to all but "unsafe to monitor" components due to the implementation of a District-approved I&M program consistent with Rule 331 requirements. Detailed fugitive emission calculations are attached in Table 10.1. Ongoing compliance is determined in the field by inspection with an organic vapor analyzer and verification of operator records.

4.4 Tanks/Vessels/Sumps/Separators

4.4.1 Oil-Water Separation and Crude Oil Storage Tanks: The La Purisima Lease utilizes one 1,500 bbl crude storage tank. The tank is a vertical, cone roof tank measuring 21.5 feet diameter by 24 feet high. There is also one 160 bbl LACT control vessel that measures 12 feet diameter by 16 feet high. Both tanks are connected to vapor recovery. Emissions from these tanks are calculated using USEPA AP-42, Chapter 7 - Liquid Storage Tanks (5th Edition, 2/96). Attachment 10.2 contains emission spreadsheets showing the detailed calculations for these tanks.

4.4.2 Pits, Sumps and Well Cellars: The La Purisima Lease is equipped with forty-nine well cellars, one wastewater pit and a covered wastewater pond. Well cellar emissions are assumed to be reduced 70-percent for maintaining the cellars per the requirements of Rule 344. An 85-percent control efficiency is assumed for the covered oil/water separation pond. Fugitive emissions from the wastewater pit are uncontrolled. The wastewater pond and the wastewater pit are operated less than 30-days/year. The emission estimates are based District P&P 6100.060 (*Determination of Fugitive Hydrocarbon Emissions at Oil and Gas Facilities by the CARB/KVB Method - Modified for Revised ROC Definition*). The calculation is:

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

where:

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

Attachment 10.2 contains an emission spreadsheet showing the detailed calculations for the well cellars, pits and sumps.

4.4.3 Waste Water Tanks: The La Purisima Lease uses one vertical, fixed roof wastewater tank. The tank has a 2,000 bbl capacity and measures 29.7 feet in diameter by 16 feet high, and is served by vapor recovery. Emissions from this tank is calculated using the same methodology as pits and sumps and is based on District's 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*). Attachment 10.2 contains an emission spreadsheet showing the detailed calculations for the tank.

4.5 Other Emission Sources

4.5.1 General Solvent Cleaning/Degreasing: Solvent usage (not used as thinners for surface coating) may occur at the facility as part of normal daily operations). The usage includes cold solvent degreasing. Mass balance emission calculations are used assuming all the solvent used evaporates to the atmosphere. The solvent limits in Table 5.2 cannot be exceeded (excluding solvent activities that qualify for the maintenance exemption under Rule 202).

4.5.2 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/PM₁₀ from paint overspray are not calculated due to the lack of established calculation techniques.

- 4.5.3 Abrasive Blasting: Abrasive blasting with CARB certified sands may be performed as a preparation step prior to surface coating. The engines (ICEs) used to power the compressor may be electric or diesel fired. Any ICE used for this purpose will require a permit unless the engine qualifies for a permit exemption. 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 and PM₁₀ when needed for compliance verifications. A PM/PM₁₀ ratio of 1.0 is assumed.

4.6 Vapor Recovery/Control Systems

The vapor recovery system (VRS) collects ROC emissions from the tanks and LACT control vessel. The VRS is equipped with a compressor driven by a 10 hp electric motor. The collected vapors are combined with gas from the gas gathering system and are routed to the Lompoc Oil and Gas Plant. Overall ROC control efficiency for the system is assumed to be 90-percent.

4.7 BACT/NSPS/NESHAP/MACT

To date, this facility has not triggered Best Available Control Technology (BACT), New Source Performance Standards (NSPS) National Emission Standards For Hazardous Air Pollutants (NESHAP) or Maximum Available Control Technology (MACT).

A National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Oil and Natural Gas Production and Natural Gas Transmission and Storage was promulgated on June 17, 1999. As described in section 3.2.4, this facility qualified for the black oil exemption and is required only to maintain the records specified in permit condition 9.B.12.

4.8 CEMS/Process Monitoring/CAM

- 4.8.1 CEMS: There are no CEMS at this facility.

- 4.8.2 Process Monitoring: In many instances, ongoing compliance beyond a single (snap shot) source test is assessed by the use of process monitoring systems. Examples of these monitors include: engine hour meters, fuel usage meters, water injection mass flow meters, flare gas flow meters and hydrogen sulfide analyzers. It is important that they be well maintained and calibrated to ensure that the required accuracy and precision of the devices are within specifications. PXP is required to report oil and gas throughput, however this permit requires no specific monitors.

- 4.8.3 CAM: There are no emission units at this facility subject to the USEPA's Compliance Assurance Monitoring Assurance (CAM) rule.

4.9 Source Testing/Sampling

Source testing and sampling are required in order to ensure compliance with permitted emission limits, prohibitory rules, control measures and the assumptions that form the basis for issuing operating permits. This permit requires no source testing.

At a minimum, the process streams below are required to be sampled and analyzed on a periodic basis, per District Rules and standards:

Produced oil: Annual analysis for API gravity and true vapor pressure.

All sampling and analyses are required to be performed according to District approved procedures and methodologies. Typically, the appropriate ASTM methods are acceptable. For liquids with API gravity over 20, ASTM D323 applies for true vapor pressure (TVP) measurement. In this case, the TVP at the maximum expected temperature shall be calculated from the Reid vapor pressure in accordance with API Bulletin 2518, or equivalent Reid/true vapor pressure correlation. The calculated true vapor pressure is based on the maximum expected operating temperature in the initial crude oil storage tank. TVP sampling methods for liquids with an API gravity under 20^o require specialized procedures per Rule 325.G.2.b. It is important that all sampling and analysis be traceable by chain of custody procedures.

4.10 Part 70 Engineering Review: Hazardous Air Pollutant Emissions

Hazardous air pollutant emissions from the different categories of emission units at the La Purisima 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.

The HAP emission factors are listed in Table 5.4-1. Potential HAP emissions from the facility are computed and listed in Table 5.4-2.

5.0 Emissions

5.1 General

The facility was analyzed to determine all air-related emission sources. Emissions calculations are divided into "permitted" and "exempt" categories. District Rule 202 determines permit-exempt equipment. The permitted emissions for each emissions unit is 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 from the facility. 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. The District uses a computer database to accurately track the emissions from a facility. Attachment 10.4 contains the District's documentation for the information entered into that database.

5.2 Permitted Emission Limits - Emission Units

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

- Nitrogen Oxides (NO_x)³
- Reactive Organic Compounds (ROC)
- Carbon Monoxide (CO)
- Sulfur Oxides (SO_x)⁴
- Particulate Matter (PM)⁵
- Particulate Matter smaller than 10 microns (PM₁₀)
- Greenhouse Gases (GHG)

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, as well as detailed calculation spreadsheets, may be found in Section 4 and Attachments 10.1 and 10.2 respectively. Table 5.1-1 provides the basic operating characteristics. Table 5.1-2 provides the specific emission factors. Tables 5.1-3 and 5.1-4 show 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”.

5.3 Permitted Emission Limits - Facility Totals

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

5.4 Part 70: Federal Potential to Emit for the Facility

Table 5.3 lists the federal Part 70 potential to emit. Coating emissions, although exempt from permit requirements, are included in the federal potential to emit calculation. Fugitive emissions from the La Purisima Lease emissions units are not counted in the federal definition of potential to emit. However, fugitives are counted in the Federal PTE if the facility is subject to any applicable NSPS or NESHAP requirement.

5.5 Part 70: Hazardous Air Pollutant Emissions for the Facility

Hazardous air pollutants (HAP) emission factors, for each type of emissions unit, are listed in Table 5.4-1. Potential HAP emissions, based on the worst-case scenario, are shown in Table 5.4-2.

5.6 Exempt Emission Sources

Per Rule 202, maintenance activities such as painting and surface coating qualify for a permit exemption, but may contribute to facility emissions. Only one piece of combustion equipment at

³ Calculated and reported as nitrogen dioxide (NO₂)

⁴ Calculated and reported as sulfur dioxide (SO₂)

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

the La Purisima Lease, a glycol regenerator that is fired on PUC quality natural gas, is exempt from District permit.

5.7 *Net Emissions Increase Calculation*

The net emissions increase for this facility and the entire stationary source since November 15, 1990 (the day the federal Clean Air Act Amendments were adopted) are shown in the tables below.

Facility Emissions Summary
PXP LaPursima Lease - FID 3069

I. This Projects "I" NEI-90

Permit No.	Date Issued	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr										
ATC 13849-01	8/6/2012	0.00	0.00	12.83	2.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

II. This Facility's "P1s"

Enter all facility "P1" NEI-90s below:

Permit No.	Date Issued	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
ATC 13729	10/28/2011	0.00	0.00	1.76	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ATC 13788	10/27/2011	0.00	0.00	4.52	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ATC 13835	7/5/2012	0.00	0.00	2.64	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ATC 13836	7/6/2012	0.00	0.00	4.16	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals		0.00	0.00	13.08	2.09	0.00							

Notes:
 (1) Facility NEI from IDS.
 (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
 (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

III. This Facility's "P2" NEI-90 Decreases

Enter all facility "P2" NEI-90s below:

Permit No.	Date Issued	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr										
None		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals		0.00											

Notes:
 (1) Facility NEI from IDS.
 (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
 (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

IV. This Facility's Pre-90 "D" Decreases

Enter all facility "D" decreases below:

Permit No.	Date Issued	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr										
ATC 13729	10/28/2011	0.00	0.00	0.44	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals		0.00	0.00	0.44	0.08	0.00							

Notes:
 (1) Facility "D" from IDS.
 (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
 (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

V. Calculated This Facility's NEI-90

Table below summarizes facility NEI-90 as equal to: I+ (P1-P2) -D

Term	NOx		ROC		CO		SOx		PM		PM10	
	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
Project "I"	0.00	0.00	12.83	2.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1	0.00	0.00	13.08	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.44	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FNEI-90	0.00	0.00	25.47	4.35	0.00							

Notes:
 (1) Resultant FNEI-90 from above Section I thru IV data.
 (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
 (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

**Stationary Source NEI-90 Calculations
PXP Point Pedernales Stationary Source**

Facility No.	Facility Name	NOx		ROC		CO		SOx		PM		PM10	
		lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
3069	La Purisima	0.00	0.00	25.47	4.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3095	Lompoc O&G Plant	20.86	2.64	136.98	25.04	12.34	1.98	9.08	0.64	3.10	0.53	3.10	0.53
3309	Jesus Maria "D"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3310	Orcutt Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3802	Eefson Lease	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3832	Jesus Maria "A"	0.00	0.00	2.75	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3837	Lompoc Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3839	Hill Lease	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4417	Arkley Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4218	Lompoc ICEs	5.04	0.96	0.24	0.05	1.20	0.21	0.48	0.07	0.00	0.00	0.00	0.00
8016	Platform Irene	0.07	1.62	4.80	0.90	0.09	0.02	0.11	0.02	0.01	0.00	0.01	0.00
Totals		25.97	5.22	170.23	30.83	13.63	2.21	9.67	0.73	3.11	0.53	3.11	0.53
Notes: <ul style="list-style-type: none"> (1) Facility NEI from IDS. (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding. (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero. 													

**Table 5.1-1
PXP Energy La Purisima Lease: Part 70/PTO 7126-R6
Operating Equipment Description**

Equipment Category	Description	Device Specifications				Usage Data			Maximum Operating Schedule				References	
		APCD Device No.	Feed	Parameter	Size	Units	Capacity	Units	Load	hr	day	qtr		year
				TVP										
Tanks	Crude Tank	2046	Oil	2.420	1,500 bbls	1,500	bbl/day	1.0	1.0	24	2,190	8,760	A	
	Utility Tank	114338	Oil/Water	2.420	1,500 bbls	1,500	bbl/day	1.0	1.0	24	2,190	8,760	A	
	Wastewater Tank	5709	Water	2.420	693 ft ²	30,000	bbl/day	1.0	1.0	24	2,190	8,760	B	
				Service										
Pits and Sumps	Well Cellars	2047	O/W	Primary	1,692 ft ²	--	--	1.0	1.0	24	2,190	8,760	B	
	Wastewater Pit	2044	Water	Tertiary	2,340 ft ²	--	--	1.0	1.0	24	2,190	8,760	B	
	Wastewater Pond	5285	Water	Tertiary	2,475 ft ²	--	--	1.0	1.0	24	720	720	B	
Fugitive Components	Gas/Condensate Service	8703	--	Gas	6,384 clps	--	--	1.0	1.0	24	2,190	8,760	C	
	Oil Service	8753	--	Oil	1,977 clps	--	--	1.0	1.0	24	2,190	8,760	C	
Solvent Usage (a) (b)	Photochemically Reactive		--	--	various	various	--	1.0	1.0	24	2,190	8,760	D	
	Non-Photochemically Reactive		--	--	various	various	--	1.0	1.0	24	2,190	8,760	D	

Notes:

- (a) Solvent use for the Lompoc Oilfield is based on Rule 317 limits.
- (b) PXP Lompoc Oilfield solvent usage is listed in this permit only.

**Table 5.1-2
PXP Energy La Purisima Lease: Part 70/PTO 7126-R6
Equipment Emission Factors**

		Emission Factors								
Equipment Category	Description	APCD Device No.	NO _x	ROC	CO	SO _x	PM	PM ₁₀	Units	
Tanks	Crude Tank	2046	See attached worksheets for emission factors.							
	Utility Tank	114338								
	Wastewater Tank	5709								
Pits and Sumps	Well Cellars	2047	--	0.0941	--	--	--	--	lb/ft ² -day	
	Wastewater Pit	2044	--	0.0058	--	--	--	--	lb/ft ² -day	
	Wastewater Pond	5285	--	0.0058	--	--	--	--	lb/ft ² -day	
Fugitive Components	Gas/Condensate Service	8703	See Table 10.1 for Emission Factors							
	Oil Service	8753								
Solvent Usage	Photochemically Reactive		Solvent emissions permitted at Rule 317 levels.							
	Non-Photochemically Reactive									

**Table 5.1-3
PXP Energy La Purisima Lease: Part 70/PTO 7126-R6
Hourly and Daily Emissions**

Equipment Category	Description	APCD Device No.	NO _x		ROC		CO		SO _x		PM		PM ₁₀		Enforceability	
			lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	lb/hr	lb/day	Type	Basis
Tanks	Crude Tank	2046	--	--	0.16	3.95	--	--	--	--	--	--	--	--	FE	ATC 7126
	Utility Tank	114338	--	--	0.05	1.25	--	--	--	--	--	--	--	--	FE	ATC 13729
	Wastewater Tank	5709	--	--	0.02	0.44	--	--	--	--	--	--	--	--	A	--
Pits and Sumps	Well Cellars	2047	--	--	1.99	47.77	--	--	--	--	--	--	--	--	A	--
	Wastewater Pit	2044	--	--	0.57	13.57	--	--	--	--	--	--	--	--	A	--
	Wastewater Pond	5285	--	--	0.09	2.15	--	--	--	--	--	--	--	--		
Fugitive Components	Gas/Condensate Service		--	--	1.96	46.99	--	--	--	--	--	--	--	--	FE	ATC 9817
	Oil Service		--	--	0.04	0.88	--	--	--	--	--	--	--	--	FE	ATC 9817
Solvent Usage	Photochemically Reactive	8703	--	--	8.00	40.00	--	--	--	--	--	--	--	--	FE	Rule 317
	Non-Photochemically Reactive	8753	--	--	450	3,000	--	--	--	--	--	--	--	--	FE	Rule 317

Notes:

- A = APCD enforceable emission limit.
- FE = Federally enforceable emission limit.

**Table 5.1-4
PXP Energy La Purisima Lease: Part 70/PTO 7126-R6
Quarterly and Annual Emissions**

Equipment Category	Description	APCD Device No.	NO _x		ROC		CO		SO _x		PM		PM ₁₀		Enforceability	
			TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY	Type	Basis
Tanks	Crude Tank	2046	--	--	0.18	0.72	--	--	--	--	--	--	--	--	FE	ATC 7126
	Utility Tank	114338	--	--	0.06	0.23	--	--	--	--	--	--	--	--	A	ATC 13729
	Wastewater Tank	5709	--	--	0.02	0.08	--	--	--	--	--	--	--	--	A	--
Pits and Sumps	Well Cellars	2047	--	--	2.18	8.72	--	--	--	--	--	--	--	--	A	--
	Wastewater Pit	2044	--	--	0.62	2.48	--	--	--	--	--	--	--	--	A	--
	Wastewater Pond	5285	--	--	0.03	0.03	--	--	--	--	--	--	--	--	--	--
Fugitive Components	Gas/Condensate Service		--	--	2.14	8.58	--	--	--	--	--	--	--	--	FE	ATC 9817
	Oil Service		--	--	0.04	0.16	--	--	--	--	--	--	--	--	FE	ATC 9817
Solvent Usage	Photochemically Reactive	8703	--	--	1.83	7.30	--	--	--	--	--	--	--	--	A	--
	Non-Photochemically Reactive	8753	--	--	20.53	82.13	--	--	--	--	--	--	--	--	A	--

Notes:

A = APCD enforceable emission limit.
FE = Federally enforceable emission limit.

Table 5.2
PXP Energy La Purisima Lease: Part 70/PTO 7126-R6
Total Permitted Facility Emissions

A. HOURLY (lb/hr)

Equipment Category	NO _x	ROC	CO	SO _x	PM	PM ₁₀
Tanks	--	0.24	--	--	--	--
Pits and Sumps	--	2.65	--	--	--	--
Fugitive Components	--	1.99	--	--	--	--
Lompoc Oilfield Solvent Usage	--	458.00	--	--	--	--
	0.00	462.87	0.00	0.00	0.00	0.00

B. DAILY (lb/day)

Equipment Category	NO _x	ROC	CO	SO _x	PM	PM ₁₀
Tanks	--	5.64	--	--	--	--
Pits and Sumps	--	63.49	--	--	--	--
Fugitive Components	--	47.87	--	--	--	--
Lompoc Oilfield Solvent Usage	--	3,040.00	--	--	--	--
	0.00	3,157.00	0.00	0.00	0.00	0.00

C. QUARTERLY (tpq)

Equipment Category	NO _x	ROC	CO	SO _x	PM	PM ₁₀
Tanks	--	0.26	--	--	--	--
Pits and Sumps	--	2.83	--	--	--	--
Fugitive Components	--	2.18	--	--	--	--
Lompoc Oilfield Solvent Usage	--	22.36	--	--	--	--
	0.00	27.63	0.00	0.00	0.00	0.00

D. ANNUAL (tpy)

Equipment Category	NO _x	ROC	CO	SO _x	PM	PM ₁₀
Tanks	--	1.03	--	--	--	--
Pits and Sumps	--	11.22	--	--	--	--
Fugitive Components	--	8.74	--	--	--	--
Lompoc Oilfield Solvent Usage	--	89.43	--	--	--	--
	0.00	110.42	0.00	0.00	0.00	0.00

Table 5.3
PXP Energy La Purisima Lease: Part 70/PTO 7126-R6
Federal Potential To Emit

A. HOURLY (lb/hr)

Equipment Category	NO _x	ROC	CO	SO _x	PM	PM ₁₀
Tanks	--	0.24	--	--	--	--
Pits and Sumps	--	2.65	--	--	--	--
Fugitive Components	--	1.99	--	--	--	--
Exempt Surface Coating	--	0.01	--	--	--	--
Exempt Glycol Reboiler	0.15	0.01	0.12	0.02	0.01	0.01
Lompoc Oilfield Solvent Usage	--	458.00	--	--	--	--
	0.15	460.90	0.12	0.02	0.01	0.01

B. DAILY (lb/day)

Equipment Category	NO _x	ROC	CO	SO _x	PM	PM ₁₀
Tanks	--	5.64	--	--	--	--
Pits and Sumps	--	63.49	--	--	--	--
Fugitive Components	--	47.87	--	--	--	--
Exempt Surface Coating	--	0.01	--	--	--	--
Exempt Glycol Reboiler	3.53	0.19	2.97	0.49	0.27	0.27
Lompoc Oilfield Solvent Usage	--	3,040.00	--	--	--	--
	3.53	3,109.33	2.97	0.49	0.27	0.27

C. QUARTERLY (tpq)

Equipment Category	NO _x	ROC	CO	SO _x	PM	PM ₁₀
Tanks	--	0.26	--	--	--	--
Pits and Sumps	--	2.83	--	--	--	--
Fugitive Components	--	2.18	--	--	--	--
Exempt Surface Coating	--	0.01	--	--	--	--
Exempt Glycol Reboiler	0.16	0.01	0.14	0.02	0.01	0.01
Lompoc Oilfield Solvent Usage	--	22.36	--	--	--	--
	0.16	25.47	0.14	0.02	0.01	0.01

D. ANNUAL (tpy)

Equipment Category	NO _x	ROC	CO	SO _x	PM	PM ₁₀
Tanks	--	1.03	--	--	--	--
Pits and Sumps	--	11.22	--	--	--	--
Fugitive Components	--	8.74	--	--	--	--
Exempt Surface Coating	--	0.01	--	--	--	--
Exempt Glycol Reboiler	0.64	0.04	0.54	0.09	0.05	0.05
Lompoc Oilfield Solvent Usage	--	89.43	--	--	--	--
	0.64	101.73	0.54	0.09	0.05	0.05

Table 5.4-1
PXP Energy La Purisima Lease: Part 70/PTO 7126-R6
Equipment Hazardous Air Pollutant Factors

		Emission Factors							
Equipment Category	Description	APCD Device No.	Hexane	Benzene	Toluene	Xylene	Iso-Octane	Units	References
Tanks	Crude Tank	2046	0.1107	0.0271	0.0158	0.0000	0.0000	lb/lb-ROC	CARB (1991) S.P. 297
	LACT Tank	114338	0.1107	0.0271	0.0158	0.0000	0.0000	lb/lb-ROC	CARB (1991) S.P. 297
	Wastewater Tank	5709	0.1107	0.0271	0.0158	0.0000	0.0000	lb/lb-ROC	CARB (1991) S.P. 297
Pits and Sumps	Well Cellars	2047	0.1768	0.0018	0.0000	0.0000	0.1554	lb/lb-ROC	CARB (1991) S.P. 756
	Wastewater Pit	2044	0.1768	0.0018	0.0000	0.0000	0.1554	lb/lb-ROC	CARB (1991) S.P. 756
	Wastewater Pond	5285	0.1768	0.0018	0.0000	0.0000	0.1554	lb/lb-ROC	CARB (1991) S.P. 756
Fugitive Components	Gas/Condensate Service	8703	0.1768	0.0018	0.0000	0.0000	0.1554	lb/lb-ROC	CARB (1991) S.P. 756
	Oil Service	8753	0.1768	0.0018	0.0000	0.0000	0.1554	lb/lb-ROC	CARB (1991) S.P. 756

**Table 5.4-2
PXP Energy La Purisima Lease: Part 70/PTO 7126-R6
Daily and Annual Hazardous Air Pollution Emissions**

Equipment Category	Description	APCD Device No.	Hexane		Benzene		Toluene		Xylene		Iso-Octane	
			lb/day	ton/year	lb/day	ton/year	lb/day	ton/year	lb/day	ton/year	lb/day	ton/year
Tanks	Crude Tank	2046	0.44	0.08	0.11	0.02	0.06	0.01	0.00	0.00	0.00	0.00
	LACT Tank	114338	0.14	0.03	0.03	0.01	0.02	0.00	0.00	0.00	0.00	0.00
	Wastewater Tank	5709	0.05	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Pits and Sumps	Well Cellars	2047	8.44	1.54	0.09	0.02	0.00	0.00	0.00	0.00	7.42	1.35
	Wastewater Pit	2044	2.40	0.44	0.02	0.00	0.00	0.00	0.00	0.00	2.11	0.38
	Wastewater Pond	5285	0.38	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.06
Fugitive Components	Gas/Condensate Service	8703	8.31	1.52	0.08	0.02	0.00	0.00	0.00	0.00	7.30	1.33
	Oil Service	8753	0.16	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.02
Totals			20.31	3.71	0.35	0.06	0.09	0.02	0.00	0.00	17.30	3.16

Note:

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 the La Purisima Lease.

6.2 Increments

An air quality increment analysis has not been required for the La Purisima Lease.

6.3 Monitoring

Air quality monitoring is not required for the La Purisima Lease.

6.4 Health Risk Assessment

A health risk assessment has not been performed for the combined PXP Lompoc/Point Pedernales Stationary Source. However, a health risk assessment was performed for the Lompoc Stationary Source prior to being combined with the Point Pedernales Stationary Source.

The PXP Lompoc Stationary Source was subject to the Air Toxics “Hot Spots” Program (AB 2588). A health risk assessment (HRA) for the Lompoc facilities was prepared by the District on May 31, 1996 under the requirements of the AB 2588 program. The HRA is based on 1994 toxic emissions inventory data submitted to the District.

Based on the 1994 toxic emissions inventory, a cancer risk of about 2 per million at the property boundary was estimated for the PXP Lompoc Stationary Source. This risk is primarily due to benzene emitted at the site. Additionally, chronic and acute noncarcinogenic risks of 0.08 and 0.06 have been estimated by the District and are mainly due to H₂S emissions. Approximately 527 pounds of benzene and about 310 pounds of H₂S were emitted from the PXP Lompoc Stationary Source in 1994. The cancer and noncancer risk projections are less than the District’s AB 2588 significance thresholds of 10 in a million and 1.0, respectively.

7.0 CAP Consistency, Offset Requirements and ERCs

7.1 General

The stationary source is located in an ozone nonattainment area. Santa Barbara County has not attained the state ozone ambient air quality standards. The County also does not meet the state PM₁₀ ambient air quality standards. Therefore, emissions from all emission units at the stationary source and its constituent facilities must be consistent with the provisions of the USEPA and State approved Clean Air Plans (CAP) and must not interfere with progress toward attainment of federal and state ambient air quality standards. Under District regulations, any modifications at the source that result in an emissions increase of any nonattainment pollutant exceeding 25 lbs/day must apply BACT (NAR). Increases above offset thresholds will trigger offsets at the source or elsewhere so that there is a net air quality benefit for Santa Barbara County. These offset threshold levels are 55 lbs/day for all non-attainment pollutants except PM₁₀, for which the level is 80 lbs/day.

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.

On January 20, 2011 the District Board adopted the 2010 Clean Air Plan. The 2010 Plan provides a three-year update to the 2007 Clean Air Plan. As Santa Barbara County has yet to attain the state eight-hour ozone standard, the 2010 Clean Air Plan demonstrates how the District plans to attain that standard. The 2010 Clean Air Plan therefore satisfies all state triennial planning requirements.

7.3 Offset Requirements

District rules and regulations require that emissions from the entire project, when considered in conjunction with emission reductions for existing sources, result in a Net Air Quality Benefit. In addition, project emissions must be consistent with the AQAP and not interfere with reasonable further progress towards attainment and maintenance of ozone standards.

The Point Pedernales Project originally triggered offsets, however, during initial permitting, the Lompoc Oil Field was not associated with the project and was a separate stationary source. The primary project components were the LOGP and Platform Irene. Due to installation of the gas plant at the LOGP in 1996 however, operations at the LOF and LOGP became interrelated and subsequently, the District made a determination that the LOF and the Point Pedernales Project constituted a single stationary source. As a result, the existing NEI (FNEI90) associated with the LOF facilities at that time was required to be offset. A detailed discussion of these emissions and offsets is provided in Section 7.3.5 of PTO 6708. Since ROC emissions for the stationary source are currently over 55 lb/day, all project increases in ROC emissions are subject to offsets.

7.4 Emission Reduction Credits

This lease provides emission reduction credits (ERCs) to PXP's Point Pedernales Project. These ERCs are provided through:

- Electrification of the gas compressor. This provides 8.39 tons/quarter of NO_x ERCs and 4.92 tons/quarter of ROC ERCs.
- Electrification of the engines serving wastewater injection wells #20 and #53. This provides 4.26 tons/quarter of NO_x ERCs and 0.25 tons/quarter of ROC ERCs.
- Installation of vapor recovery on the glycol regenerator vent. This provides 2.70 tons/quarter of ROC ERCs.

8.0 Lead Agency Permit Consistency

The Santa Barbara County Planning and Development Department is the lead agency for this project. To the District's knowledge, this permit is consistent with all provisions of the lead agency permit.

9.0 Permit Conditions

This section lists the applicable permit conditions for the La Purisima 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 La Purisima 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 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. *[Re: 40 CFR Part 70.6, District Rules 1303.D.1]*
- (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.

- 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, 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 **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 apply for renewal of the Part 70 permit no later than 180 days before the permit expiration date. 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.6 **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 **Prompt Reporting of Deviations:** The permittee shall submit a written report to the District documenting each and every deviation from the 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.8 **Reporting Requirements/Compliance Certification:** The permittee shall submit compliance certification reports to the USEPA and the Control Officer every six-months. 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 1st and March 1st, 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.9 **Federally-Enforceable Conditions:** Each federally-enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the District-only enforceable section of this permit are federally-enforceable or subject to the public/USEPA review. [Re: CAAA, § 502(b)(6), 40 CFR 70.6]
- A.10 **Recordkeeping Requirements:** Records of required monitoring information shall 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
 - (f) The operating conditions as existing at the time of sampling or measurement
- The records (electronic or hard copy), 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 PXP and shall be made available to the District upon request. [Re: District Rule 1303.D.1.f, 40CFR70.6(a)(3)(ii)(A)]
- A.11 **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 which 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 and revise/voke/reissue 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 a permit is reopened, the expiration date does not change. Thus, if the permit is reopened, and revised, then it will be reissued with the expiration date applicable to the re-opened permit. [*Re: 40 CFR 70.7, 40 CFR 70.6*]

9.B. Generic Conditions

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

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

- (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection B.2(a) above. *[Re: District Rule 302]*
- B.3 **Nuisance (Rule 303):** No pollutant emissions from any source at PXP shall create nuisance conditions. Operations shall not endanger health, safety or comfort, nor shall they damage any property or business. *[Re: District Rule 303]*
- B.4 **Specific Contaminants (Rule 309):** PXP shall not discharge into the atmosphere from any single source sulfur compounds and combustion contaminants (particulate matter) in excess of the applicable standards listed in Sections A through E of Rule 309. *[Re: District Rule 309]*
- B.5 **Organic Solvents (Rule 317):** PXP shall comply with the emission standards listed in Rule 317.B. Compliance with this condition shall be based on PXP's compliance with Condition C.5 of this permit. *[Re: District Rule 317]*
- B.6 **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 PXP's compliance with Condition C.5 of this permit and facility inspections. *[Re: District Rule 322]*
- B.7 **Architectural Coatings (Rule 323):** PXP shall comply with the coating ROC content and handling 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 PXP's compliance with Condition C.5 of this permit and facility inspections. *[Re: District Rules 323, 317, 322, 324]*
- B.8 **Disposal and Evaporation of Solvents (Rule 324):** PXP 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 PXP's compliance with Condition C.5 of this permit and facility inspections. *[Re: District Rule 324]*
- B.9 **Adhesives and Sealants (Rule 353):** PXP 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 PXP uses such materials from containers larger than 16 fluid ounces and the materials are not exempt by Rule 353.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.10 **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]*

- B.11 **Emergency Episode Plan (Rule 603):** During emergency episodes, PXP shall implement the Emergency Episode Plan approved on December 12, 2000.
- B.12 **Oil and Natural Gas Production MACT:** PXP shall comply with the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Oil and Natural Gas Production and Natural Gas Transmission and Storage (promulgated June 17, 1999). At a minimum, PXP shall maintain records in accordance with 40 CFR Part 63, Subpart A, Section 63.10(b) (1) and (3). *[Re: 40 CFR 63, Subpart HH]*
- B.13 **Emergency Episode Plans (Rule 603):** During emergency episodes, the permittee shall implement the Emergency Episode Plan dated March 30, 1999. *[Reference District Rule 603]*

9.C Requirements and Equipment Specific Conditions

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

C.1 **Fugitive Hydrocarbon Emissions Components:** The following equipment are included in this emissions unit category:

District Device No.	Equipment
8715, 8716, 8719-8722	6,464 Component Leak-Paths in Gas/Gas Condensate Service
8703, 8705, 8708, 8709, 8711-8713	1,972 Component Leak-Paths in Oil Service

- (a) Emission Limits: Mass emission for the component leak-paths listed above shall not exceed the limits listed in Tables 5.1-3 and 5.1-4.
- (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 PXP shall meet the following requirements:
 - (i) Component Leak-Path Count. The total component and component leak-path counts listed in the latest fugitive I&M inventory shall not exceed the line item component and component leak-path counts in Table 5-1 of this permit by more than five-percent. This five-percent range is to allow for small differences due to component leak-path counting methods, and does not authorize additional component leak-paths.
 - (ii) VRS Use. The vapor recovery/gas collection (VRGC) system shall be in operation when the equipment connected to the VRGC system at the facility is in use. The VRGC system includes piping, valves, and flanges associated with the VRGC system. The VRGC system shall be maintained and operated to minimize the release of emissions from all systems, including pressure relief valves and gauge hatches.
 - (iii) I&M Program. The District-approved I&M Plan for this 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. An updated Fugitive Emissions Inspection and Maintenance Plan must be submitted to the District for review and approval within one calendar quarter whenever there is a change in the component list or diagrams.
 - (iv) Venting. All routine venting of hydrocarbons shall be routed to either a sales compressor, flare header, injection well or other District-approved control device.
- (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. All inspection and repair records shall be retained at the source for a minimum of five years. The equipment listed in this section are subject to all the recordkeeping requirements listed in District Rule 331.G.
- (e) Reporting. On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the District. The report must list all data required by the *Semi-Annual Compliance Verification Reports* condition of this permit. [Re: ATC 9817, District Rules 331 and 1303, 40 CFR 70.6]

C.2 **Petroleum Storage and Processing Tanks:** The following equipment is included in this emissions category:

District Device No.	Equipment Name; Capacity
2046	Crude Oil Tank, 1,500 bbl capacity
5784	LACT Control Tank, 160 bbl capacity

- (a) Emission Limits. Mass emission for the crude oil tank listed above shall not exceed the limits listed in Tables 5.1-3 and 5.1-4.
- (b) Operational Limits.
 - (i) All process operations from the equipment listed in this section shall meet the requirements of District Rules 325 Sections D, E, F and G. Rule 325.D requires the tanks to be connected to vapor collection and removal device(s) prior to their operation, and the vapor removal efficiencies to be no less than 90-percent. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.
- (c) Monitoring. The equipment listed in this section shall be subject to all the monitoring requirements of District Rule 325.H. The test methods outlined in District Rule 325.G shall be used, when applicable. In addition, PXP shall, for all degassing events, monitor the volume purged, characteristics of the vapor purged, and control device/method used.
- (d) Recordkeeping. The equipment listed in this section is subject to all the recordkeeping requirements listed in District Rule 325.F. In addition, PXP shall maintain a log of all degassing events.
- (e) Reporting. On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the District. The report must list all data required by the *Semi-Annual Compliance Verification Reports* condition of this permit. [Re: ATC 7126, 40 CFR 70.6, District Rules 206, 325, 343 and 1303]

C.3 **Wastewater Tanks, Sumps and Pits:** The following equipment are included in this emissions category:

District Device No.	Equipment Name; Capacity, Size
5709	Wastewater Tank, 2,000 bbl capacity
2044	Wastewater Pit
5285	Wastewater Pond

- (a) Emission Limits. Not applicable.
- (b) Operational Limits.
- (i) All process operations for the equipment listed in this section shall meet the requirements of District Rules 325 and 344. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit.
- (ii) The wastewater pond and wastewater pit shall each be operated less than 30-days/year. Operation for any portion of a day constitutes a full day's use.
- (c) Monitoring. The wastewater tank listed in this section is subject to all the monitoring requirements of District Rule 325.H. The test methods outlined in District Rule 325.G shall be used, when applicable. In addition, PXP shall perform the following compliance monitoring:
- (i) For all degassing events, monitor the volume purged, characteristics of the vapor purged, and control device/method used.
- (d) Recordkeeping. The tank listed in this section is subject to all the recordkeeping requirements listed in District Rule 325.F. In addition, PXP shall record the following:
- (i) PXP shall maintain a log of all degassing events, and record all the parameters listed in Section 9.C.3.(c)(i) above.
- (ii) PXP shall maintain a log indicating the days that the wastewater pond and the wastewater pit have been operated. The log shall be made available to the District upon request.
- (e) Reporting. On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the District. The report must list all data required by the *Semi-Annual Compliance Verification Reports* condition of this permit.
[Re: 40 CFR 70.6, District Rules 325, 344 and 1303.D.1.f]

C.4 **Well Cellars:** The following equipment are included in this emissions category:

District Device No.	Equipment Name
2048	Well Cellars (47)

- (a) Emission Limits. Not applicable.
- (b) Operational Limits. All process operations from the equipment listed in this section shall meet the requirements of District Rule 344, including the following:
 - (i) A person shall not open any valve at the wellhead without using a portable container to catch and contain any organic liquid that would otherwise drop on the ground or into the well cellar. Such container shall be kept closed when not in use.
 - (ii) Immediately before a well is steamed or after a well head is steam cleaned, the well cellar in which it is located shall be pumped out.
 - (iii) Neither of the following conditions shall occur unless the owner or operator discovered the condition and the well cellar is pumped within 7-days of discovery:
 - (a) liquid depth exceeding 50-percent of the depth of the well cellar.
 - (b) oil/petroleum depth exceeding 2-inches.

If a well cellar cannot be accessed by a vacuum truck due to muddy conditions, the well cellar shall be pumped as soon as it becomes accessible.
- (c) Monitoring. PXP shall inspect the well cellars 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 following information relating to detection of conditions requiring pumping of a well cellar as required in Section D.3.c shall be recorded for each detection:
 - (i) the date of the detection
 - (ii) the name of the person and company performing the test or inspection
 - (iii) the date and time the well cellar is pumped
- (e) Reporting. None

[Re: District Rules 344.D.3 and 344.G.2, 40 CFR 70.6]

C.5 Solvent Usage: The following items are included in this emissions unit category: Photochemically reactive solvents, surface coatings and general solvents.

- (a) Emission Limits. The following solvent emission limits are federally-enforceable for the entire stationary source:

Solvent Type	lbs/hour	lbs/day
Photochemically Reactive	8 lbs/hour	40 lbs/day
Non-Photochemically Reactive	450 lbs/hour	3,000 lbs/day

- (b) Operational Limits. Use of solvents for cleaning/degreasing shall conform to the requirements of District Rules 317, 322, 323 and 324. Compliance with these rules shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit and facility inspections.

- (i) *Containers.* Vessels or containers used for storing materials containing organic solvents shall be kept closed unless adding to or removing material from the vessel or container.
 - (ii) *Materials.* All materials that have been soaked with cleanup solvents shall be stored, when not in use, in closed containers that are equipped with tight seals.
 - (iii) *Solvent Leaks.* Solvent leaks shall be minimized to the maximum extent feasible or the solvent shall be removed to a sealed container and the equipment taken out of service until repaired. A solvent leak is defined as either the flow of three liquid drops per minute or a discernible continuous flow of solvent.
 - (iv) *Reclamation Plan.* PXP 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. PXP 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) Monitoring. none
- (d) Recordkeeping. PXP shall record in a log the following on a monthly basis for each solvent 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 manner readily accessible to District inspection. For the leases in the Lompoc Oilfield, the permittee may keep the log of solvent/coating use on a field-wide basis. The emissions for each lease may be calculated by proportioning the number of active wells per lease by the total solvent emissions of the Lompoc Oilfield.
- (e) Reporting. On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the District. The report must list all data required by the *Semi-Annual Compliance Verification Reports* condition of this permit. [Re: 40 CFR 70.6, District Rules 317, 322,323, 324]

C.6 **Recordkeeping:** PXP shall maintain all records and logs required by this permit or any applicable federal rule or regulation for a minimum of five calendar years from the date of information collection and log entry at the lease. These records or logs shall be readily accessible and be made available to the District upon request.
[Re: 40 CFR 70.6, District Rule 1303]

C.7 **Requirements for Produced Gas:** The emissions of produced gas shall be controlled at all times using a properly maintained and operated system that directs all produced gas, except gas used in a tank battery vapor recovery system, to one of the following: (a) a system handling gas for fuel, sale, or underground injection; or (b) a flare that combusts reactive organic compounds; or (c) a device with an ROC vapor removal efficiency of at least 90-percent by weight. The

provisions of this condition shall not apply to wells which are undergoing routine maintenance.
 [Re: District Rule 325]

C.8 **Semi-Annual Monitoring/Compliance Verification Reports:** PXP shall submit a report to the District every six-months to verify compliance with the emission limits and other requirements of this permit. 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 1st and March 1st, respectively, each year, and 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. The report shall include the following information:

- (a) Rule 331 fugitive hydrocarbon I&M program data:
 - inspection summary.
 - record of leaking components.
 - record of leaks from critical components.
 - record of leaks from components that incur five repair actions within a continuous 12-month period.
 - record of component repair actions including dates of component re-inspections.
- (b) *Surface Coating and Solvent Usage.* On a monthly basis the amount of surface coating/solvent used field-wide in the Lompoc Oilfield; the percentage of ROC by weight (as applied); the surface coating/solvent density; the amount of solvent reclaimed; whether the surface coating/solvent is photochemically reactive; and, the resulting emissions of ROC and photochemically reactive surface coatings/solvents to the atmosphere in units of pounds per month.

C.9 **Emission Reduction Credits:** The following equipment are included in this emissions unit category:

District Device No.	Equipment
2034	Glycol Reboiler
2048	Water Injection Wells #20 and #53
101592	Gas Compressors

- (a) Emission Limits. Not applicable.
- (b) Operational Limits. The emission reductions created by the removal of three internal combustion engines driving gas compressors (previously subject to PTO 1812) and two wastewater injection wells, and the addition of vapor recovery to the glycol reboiler are used as offsets by the PXP Company to meet the requirements of the Point Pedernales Project (PTO 6708). The emission reduction credits are valid for the life of the Point Pedernales Project. In addition PXP shall meet the following requirements:
 - (i) *Dedication of ERCs.* This permit does not authorize the dedication of these emission reductions to any other project or permit without prior approval of the District. The District will assess any such proposal in accordance with rules and regulations in

effect at the time an application for such other project is deemed complete or at a later date if provided for by District Rules.

- (ii) *Glycol Regenerator (Reboiler)*. The vapor recovery system serving the glycol regenerator shall be maintained in a vapor tight condition. Vapor tight is defined as a reading of less than 10,000 ppm (as methane) at a distance of 1-centimeter using a flame ionization detector.

The total sulfur and hydrogen sulfide (H₂S) content (calculated as H₂S at standard conditions, 60° F and 14.7 psia) of the PUC quality natural gas fuel shall not exceed 80 ppm_v and 4 ppm_v respectively. Compliance with this condition shall be based on analyses provided by the gas utility.

- (iii) *Gas Compressors*. PXP shall only operate electrically-driven gas compressors at the La Purisima Lease.
- (iv) *Wells #20 and #53*. PXP shall use electrically-driven motors for any injection pumps associated with wells #20 and #53. If PXP shifts operations associated with these wells to other wells, then any injection pumps used on the other wells shall be driven by electric motors.
- (v) *Emission Reduction Credits: Real, Surplus, Quantifiable and Enforceable*. The emission reductions created by the control of the glycol reboiler vent and the electrification of the gas compressors and pumps on wells #20 and #53 are for the use as offsets by the PXP Company to meet the requirements under PTO 6708 for the Point Pedernales Project. Emission reduction measures (i.e. vapor recovery) implemented to create the required emission reductions shall be in place and maintained for the life of the Project.

To assure that offsets are real, quantifiable, surplus and enforceable, PXP shall not utilize a shift in load from the controlled equipment subject to this permit to other uncontrolled point sources at the stationary source as a means of generating additional emission reduction credits (ERCs). For the purposes of this condition, shift in load is defined as a redirecting of produced fluids from a controlled source to an uncontrolled source for the sole purpose of increasing the uncontrolled source baseline throughput resulting in the generation of false surplus ERC's. If such shift in load does occur, the increased emissions at the uncontrolled point source shall not be considered in any baseline calculation for possible ERC for that uncontrolled point source and the ERCs provided by this permit to the Point Pedernales project shall become invalid.

- (c) Monitoring. The glycol reboiler vapor recovery system is 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. All inspection and repair records made to the glycol reboiler vapor recovery system shall be retained at the source for a minimum of five years. The glycol reboiler vapor recovery system is subject to all the recordkeeping requirements listed in District Rule 331.G.

C.10. **Emission Reduction Credits – Vessel V-14 / Pig Receiver**. The pig receiver, associated V-14 gas/liquids separator (District #101605), as well as, the fugitive emission components associated with these units, located on the 4-inch gas line just northeast of the LOGP which delivers

produced gas from the Lompoc Oil Field to the LOGP, shall be permanently removed from service. Any future use or installation of this equipment may be subject to ATC permit. The conditions contained in DOI #0056 (and all updates thereof) are hereby incorporated by reference as an enforceable part of this permit.

9.D District-Only Conditions

The following section lists permit conditions that are not federally-enforceable (i.e., not enforceable by the USEPA or the public). However, these conditions are enforceable by the District and the State of California. These conditions have been determined as being necessary to ensure that operation of the facility complies with all applicable local and state air quality rules, regulations and laws. Failure to comply with any of these conditions shall be a violation of District Rule 206, this permit, as well as any applicable section of the California Health & Safety Code.

- D.1 **Severability:** In the event that any condition herein is determined to be invalid, all other conditions shall remain in force
- D.2 **Compliance:** Nothing contained within this permit shall be construed as allowing the violation of any local, state or federal rules, regulations, air quality standards or increments.
- D.3 **Facility Throughput Limitations:** The La Purisima Lease production shall be limited to a monthly average of 3,000 barrels of (dry) oil per day and 2,000,000 SCF of gas per day. PXP shall record in a log the volumes of oil and gas produced and the actual number of days in production per month. The above limits are based on actual days of operation during the month.
- D.4 **Abrasive Blasting Equipment:** All abrasive blasting activities performed on the La Purisima Lease shall comply with the requirements of the California Administrative Code Title 17, Sub-Chapter 6, Sections 92000 through 92530.
- D.5 **Process Stream Sampling and Analysis:** PXP shall sample analyze the process streams listed in Section 4.9 of this permit according to the methods and frequency detailed in that Section. All process stream samples shall be taken according to District approved ASTM methods and must follow traceable chain of custody procedures.
- D.6 **Annual Compliance Verification Reports:** PXP shall submit a report to the District, by March 1st each year containing the information listed below and shall document compliance with all applicable permit requirements. 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. Pursuant to Rule 212, the annual report shall include a completed *District Annual Emissions Inventory* questionnaire or alternatively, the questionnaire may be electronically submitted/completed via the District website. The report shall include the following information:
 - (a) API gravity, true vapor pressure and storage temperature of the oil.
 - (b) Oil processed through the tank battery along with the number of days per month of production.
 - (c) Breakdowns and variances reported/obtained per Regulation V along with the excess emissions that accompanied each occurrence.

- (d) The ROC and NO_x emissions from all permit-exempt activities (tons per year by device/activity).
 - (e) The annual emissions totals of all pollutants in tons per year for each emission unit and summarized for the entire facility.
 - (f) A copy of the odor log required by Condition 9.D.9
- D.7 **Mass Emission Limitations:** Mass emissions for each equipment item (i.e., emissions unit) associated with the La Purisima Lease shall not exceed the values listed in Table 5.1-3 and 5.1-4. Emissions for the entire facility shall not exceed the total limits listed in Table 5.2.
- D.8 **External Combustion Units - Permits Required.**
- (a) An ATC/PTO permit shall be obtained prior to installation of any grouping of Rule 360 applicable boilers or hot water heaters whose combined system design heat input rating exceeds 2,000 MMBtu/hr.
 - (b) An ATC permit shall be obtained prior to installation, replacement, or modification of any existing Rule 361 applicable boiler or water heater rated over 2,000 MMBtu/hr.
 - (c) An ATC shall be obtained for any size boiler or water heater if the unit is not fired on natural gas or propane except as provided for by District Rule 202.L.15 and L.16.
- D.9 **Notification of Conversion of Water Disposal Well:** The District shall be notified within three (3) business days of the conversion of any water disposal from water disposal back to its former status as a well in oil and gas service. Notification shall include details of all activities involved with the conversion of the well and subsequent production of hydrocarbons. Initial inspections of all associated fugitive I&M components shall be conducted within seven (7) days of returning the well to oil and gas service.
- D.10 **Grounds for Revocation:** Failure to abide by and faithfully comply with this permit or any Rule, Order or Regulation shall constitute grounds for the APCO to petition for permit revocation pursuant to California Health & Safety Code Section 42307 *et seq.*
- D.11 **Odor Log/Monitoring:** The permittee shall maintain a log that records the following:
- (a) Date, time, location, and description of any odor complaints received that are associated with leases in the Lompoc Oil Field.
 - (b) A written account of the events and actions taken to isolate odors, identify the sources, and any mitigation action(s) taken.
 - (c) Identification of the origin of the odor, if determined.

These records shall be maintained at all times, and be made available to the District upon request.

If odor complaints occur and the District determines that the source of the odors can reasonably be attributed to operations at the Lompoc Oil Field leases, the District may require additional odor monitoring stations at the property boundary to assure compliance with Rule 310. *[Re: District Rules 303 and 310]*

D.12 **Odorous Organic Sulfides (Rule 310):** PXP shall not discharge into atmosphere H₂S and organic sulfides that result in a ground level impact beyond the PXP property boundary in excess of either 0.06 ppmv averaged over 3 minutes and 0.03 ppmv averaged over 1 hour. *[Re: District Rule 310]*

D.13 **Documents Incorporated by Reference:** The documents listed below, including any District-approved updates thereof, are incorporated herein and shall have the full force and effect of a permit condition for this operating permit. These documents shall be implemented for the life of the Project and shall be made available to District inspection staff upon request.

Fugitive Inspection and Maintenance Plan (October 2001)

Emergency Episode Plan (December 2003)

Air Pollution Control Officer

Date

NOTES:

- (a) This permit supersedes all previous District PTO permits issued for the La Purisima Lease
- (b) Permit Reevaluation Due Date: December 2015
- (c) Part 70 Operating Permit Expiration Date: December 2015

10.0 Attachments

10.1 Emission Calculation Documentation

10.2 Emission Calculation Spreadsheets

10.3 Fee Calculations

10.4 IDS Database Emission Tables

10.5 Equipment List

10.6 Well List

10.1 Emission Calculation Documentation PXP La Purisima Lease

This attachment contains all relevant emission calculation documentation used for the emission tables in Section 5. Refer to Section 4 for the general equations. Detailed calculation spreadsheets are attached as Attachment 10.2. The letters A - D refer to Tables 5.1-1 and 5.1-2.

Reference A - Petroleum Storage Tanks

The hourly/daily/annual emissions for the petroleum storage tanks is based on USEPA AP-42 Chapter 7, Liquid Storage Tanks (5th Edition, 2/96)

Reference B - Pits, Sumps and Wastewater Tanks

The maximum operating 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)*;

Calculations are based on surface area of emissions noted in the inspector's report;

The wastewater tank is classified as in secondary service and heavy oil service;

The wastewater pit and pond are classified as tertiary service, heavy oil service and emergency use only (less than 30 days/year each);

The THC Speciation is based on CARB profiles # 529, 530, 531, 532; the ROC/TOC ratio is based on the District's guideline "*VOC/ROC Emission Factors and Reactivities for Common Source Types*" Table dated 07/13/98 (version 1.1).

Reference C - Pipeline Components Emitting Fugitive ROCs

Emission factors are based on the *District P&P 6100.061* guidelines.

Component leak-path counts were provided by Avanti Environmental (March 11, 1998) and were included with the application for PTO 9817.

An 80% reduction in fugitive emissions was assumed due to the implementation of a fugitive inspection and maintenance plan pursuant to Rule 331.

Reference D - Solvents

All solvents not used to thin surface coatings are included in this equipment category. Daily and annual emission rates assumed to be minimal (0.01 lb/day, 0.01 TPY)

10.2 Emission Calculation Spreadsheets

- A. Table 10.1 – Fugitive ROC Emission Calculations
- B. Crude Oil Tank
- C. LACT Tank
- D. Pits and Sumps
- E. Glycol Reboiler (Exempt)

FUGITIVE HYDROCARBON CALCULATIONS - CARB/KVB METHOD

Page 1 of 2

Attachment:	D
Company:	PXP Energy
PTO #:	7126
Facility:	La Purisima Lease
Date:	1-Dec-09

Version: fhc-kvb2.xls
Date: 1-Dec-06

Reference: CARB speciation profiles #s 529, 530, 531, 532

Data	Value	Units
Number of Active Wells at Facility	0	wells
Facility Gas Production	2,000,000	scf/day
Facility Dry Oil Production	3000	bbls/day
Facility Gas to Oil Ratio (default to 501)	667	scf/bbl
API Gravity	21	degrees API
Facility Model Number	5	dimensionless
Steam Drive Wells with Control Vents	0	lb/day-well
Steam Drive Wells with Uncontrol Vents	0	lb/day-well
Cyclic Steam Drive Wells with Control Vents	0	lb/day-well
Cyclic Steam Drive Wells with Uncontrol Vents	0	lb/day-well
Composite Valve and Fitting Emission Factor	2.8053	lb/day-well

ROC Emission Calculation Results Table

	Reactive Organic Compounds		
	lbs/hr	lbs/day	tons/year
Valves and Fittings ^(a)	0.00	0.00	0.00
Sumps, Wastewater Tanks and Well Cellars ^(b)	2.75	65.96	12.04
Oil/Water Separators ^(b)	0.00	0.00	0.00
Pumps/Compressors/Well Heads ^(a)	0.00	0.00	0.00
Enhanced Oil Recovery Fields	0.00	0.00	0.00
Total Facility FHC Emissions (ROC)	2.75	65.96	12.04

a: Emissions amount reflect an 80% reduction due to Rule 331 implementation.

b: Emissions reflect control efficiencies where applicable.

*: Due to rounding, the totals may not appear correct

Lease Model	Valve	Fitting	Composite	
	ROG Emission Factor Without Ethane	ROG Emission Factor Without Ethane	ROG Emission Factor Without Ethane	
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.

Pumps, Compressors, and Well Heads

Number of Wells	0	wells
Wellhead emissions	0	ROC (lb/well-day)
FHC from Pumps	0	ROC (lb/well-day)
FHC from Compressors	0	ROC (lb/well-day)
Total:	0.0000	ROC (lb/well-day)

FUGITIVE HYDROCARBON CALCULATIONS - CARB/KVB METHOD

Page 2 of 2

Sumps, Uncovered Wastewater Tanks, and Well Cellars

Efficiency Factor: varies (70% for well cellars and sumps, 0% for uncovered WW tanks)

Unit Type/Emissions Factor

Primary 0.0941 (lb ROC/ft²-day)

Secondary 0.0126 (lb ROC/ft²-day)

Tertiary 0.0058 (lb ROC/ft²-day)

Surface Area and Type (emissions in lbs/day)

Description/Name	Number	Area (ft ²)	Primary	Secondary	Tertiary
Well Cellars ^(a)	49	1,764	49.80		
Wastewater Pit	1	2,340			13.57

(a) A 70% reduction is applied for implementation of Rule 344 (Sumps, Pits, and Well Cellars). 49.80 0.00 13.57

Covered Wastewater Tanks

Efficiency Factor: 85%

Unit Type/Emissions Factor

Primary 0.0941 (lb ROC/ft²-day)

Secondary 0.0126 (lb ROC/ft²-day)

Tertiary 0.0058 (lb ROC/ft²-day)

Surface Area and Type (emissions in lbs/day)

Description/Name	Area (ft ²)	Primary	Secondary	Tertiary
Wastewater Pond	2,475		0.00	2.15

0.00 0.00 2.15

Covered Wastewater Tanks Equipped with Vapor Recovery

Efficiency Factor: 95%

Unit Type/Emissions Factor

Primary 0.0941 (lb ROC/ft²-day)

Secondary 0.0126 (lb ROC/ft²-day)

Tertiary 0.0058 (lb ROC/ft²-day)

Surface Area and Type (emissions in lbs/day)

Description/Name	Area (ft ²)	Primary	Secondary	Tertiary
Wastewater Tank	692.79		0.44	0.00

0.00 0.44 0.00

Oil/Water Separators

Efficiency Factor: varies (85% for cover, 95% for VRS, 0% for open top)

Emissions Factor: 560 (lb ROC/MM Gal)

Description/Name	TP-MM Gal	Type (emissions in lbs/day)			Total lb/day
		Equipped with Cover	Equipped with VRS	Open Top	
		0.00	0.00	0.00	
		0.00	0.00	0.00	
		0.00	0.00	0.00	
		0.00	0.00	0.00	0.00

Attachment:

Date: 08/20/09

BOILER / STEAM GENERATOR CALCULATION WORKSHEET (ver. 6.0)

DATA

Permit No.	7126	
Owner/Operator	Nuevo	
Facility/Lease	La Purisima	
Boiler Type	Firetube	
Boiler Mfg.	no data	
Boiler Model No.	no data	
Boiler Serial/ID No.	no data	
Boiler Horsepower	no data	Bhp
Burner Type	Gas	
Burner Mfg.	no data	
Burner Model No.	no data	
Max. Firing Rate of Burner	1.500	MMBtu/hr
Max. Annual Heat Input	13,140.000	MMBtu/yr
Daily Operating schedule	24	hrs/day
Yearly Load factor (%)	100	%
Fuel Type	PUC Natural Gas	
High Heating Value	1,050	Btu/scf
Sulfur Content of Fuel	80.00	ppmvd as H2S
Nitrogen Content of Fuel	-	wt. % N
Boiler Classification	Commercial	
Firing Type	Other Type	
PM Emission Factor	0.0075	lb/MMBtu
PM ₁₀ Emission Factor	0.0075	lb/MMBtu
NO _x Emission Factor	0.0980	lb/MMBtu
SO _x Emission Factor	0.0137	lb/MMBtu
CO Emission Factor	0.0824	lb/MMBtu
ROC Emission Factor	0.0054	lb/MMBtu

RESULTS

	<u>lb/hr</u>	<u>lb/day</u>	<u>TPY</u>
Nitrogen Oxides (as NO ₂)	0.15	3.53	0.64
Sulfur Oxides (as SO ₂)	0.02	0.49	0.09
PM ₁₀	0.01	0.27	0.05
Total Suspended Particulate (PM)	0.01	0.27	0.05
Carbon Monoxide	0.12	2.97	0.54
Reactive Organic Compounds (ROC)	0.01	0.19	0.04
Hourly Heat Release	1.500	MMBtu/hr	
Daily Heat Release.....	36.000	MMBtu/day	
Annual Heat Release	13,140.000	MMBtu/yr	
Rule 342 Applicability	13.1	Billion Btu/yr	

10.3 Fee Calculations

Emission fees for the permit reevaluation of PTO 7126 are based on Fee Schedule A of District Rule 210. Fees are based on the final issuance date of this permit.

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.

10.4 IDS Database Emission Tables

Table 1
Permitted Potential to Emit (PPTE)

	NO _x	ROC	CO	SO _x	TSP	PM ₁₀
PTO 7126 – La Purisima Lease						
lb/day						
tons/year						

Table 2
Facility Potential to Emit (FPTE)

	NO _x	ROC	CO	SO _x	TSP	PM ₁₀
PTO 7126 – La Purisima Lease						
lbs/day						
tons/year						

Table 3
Federal PT-70 Facility Potential to Emit (PT 70 FPTE)

	NO _x	ROC	CO	SO _x	TSP	PM ₁₀
PTO 7126 – La Purisima Lease						
lbs/day	3.53		2.97	0.49	0.27	0.27
tons/year	0.64		0.54	0.09	0.05	0.05

Table 4
Facility Net Emission Increase Since 1990 (FNEI-90)

	NO _x	ROC	CO	SO _x	TSP	PM ₁₀
PTO 7126 – La Purisima Lease						
lbs/day	0.00	0.00	0.00	0.00	0.00	0.00
tons/year	0.00	0.00	0.00	0.00	0.00	0.00

Table 5
Facility Exempt Emissions (FXMT)

	NO _x	ROC	CO	SO _x	TSP	PM ₁₀
PTO 7126 – La Purisima Lease						
lbs/day	3.53	0.19	2.97	0.49	0.27	0.27
tons/year	0.64	0.04	0.54	0.09	0.05	0.05

10.5 Equipment List

10.6 Well List

Attachment 10.6. Permitted Wells.

This table represents the number of active and idle oil and gas wells at this facility as reported by the DOGGR.

1. Section (S), Township (T) and Range, (R) is a surveyed rectangular land grid system that covers most of the United States. A township is the measure of units north or south of a baseline, the horizontal line where the survey began. A Range is the measure of units east or west of a meridian, the vertical line where the survey began. Each Township/Range is thirty-six square miles, measuring 6 miles by 6 miles, and contains 36 one-mile square sections. In California, there are three base and meridians, Humboldt, Mount Diablo, and San Bernardino.