



PROPOSED

Part 70 Minor Revision 12237

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EQUIPMENT OWNER/OPERATOR:

Breitburn Energy Company

300000

EQUIPMENT LOCATION:

Cal Coast Lease, Orcutt Hill Oilfield, Santa Barbara County, California

STATIONARY SOURCE/FACILITY:

BreitBurn Energy Company.
Cal Coast Lease - Orcutt Field

SSID: 02667
FID: 03206

EQUIPMENT DESCRIPTION:

The equipment subject to this permit is listed in Attachment A at the end of this permit.

PROJECT/PROCESS DESCRIPTION:

Oil, water and gas are produced from 13 wells on the California Coast Lease. The produced liquids, along with produced liquids from the Hartnell and Squires Leases are piped to the California Coast Lease. Oil and water are separated in the wash tank. The oil is piped to one of two crude storage tanks and the water is sent to the wastewater tank. The oil is metered at the LACT unit and is shipped from the lease via a pipeline. The wastewater is reinjected into the producing formation. The tanks are connected to the vapor recovery system. A complete process description for this facility can be found in PTO 8226-R7 issued March 29, 2006. This project involves increasing the size of the existing 2000 barrel wash tank to 3000 barrels by adding a ring to the tank. The increase in size will allow for a longer residence and settling time in the tank for better separation of water and oil. The current wash tank permitted throughput limit for crude oil of 850 BOPD is not modified.

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CONDITIONS:

9.A Standard Administrative Conditions

The following federally-enforceable administrative permit conditions apply to the Newlove 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, APCD 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 APCD, Rule 505 (Upset/Breakdown rule) and/or APCD 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 APCD, in writing, a “notice of emergency” within 2 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, APCD 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, as identified in the Compliance Plan.

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- (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: APCD 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: APCD Rule 1303.D.2]
- A.6 **Payment of Fees.** The permittee shall reimburse the APCD 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 APCD and the USEPA pursuant to section 502(a) of the Clean Air Act. [Re: APCD 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 APCD 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 APCD in accordance with Rule 505. *Breakdown Conditions*, or Rule 1303.F *Emergency Provisions*. [APCD 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 APCD forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations (excluding emergency upsets) from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1 and March 1, respectively, each year. Supporting monitoring data shall be submitted in accordance with the “Semi-Annual Monitoring/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: APCD Rules 1303.D.1, 1302.D.3, 1303.2.c]

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- 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 APCD-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; and
 - (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 the permittee and shall be made available to the APCD upon request. [*Re: APCD 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 APCD 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 APCD 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/revoke/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.

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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]

A.12 **Grounds for Revocation.** Failure to abide by and faithfully comply with this permit or any Rule, Order, or Regulation may constitute grounds for the APCO to petition for permit revocation pursuant to California Health & Safety Code Section 42307 *et seq.*

9.B. Generic Conditions

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 APCD Rule 303. [Re: APCD Rule 301]

B.3 **Nuisance (Rule 303):** No pollutant emissions from any source at the permittee shall create nuisance conditions. Operations shall not endanger health, safety or comfort, nor shall they damage any property or business. [Re: APCD Rule 303]

9.C Requirements and Equipment Specific Conditions

This condition supersedes the same numbered condition in PTO/Part-70 Permit 8226-R7. Tables 5.1 through 5-4 in PTO/Part-70 Permit 8226-R7 are also superseded by Tables 5.1 through 5-4 of this permit.

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

| Dev No | Equipment Name; Capacity |
|---------------|--|
| 109733 | Wash Tank, 3,000 bbl capacity |
| 002450 | Crude Storage Tank, 2,000 bbl capacity |
| 107169 | Crude Storage Tank, 750 bbl capacity |

(a) Emission Limits: Mass emission for the tanks listed above shall not exceed the limits listed in Tables 5.1-3 and 5.1-4.

(b) Operational Limits:

(i) Throughput Limitation: Production to the crude oil tanks shall be limited to an average of 850 barrels of dry oil per day. The permittee shall record in a log the volumes of oil produced and the actual number of days in production per month. The above limits are based on actual days of operation during the month.

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- (ii) All process operations from the equipment listed in this section shall meet the requirements of APCD Rules 325 Sections D, E, F and G. Rule 325.D requires the tanks to be connected to vapor collection and removal device(s) 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.
- (iii) Pursuant to Rule 343, Sections D, E, F and G, the permittee shall use a control device, approved in advance by the APCD, when degassing or purging any stationary tanks, vessels, or containers which process odorous sulfur compounds. Except for emergency cases, the Control Officer shall be notified in writing at least two weeks prior to the start of the emptying operation for the purpose of degassing any above-ground tank subject to this rule.
- (c) **Monitoring:** The equipment listed in this section shall be subject to all the monitoring requirements of APCD Rule 325.H. The test methods outlined in APCD Rule 325.G shall be used, when applicable. In addition, the permittee 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 APCD Rule 325.F. In addition, the permittee shall maintain a log of all degassing events in accordance Rule 343.F.
- (e) **Reporting:** On a semi-annual basis, a report detailing the previous six-month's activities shall be provided to the APCD. The report must list all data required by the *Semi-Annual Compliance Verification Reports* condition of PTO 8226-R7/Pt 70 Operating Permit 8226.

[Re: 40 CFR 70.6, APCD Rules 206, 325, 343 and 1303]

AIR POLLUTION CONTROL OFFICER

DATE

Notes:

1. This permit supersedes ATC 12237 issued April 19, 2007.
2. Next Reevaluation Due: March 2009

Attachment: Permit Evaluation for PTO 12237

ATTACHMENT "A"

Santa Barbara County APCD – Equipment List

PTO 12237 / FID: 03206 Cal Coast Lease (Orcutt Hill) / SSID: 02667

A PERMITTED EQUIPMENT

1 Wash tank

| <i>Device ID #</i> | 109733 | <i>Device Name</i> | Wash tank |
|-------------------------|--|----------------------|------------------|
| <i>Rated Heat Input</i> | | <i>Physical Size</i> | 3000.00 BBL |
| <i>Manufacturer</i> | | <i>Operator ID</i> | 1000 |
| <i>Model</i> | | <i>Serial Number</i> | |
| <i>Location Note</i> | | | |
| <i>Device</i> | 3,000 bbl capacity, ID# , 29.7 feet in diameter by 24 feet high, with a cone | | |
| <i>Description</i> | roof 1.9 feet above the shell, connected to the vapor recovery system | | |

E DE-PERMITTED EQUIPMENT

1 Wash tank

| <i>Device ID #</i> | 002449 | <i>Device Name</i> | Wash tank |
|-------------------------|--|--------------------------|------------------|
| <i>Rated Heat Input</i> | | <i>Physical Size</i> | 2000.00 BBL |
| <i>Manufacturer</i> | | <i>Operator ID</i> | 1000 |
| <i>Model</i> | | <i>Serial Number</i> | |
| <i>Depermitted</i> | | <i>Facility Transfer</i> | |
| <i>Device</i> | 2,000 bbl capacity, ID# , 29.7 feet in diameter by 16 feet high, with a cone | | |
| <i>Description</i> | roof 1.9 feet above the shell, connected to the vapor recovery system | | |

**Table 5.1-1
BreitBurn California Coast Lease: Permit to Operate 12237
Operating Equipment Description**

| Equipment Category | Description | Dev No | Device Specifications | | | Usage Data | | Maximum Operating Schedule | | | | | References | |
|-----------------------|------------------------------|--------|-----------------------|----------------|---------------------|------------|-------------|----------------------------|------|----|-------|-------|------------|------|
| | | | Feed | Parameter | Size | Units | Capacity | Units | Load | hr | day | qtr | | year |
| | | | | <u>TVP</u> | | | | | | | | | | |
| Tanks | Wash Tank | 109733 | OW | 2.420 | 3,000 bbls | | 850 bbl/day | 1.0 | 1.0 | 24 | 2,190 | 8,760 | A | |
| | Crude Tank | 002450 | Oil | 2.420 | 2,000 bbls | | 850 bbl/day | 1.0 | 1.0 | 24 | 2,190 | 8,760 | A | |
| | Crude Tank | 107169 | Oil | 2.420 | 750 bbls | | 850 bbl/day | 1.0 | 1.0 | 24 | 2,190 | 8,760 | A | |
| | Wastewater Tank | 107168 | Water | 2.420 | 5,000 bbls | -- | -- | 1.0 | 1.0 | 24 | 2,190 | 8,760 | B | |
| | | | | <u>Service</u> | | | | | | | | | | |
| Pits and Sumps | Well Cellars | 002478 | OW | Primary | 288 ft ² | -- | -- | 1.0 | 1.0 | 24 | 2,190 | 8,760 | B | |
| | LACT Pit | 008202 | | Oil | 7 ft ² | -- | -- | 1.0 | 1.0 | 24 | 2,190 | 8,760 | B | |
| | Wastewater Pits | 101115 | OW | Secondary | 39 ft ² | -- | -- | 1.0 | 1.0 | 24 | 2,190 | 8,760 | B | |
| Fugitive Components | Valves, Connections, etc | 002477 | -- | -- | 13 wells | -- | -- | 1.0 | 1.0 | 24 | 2,190 | 8,760 | C | |
| | Pumps/Compressors/Wellheads | 002479 | -- | -- | 13 wells | -- | -- | 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 | |

(a) Solvent use for the entire stationary source is based on Rule 317 limits.

(b) Orcutt Hill Stationary Source solvent usage is listed in this permit only.

**Table 5.1-2
BreitBurn California Coast Lease: Permit to Operate 12237
Equipment Emission Factors**

| Equipment Category | Description | Dev No | Emission Factors | | | | | | Units |
|---------------------|------------------------------|--------|---|--------|----|-----------------|----|------------------|-------------------------|
| | | | NO _x | ROC | CO | SO _x | PM | PM ₁₀ | |
| Tanks | Wash Tank | 109733 | | | | | | | |
| | Crude Tank | 002450 | | | | | | | |
| | Crude Tank | 107169 | | | | | | | |
| | Wastewater Tank | 107168 | -- | 0.0006 | -- | -- | -- | -- | lb/ft ² -day |
| Pits and Sumps | Well Cellars | 002478 | -- | 0.0282 | -- | -- | -- | -- | lb/ft ² -day |
| | LACT Pit | 008202 | -- | 0.0941 | -- | -- | -- | -- | lb/ft ² -day |
| | Wastewater Pits | 101115 | -- | 0.0126 | -- | -- | -- | -- | lb/ft ² -day |
| Fugitive Components | Valves, Connections, etc | 002477 | -- | -- | -- | -- | -- | -- | -- |
| | Pumps/Compressors/Wellheads | 002479 | -- | -- | -- | -- | -- | -- | -- |
| Solvent Usage | Photochemically Reactive | | Solvent emissions permitted at Rule 317 levels. | | | | | | |
| | Non-Photochemically Reactive | | | | | | | | |

**Table 5.1-3
BreitBurn California Coast Lease: Permit to Operate 12237
Hourly and Daily Emissions**

| Equipment Category | Description | Dev 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 | Wash Tank | 109733 | -- | -- | 0.00 | 0.04 | -- | -- | -- | -- | -- | -- | -- | -- | FE | ATC 6416 |
| | Crude Tank | 002450 | -- | -- | 0.03 | 0.66 | -- | -- | -- | -- | -- | -- | -- | -- | FE | ATC 10934 |
| | Crude Tank | 107169 | -- | -- | 0.02 | 0.38 | -- | -- | -- | -- | -- | -- | -- | -- | FE | ATC 10833 |
| | Wastewater Tank | 107168 | -- | -- | 0.03 | 0.74 | -- | -- | -- | -- | -- | -- | -- | -- | FE | ATC 11191 |
| Pits and Sumps | Well Cellars | 002478 | -- | -- | 0.34 | 8.13 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| | LACT Pit | 008202 | -- | -- | 0.03 | 0.67 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| | Wastewater Pits | 101115 | -- | -- | 0.02 | 0.49 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| Fugitive Components | Valves, Connections, etc | 002477 | -- | -- | 0.30 | 7.29 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| | Pumps/Compressors/Wellheads | 002479 | -- | -- | 0.01 | 0.21 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| Solvent Usage | Photochemically Reactive | | -- | -- | 8.00 | 40.00 | -- | -- | -- | -- | -- | -- | -- | -- | FE | Rule 317 |
| | Non-Photochemically Reactive | | -- | -- | 450 | 3,000 | -- | -- | -- | -- | -- | -- | -- | -- | FE | Rule 317 |

Notes:

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

**Table 5.1-4
BreitBurn California Coast Lease: Permit to Operate 12237
Quarterly and Annual Emissions**

| Equipment Category | Description | Dev 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 | Wash Tank | 109733 | -- | -- | 0.00 | 0.01 | -- | -- | -- | -- | -- | -- | -- | -- | FE | ATC 6416 |
| | Crude Tank | 002450 | -- | -- | 0.03 | 0.12 | -- | -- | -- | -- | -- | -- | -- | -- | FE | ATC 10934 |
| | Crude Tank | 107169 | -- | -- | 0.02 | 0.07 | -- | -- | -- | -- | -- | -- | -- | -- | FE | ATC 10833 |
| | Wastewater Tank | 107168 | -- | -- | 0.03 | 0.14 | -- | -- | -- | -- | -- | -- | -- | -- | FE | ATC 11191 |
| Pits and Sumps | Well Cellars | 002478 | -- | -- | 0.37 | 1.48 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| | LACT Pit | 008202 | -- | -- | 0.03 | 0.12 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| | Wastewater Pits | 101115 | -- | -- | 0.02 | 0.09 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| Fugitive Components | Valves, Connections, etc | 002477 | -- | -- | 0.33 | 1.33 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| | Pumps/Compressors/Wellheads | 002479 | -- | -- | 0.01 | 0.04 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| Solvent Usage | Photochemically Reactive | | -- | -- | 1.83 | 7.30 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |
| | Non-Photochemically Reactive | | -- | -- | 20.53 | 82.13 | -- | -- | -- | -- | -- | -- | -- | -- | A | -- |

Notes:

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



PERMIT EVALUATION FOR PERMIT TO OPERATE 12237

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1.0 BACKGROUND

- 1.1 General: Authority to Construct 12237 was issued on April 19, 2007. The project involves increasing the size of an existing 2000 barrel wash tank (APCD Device No 002449) to 3000 barrels by adding a ring to the tank. The increase in size will allow for a longer residence and settling time in the tank resulting in better separation of water and oil. The current wash tank permitted throughput limit for crude oil of 850 BOPD is not modified. An SCDP inspection was conducted August 15, 2007 and the permitted equipment was found in compliance.
- 1.2 Permit History: See Section 1.2 of Part 70 Operating Permit and Permit to Operate 8226-R7.
- 1.3 Compliance History: See Section 3.5 of Part 70 Operating Permit and Permit to Operate 8226-R7.

2.0 ENGINEERING ANALYSIS

- 2.1 Equipment/Processes: Oil, water and gas are produced from 13 wells on the California Coast Lease. Electric motors or internal combustion engines (permitted under PTO 8039) drive the wells. The production passes through two gas/liquid separators. The produced liquids, along with produced liquids from the Hartnell and Squires Leases are piped to the California Coast Lease. Oil and water are separated in the wash tank. The oil is piped to one of two crude storage tanks and the water is sent to the wastewater tank. The oil is metered at the LACT unit and is shipped from the lease via a pipeline. The wastewater is reinjected into the producing formation. The tanks are connected to the vapor recovery system. A complete process description for this facility can be found in PTO 8226-R7 issued March 29, 2006. This project involves increasing the capacity of an existing 2000 barrel wash tank (APCD Device No 002449) to 3000 barrels by adding a ring to the tank. The increase in size will allow for a longer residence and settling time in the tank resulting in better separation of water and oil. The current wash tank permitted throughput limit for crude oil of 850 BOPD is not modified.
- 2.2 Emission Controls: The tank battery is equipped with a vapor recovery system. A 95-percent control efficiency is applied for the use of vapor recovery.
- 2.3 Emission Factors: Emission factors for each equipment item are based on those used in PTO 8226-R7.
- 2.4 Reasonable Worst Case Emission Scenario: Worst case emissions are based on operation of this facility 24 hours/day, 365 days per year at maximum permitted throughput levels.
- 2.5 Emission Calculations: Detailed emission calculation spreadsheets may be found in PTO 8226-R7. These emissions define the Potential to Emit for the tank battery. A wash tank emission calculation spreadsheet for the new wash tank configuration appears in Attachment A of this permit. The

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emission calculation algorithm assumes negligible working losses from wash tanks. Therefore, since the emissions calculation methodology is not total liquid throughput or tank height dependent, no change in wash tank emissions result from the tank height or total liquid throughput increase.

- 2.6 Special Calculations: There are no special calculations.
- 2.7 BACT Analyses: Best Available Control Technology was not required for this project.
- 2.8 Enforceable Operational Limits: The permit has enforceable operating conditions that ensure the control device is operated properly.
- 2.9 Monitoring Requirements: Monitoring of the equipment's operational limits are required to ensure that these are enforceable. This permit requires monitoring the volume of oil produced, the volume of oil trucked from the facility and the parameters required by APCD Rules 325.F, 331.G, and 346.G.
- 2.10 Recordkeeping and Reporting Requirements: The permit requires that the data which is monitored be recorded and reported to the APCD.

3.0 REEVALUATION REVIEW (not applicable)

4.0 REGULATORY REVIEW

- 4.1 Partial List of Applicable Rules: This project is anticipated to operate in compliance with the following rules:

- Rule 101. Compliance of Existing Facilities
- Rule 202. Exemptions to Rule 201
- Rule 205. Standards for Granting Permits
- Rule 303. Nuisance
- Rule 310. Odorous Organic Sulfides
- Rule 325. Crude Oil Production and Separation
- Rule 331. Fugitive Emissions Inspection and Maintenance
- Rule 505. Breakdown Procedures
- Rule 801. New Source Review
- Rule 802. Nonattainment Review
- Rule 803. Prevention of Significant Deterioration

- 4.2 Rules Requiring Review: None

- 4.3 NEI Calculations: The net emission increase calculation is used to determine whether certain requirements must be applied to a project (e.g., offsets, AQIA, PSD BACT). The NEI values for the stationary source (the I, P1, P2 and D terms of the NEI calculation) are documented in Attachments "B" and "C". The new tank configuration will generate an "I" term. Since this wash tank is pre-1990 equipment, BreitBurn has requested a "D" term be generated for the prior tank configuration. The existing wash tank has been operated for 365 days per year for the past three years. Emissions from both configurations are identical (see section 2.5 of this Engineering Evaluation). Therefore, there is no increase to the tank battery emissions as controlled by the vapor recovery system as a result of this permit action. There is no resultant adjustment to the Cal Coast Lease facility Net Emission Increase. The source indicated no new piping or components would be

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added. This was confirmed at the SCDP inspection. Facility and Stationary Source NEI remains unchanged for all pollutants as shown in PTO 8226-R7 section 10.4 and reflected in Attachment “B” and “C”.

5.0 AQIA

The project is not subject to the Air Quality Impact Analysis requirements of Regulation VIII.

6.0 OFFSETS/ERCs

6.1 General: The emission offset thresholds of Regulation VIII are not exceeded.

6.2 Offsets: Offsets are not required for this permitting action.

6.3 ERCs: This source does generate emission reduction credits

7.0 AIR TOXICS

An air toxics health risk assessment was not performed for this permitting action.

8.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REVIEW:

This project is exempt from CEQA pursuant to the Environmental Review Guidelines for the Santa Barbara County APCD (revised November 16, 2000). Appendix A. of APCD CEQA Guidelines (*Equipment or Operations Exempt from CEQA*) specifically exempts Permits to Operate. The project has no potential for causing a significant adverse environmental impact. No further action is necessary.

9.0 SCHOOL NOTIFICATION PROCESS

A school notice pursuant to the requirements of H&SC §42301.6 was not required.

10.0 PUBLIC and AGENCY NOTIFICATION PROCESS/COMMENTS ON DRAFT PERMIT

This project was not subject to public notice

11.0 FEE DETERMINATION

Fees for the APCD’s work efforts are assessed on a fee basis. The Project Code is 300000 (*Oil & Gas*). The fee calculations may be found in Attachment “D”.

12.0 RECOMMENDATION

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

| | | | |
|-------------|------|------------------------|------|
| Al Ronyecz | | | |
| AQ Engineer | Date | Engineering Supervisor | Date |

12.0 ATTACHMENTS

- A Emission Calculations
- B. IDS Tables
- C Facility and Stationary Source NEI
- D. Fee Statement

ATTACHMENT “A”

Emission Calculations

FIXED ROOF TANK CALCULATION (AP-42: Chapter 7 Method)

| Basic Input Data | |
|---|------|
| liquid {1:G13, 2:G10, 3:G7, 4:C, 5:JP, 6:ker, 7:O2, 8:O6} = | 4 |
| liquid TVP = | 2.4 |
| if TVP is entered, enter TVP temperature (°F) = | 111 |
| tank heated (yes, no) = | no |
| if tank is heated, enter temp (°F) = | |
| vapor recovery system present? (yes, no) = | yes |
| is this a wash tank? (yes, no) = | yes |
| will flashing losses occur in this tank? (yes, no) = | no |
| breather vent pressure setting range (psi) (def = 0.06): | 0.06 |

Attachment: B
 Permit: PTO 12237
 Date: 10/05/07
 Tank: Wash Tank
 Name: Calif Coast Lease
 Filename:
 District: Santa Barbara
 Version: Tank-2b.xls

PRINT

| Tank Data | |
|---|---------------|
| diameter (feet) = | 29.7 |
| capacity (enter barrels in first col, gals will compute) = | 3,000 126,000 |
| conical or dome roof? {c, d} = | c |
| shell height (feet) = | 24 |
| roof height (def = 1): | 1 |
| ave liq height (feet): | 23 |
| color {1:Spec Al, 2:Diff Al, 3:Lite, 4:Med, 5:Rd, 6:Wh} = | 4 |
| condition {1: Good, 2: Poor} = | 1 |
| upstream pressure (psig) (def = 0 when no flashing occurs): | 20 |

| Paint Factor Matrix | | |
|---------------------|-----------------|------|
| paint color | paint condition | |
| | good | poor |
| spec alum | 0.39 | 0.49 |
| diff alum | 0.60 | 0.68 |
| lite grey | 0.54 | 0.63 |
| med grey | 0.68 | 0.74 |
| red | 0.89 | 0.91 |
| white | 0.17 | 0.34 |

| Liquid Data | | |
|---|---|-----------|
| | A | B |
| maximum daily throughput (bopd) = | | 850 |
| Ann thruput (gal): (enter value in Column A if not max PTE) | | 1.303E+07 |
| RVP (psia): | | 1.94242 |
| °API gravity = | | 25 |

| Computed Values | |
|--|------------|
| roof outage ¹ (feet): | 0.3 |
| vapor space volume ² (cubic feet): | 901 |
| turnovers ³ : | 103.42 |
| turnover factor ⁴ : | 0.46 |
| paint factor ⁵ : | 0.68 |
| surface temperatures (°R, °F) | |
| average ⁶ : | 527.2 67.2 |
| maximum ⁷ : | 539 79 |
| minimum ⁸ : | 515.4 55.4 |
| product factor ⁹ : | 0.75 |
| diurnal vapor ranges | |
| temperature ¹⁰ (fahrenheit degrees): | 47.2 |
| vapor pressure ¹¹ (psia): | 0.514249 |
| molecular weight ¹² (lb/lb-mol): | 50 |
| TVP ¹³ (psia) [adjusted for ave liquid surface temp]: | 0.93844 |
| vapor density ¹⁴ (lb/cubic foot): | 0.008294 |
| vapor expansion factor ¹⁵ : | 0.123 |
| vapor saturation factor ¹⁶ : | 0.939268 |
| vented vapor volume (scf/bbl): | 16 |
| fraction ROG - flashing losses: | 0.308 |
| fraction ROG - evaporative losses: | 0.885 |

| Adjusted TVP Matrix | |
|---------------------|-----------|
| liquid | TVP value |
| gas rvp 13 | 7.908 |
| gas rvp 10 | 5.56 |
| gas rvp 7 | 3.932 |
| crude oil | 0.93844 |
| JP-4 | 1.516 |
| jet kerosene | 0.0103 |
| fuel oil 2 | 0.009488 |
| fuel oil 6 | 0.0000472 |

| Emissions | Uncontrolled ROC emissions | | | Controlled ROC emissions | | |
|--------------------------------|----------------------------|-------------|-------------|--------------------------|-------------|-------------|
| | lb/hr | lb/day | ton/year | lb/hr | lb/day | ton/year |
| breathing loss ¹⁷ = | 0.03 | 0.76 | 0.14 | 0.00 | 0.04 | 0.01 |
| working loss ¹⁸ = | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| flashing loss ¹⁹ = | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTALS = | 0.03 | 0.76 | 0.14 | 0.00 | 0.04 | 0.01 |

ATTACHMENT “B”

IDS Tables

ATTACHMENT “C”

Facility/Stationary Source NEI

Facility Emissions Summary
California Coast Lease FID 3206

I. This Projects "I" NEI-90

| Permit No. | Date Issued | NOx | | ROC | | CO | | SOx | | PM | | PM10 | |
|------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | lb/day | ton/yr |
| P12237 | | | | 0.04 | 0.01 | | | | | | | | |

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 |
| P10934 | 6/10/2003 | | | 0.66 | 0.12 | | | | | | | | |
| P10833 | 6/25/2003 | | | 0.38 | 0.07 | | | | | | | | |
| P11191 | 7/12/2004 | | | 0.74 | 0.14 | | | | | | | | |
| Totals | | 0.00 | 0.00 | 1.78 | 0.33 | 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 |
| | | | | | | | | | | | | | |
| 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 |
| P12237 | | | | 0.04 | 0.01 | | | | | | | | |
| Totals | | 0.00 | 0.00 | 0.04 | 0.01 | 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 |
| Project "I" | 0.00 | 0.00 | 0.04 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| P1 | 0.00 | 0.00 | 1.78 | 0.33 | 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 | 0.04 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| FNEI-90 | 0.00 | 0.00 | 1.78 | 0.33 | 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
BreitBurn Energy Company LP Orcutt Hill Stationary Source

Facility FNEI-90 at this SSN

Enter all other facility NEI-90s below:

| Facility No. | Date Revised | 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 |
| 3206 | | 0.00 | 0.00 | 1.78 | 0.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3313 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3314 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3316 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3318 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3319 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3320 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3321 | | 49.50 | 9.03 | 52.06 | 7.44 | 85.50 | 15.60 | 16.66 | 3.04 | 27.00 | 4.93 | 27.00 | 4.93 |
| 3322 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3323 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3324 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3495 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4104 | | 0.00 | 0.00 | 0.55 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4214 | | 11.04 | 0.23 | 0.60 | 0.01 | 9.27 | 0.19 | 0.58 | 0.01 | 0.06 | 0.01 | 0.06 | 0.01 |
| 10482 | | 6.05 | 1.09 | 4.26 | 0.77 | 10.49 | 1.91 | 2.04 | 0.37 | 3.31 | 0.60 | 3.31 | 0.60 |
| 1904 | | 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 | | 66.59 | 10.35 | 59.25 | 8.65 | 105.26 | 17.70 | 19.28 | 3.42 | 30.37 | 5.54 | 30.37 | 5.54 |

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.

Calculate This SSN's NEI-90

Table below summarizes Source NEI-90 as equal to sum of each facility's (unless footnoted by an enforceable NEI scenario)

| 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 |
| SSN NEI-90 | 66.59 | 10.35 | 59.25 | 8.65 | 105.26 | 17.70 | 19.28 | 3.42 | 30.37 | 5.54 | 30.37 | 5.54 |

Notes:
(1) Resultant SSN NEI-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.

ATTACHMENT “D”

Fee Statement

FEE STATEMENT

PTO No. 12237

FID: 03206 Cal Coast Lease (Orcutt Hill) / SSID: 02667



Device Fee

| Device No. | Device Name | Fee Schedule | Qty of Fee Units | Fee per Unit | Fee Units | Max or Min. Fee Apply? | Number of Same Devices | Pro Rate Factor | Device Fee | Penalty Fee? | Fee Credit | Total Fee per Device |
|--------------------------------|-------------|--------------|------------------|--------------|------------------|------------------------|------------------------|-----------------|-----------------|---------------|---------------|----------------------|
| 109733 | Wash tank | A6 | 126.000 | 3.26 | Per 1000 gallons | No | 1 | 1.000 | 410.76 | 0.00 | 0.00 | 410.76 |
| Device Fee Sub-Totals = | | | | | | | | | \$410.76 | \$0.00 | \$0.00 | |
| Device Fee Total = | | | | | | | | | | | | \$410.76 |

Permit Fee

Fee Based on Devices

410.76

Fee Statement Grand Total = \$410

Notes:

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