



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

SEP 17 2012

Gerardo C. Rios, Chief  
Permits Office  
Air Division  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

Re: **Notice of Minor Title V Permit Modification**  
**District Facility # S-1246**  
**Project # S-1114059**

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. Berry Petroleum Company is proposing a Title V minor permit modification to incorporate the recently issued the Authorities to Construct S-1246-95-9 and '-316-2 into the Title V operating permit. Berry Petroleum requested to install a 2000 BBL fixed roof crude oil storage tank (S-1246-316-2) connected to the vapor control system listed on S-1246-95-9.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued the Authorities to Construct S-1246-95-9 and '-316-2, emission increases, application, and previous Title V permit. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,



David Warner  
Director of Permit Services

Enclosures

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**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061  
[www.valleyair.org](http://www.valleyair.org)

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: (661) 392-5500 FAX: (661) 392-5585



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

SEP 17 2012

John Ludwick  
Berry Petroleum Company  
5201 Truxton Avenue  
Bakersfield, CA 93309

**Re: Notice of Minor Title V Permit Modification  
District Facility # S-1246  
Project # S-1114059**

Dear Mr. Ludwick:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued the Authorities to Construct S-1246-95-9 and '316-2 into the Title V operating permit. Berry Petroleum requested to install a 2000 BBL fixed roof crude oil storage tank (S-1246-316-2) connected to the vapor control system listed on S-1246-95-9.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued the Authorities to Construct S-1246-95-9 and '316-2, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

  
David Warner  
Director of Permit Services

Enclosures

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Tel: (661) 392-5500 FAX: (661) 392-5585

# TITLE V APPLICATION REVIEW

Minor Modification

Project #: S-1104059

Engineer: Steve Davidson

Date: September 12, 2012

Facility Number: S-1246

Facility Name: Berry Petroleum Company

Mailing Address: 5201 Truxtun Ave. Suite 300  
Bakersfield, CA 93309

*Reviewed by AP SUPER ARE*

SEP 14 2012

Contact Name: John Ludwick

Phone: (661) 616-3892

Responsible Official: Robert Boston

Title: Manager of EH&S

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## I. PROPOSAL

Berry Petroleum Company (Berry) is proposing a Title V minor permit modification to incorporate the Authorities to Construct (ATCs) S-1246-95-9 and '-316-2 into their Title V permit.

Project S-1095101 authorized the installation of a 2,000 BBL fixed roof crude oil storage tank (S-1246-316-2) and connect the tank to the vapor control system listed on S-1246-95-9.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

## II. FACILITY LOCATION

The tank are located at Berry Petroleum Company's Ethel D Property (SE/4 Section 36, Township: 12N, Range 24W), Heavy Oil Western Stationary Source.

## III. EQUIPMENT DESCRIPTION

**S-1246-95-9:** 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #13470 WITH SHARED VAPOR CONTROL SYSTEM SERVING PERMITS S-1246-95, '-96, '-300, '-310, '-315, AND '-316 VENTED TO TEOR OPERATION LISTED ON PERMIT S-1246-290, (ETHEL D LEASE)

**S-1246-316-3:** 2,000 BBL OR LESS FIXED ROOF TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1246-95

#### **IV. SCOPE OF EPA AND PUBLIC REVIEW**

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

#### **V. APPLICABLE REQUIREMENTS**

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

#### **VI. DESCRIPTION OF PROPOSED MODIFICATIONS**

##### **S-1246-95-12**

The changes in the current Permit to Operate are as follows:

Equipment description edited to include tank S-1246-316 as a tank served by the vapor control systems

##### **S-1246-316-3:**

ATC S-1246-316-2 is a new permit unit. The ATC conditions will be carried over to the proposed PTO with the following exceptions:

##### **Conditions Removed:**

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Y
23. This ATC shall be implemented concurrently with S-1246-95-9. [District Rule 2201] N
24. ATCs S-1246-316-0 shall be canceled upon implementation of this ATC. [District Rule 2201] N

#### **VII. COMPLIANCE**

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for

temporary sources of ambient impacts, or a visibility or increment analysis;

- a. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
  - b. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - c. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
4. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
  5. Do not seek to consolidate overlapping applicable requirements.
  6.
    - d. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
    - e. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
  7. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
  8. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including:

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

## VIII. ATTACHMENTS

- A. Proposed Title V Operating Permit
- B. Authority to Construct
- C. Emissions Increases
- D. Application

## Attachment A

### Proposed Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1246-95-12

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 31 **TOWNSHIP:** 32S **RANGE:** 24E

**EQUIPMENT DESCRIPTION:**

21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #13470 WITH SHARED VAPOR CONTROL SYSTEM SERVING PERMITS S-1246-95, '-96, '-300, '-310, '-315, AND '-316 VENTED TO TEOR OPERATION LISTED ON PERMIT S-1246-290, (ETHEL D LEASE)

## PERMIT UNIT REQUIREMENTS

1. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 35.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
5. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
6. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
7. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623] Federally Enforceable Through Title V Permit
8. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate component count for tank according to EPAs "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The tank shall be connected to a tank vapor recovery system that is functional and is operating as designed at all times. Vapors shall be discharged to a control device with 95% efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During an operator or District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. Failure to repair the leak within the specified deadline shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. Components in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit
15. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
16. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2201]
17. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Any component leak shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2201] Federally Enforceable Through Title V Permit
19. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1246-316-3

EXPIRATION DATE: 03/31/2016

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1246-95

## PERMIT UNIT REQUIREMENTS

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1. VOC fugitive emissions from the components in gas service on tank (if permit includes the vapor control system Insert: and tank vapor collection system) shall not exceed 11.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
5. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
6. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
7. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623] Federally Enforceable Through Title V Permit
8. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
10. Permittee shall maintain accurate component count for tank according to EPAs "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

11. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The tank shall be connected to a tank vapor recovery system that is functional and is operating as designed at all times. Vapors shall be discharged to a control device with 95% efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
13. During an operator or District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. Failure to repair the leak within the specified deadline shall constitute a violation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
14. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. Components in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201] Federally Enforceable Through Title V Permit
15. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
16. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2201] Federally Enforceable Through Title V Permit
17. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Any component leak shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2201] Federally Enforceable Through Title V Permit
19. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
21. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

DRAFT

Attachment B  
Authority to Construct



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-1246-95-9

**ISSUANCE DATE:** 01/25/2010

**LEGAL OWNER OR OPERATOR:** BERRY PETROLEUM COMPANY  
**MAILING ADDRESS:** ATTN: EH&S MANAGER  
5201 TRUXTUN AVENUE SUITE 300  
BAKERSFIELD, CA 93309-0640

**LOCATION:** HEAVY OIL WESTERN STATIONARY SOURCE  
KERN COUNTY, CA

**SECTION:** SE 36 **TOWNSHIP:** 12N **RANGE:** 24W

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #13470 WITH SHARED VAPOR CONTROL SYSTEM SERVING PERMITS S-1246-95, '-96, '-300, '-310, AND '-315 VENTED TO TEOR OPERATION LISTED ON PERMIT S-1246-290, ETHEL D LEASE: CONNECT TANK S-1246-316 TO THE VAPOR CONTROL SYSTEM

### CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 35.5 lb/day. [District Rule 2201]
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
5. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623]
6. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services  
S-1246-95-9 : Jan 25 2010 9:10AM - DAVIDSOS : Joint Inspection NOT Required

7. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]
8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623]
9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623]
10. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623]
11. Permittee shall maintain accurate component count for tank according to EPAs "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
12. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201]
13. The tank shall be connected to a tank vapor recovery system that is functional and is operating as designed at all times. Vapors shall be discharged to a control device with 95% efficiency. [District Rule 2201]
14. During an operator or District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. Failure to repair the leak within the specified deadline shall constitute a violation of this permit. [District Rule 2201]
15. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. Components in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201]
16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
17. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2201]
18. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2201]
19. Any component leak shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2201]
20. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201]
21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

22. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2]
23. This ATC shall be implemented concurrently with S-1246-316-2. [District Rule 2201]



## AUTHORITY TO CONSTRUCT

PERMIT NO: S-1246-316-2

ISSUANCE DATE: 01/25/2010

**LEGAL OWNER OR OPERATOR:** BERRY PETROLEUM COMPANY  
**MAILING ADDRESS:** ATTN: EH&S MANAGER  
5201 TRUXTUN AVENUE SUITE 300  
BAKERSFIELD, CA 93309-0640

**LOCATION:** HEAVY OIL WESTERN STATIONARY SOURCE  
KERN COUNTY, CA

**EQUIPMENT DESCRIPTION:**  
10,000 BBL OR LESS FIXED ROOF TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1246-95

### CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the components in gas service on tank (if permit includes the vapor control system Insert: and tank vapor collection system) shall not exceed 11.0 lb/day. [District Rule 2201]
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
5. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623]
6. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623]
7. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services  
S-1246-316-2; Jan 25 2010 9:10AM - DAVIDSOS : Joint Inspection NOT Required

8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623]
9. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623]
10. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623]
11. Permittee shall maintain accurate component count for tank according to EPAs "Protocol for Equipment Leak Emission Estimate," Table 2-4, Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are approved and installed. [District Rule 2201]
12. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201]
13. The tank shall be connected to a tank vapor recovery system that is functional and is operating as designed at all times. Vapors shall be discharged to a control device with 95% efficiency. [District Rule 2201]
14. During an operator or District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. Failure to repair the leak within the specified deadline shall constitute a violation of this permit. [District Rule 2201]
15. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. Components in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2201]
16. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623]
17. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2201]
18. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2201]
19. Any component leak shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2201]
20. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2201]
21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

22. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2]
23. This ATC shall be implemented concurrently with S-1246-95-9. [District Rule 2201]
24. ATCs S-1246-316-0 shall be canceled upon implementation of this ATC. [District Rule 2201]

## Attachment C

### Emissions Increases

ATC	Project #	Stationary Source Increase in Permitted Emissions (SSIPE) (lb/yr)				
		NOx	SOx	PM10	CO	VOC
S-1246-95-9	S-1095101	0	0	0	0	0
S-1246-316-2	S-1095101	0	0	0	0	4015
<b>SSIPE</b>		0	0	0	0	4015

Attachment D  
Application

5-1246-95-12, 1-316-3

# San Joaquin Valley Air Pollution Control District

www.valleyair.org

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## Permit Application For:

SEP 20 2011

[ ] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [ ] SIGNIFICANT MODIFICATION

SJVAPCD  
Region

1. PERMIT TO BE ISSUED TO: <b>Berry Petroleum Company (BPC)</b>	
2. MAILING ADDRESS: STREET/P.O. BOX: <b>5201 Truxtun Ave., Suite 300</b>	
CITY: <b>Bakersfield</b> STATE: <b>CA</b>	9-DIGIT ZIP CODE: <b>93309</b>
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: <b>HOW</b> CITY: _____ SE ¼ SECTION <b>36</b> TOWNSHIP <b>12N</b> RANGE <b>24W</b>	INSTALLATION DATE: _____
4. GENERAL NATURE OF BUSINESS: <b>Oil and gas production</b>	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) <b>Implement Authorities to Construct for two tanks S-1246-95-9 and S-1246-316-2.</b>	
6. TYPE OR PRINT NAME OF APPLICANT: <b>John Ludwick</b>	TITLE OF APPLICANT: <b>Regulatory Compliance Specialist</b>
7. SIGNATURE OF APPLICANT: 	DATE: <b>9/19/2011</b>
	PHONE: (661) 616-3807 FAX: (661) 616-3892 EMAIL: <b>jjl@bry.com</b>

**For APCD Use Only:**

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <b>S-1114059</b> FACILITY ID: <b>S-1246</b>

**NO \$**

*Title V - Minor Mod*

San Joaquin Valley  
Unified Air Pollution Control District

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SEP 20 2011  
SJVAPCD  
Southern Region

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

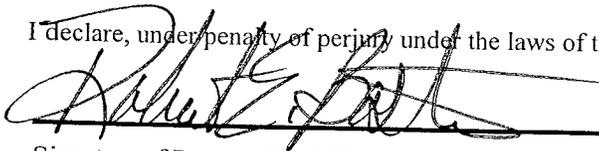
- SIGNIFICANT PERMIT MODIFICATION                       ADMINISTRATIVE  
 MINOR PERMIT MODIFICATION                                       AMENDMENT

COMPANY NAME: <b>Berry Petroleum Company (BPC)</b>	FACILITY ID: <b>S-1246</b>
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: <b>Berry Petroleum Company (BPC)</b>	
3. Agent to the Owner: <b>Tim Crawford</b>	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

  
\_\_\_\_\_  
Signature of Responsible Official

9/19/11  
\_\_\_\_\_  
Date

**Robert Boston**

Name of Responsible Official (please print)

**Manager of EH&S**

Title of Responsible Official (please print)



## AUTHORITY TO CONSTRUCT

PERMIT NO: S-1246-95-9

ISSUANCE DATE: 01/25/2010

LEGAL OWNER OR OPERATOR: BERRY PETROLEUM COMPANY  
MAILING ADDRESS: ATTN: EH&S MANAGER  
5201 TRUXTUN AVENUE SUITE 300  
BAKERSFIELD, CA 93309-0640

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE  
KERN COUNTY, CA

SECTION: SE 36 TOWNSHIP: 12N RANGE: 24W

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #13470 WITH SHARED VAPOR CONTROL SYSTEM SERVING PERMITS S-1246-95, '-96, '-300, '-310, AND '-315 VENTED TO TEOR OPERATION LISTED ON PERMIT S-1246-290, ETHEL D LEASE: CONNECT TANK S-1246-316 TO THE VAPOR CONTROL SYSTEM

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 35.5 lb/day. [District Rule 2201]
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
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CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services  
S-1246-95-9; Jan 25 2010 9:10AM - DAVIDSOS : Joint Inspection NOT Required



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** S-1246-316-2

**ISSUANCE DATE:** 01/25/2010

**LEGAL OWNER OR OPERATOR:** BERRY PETROLEUM COMPANY  
**MAILING ADDRESS:** ATTN: EH&S MANAGER  
5201 TRUXTUN AVENUE SUITE 300  
BAKERSFIELD, CA 93309-0640

**LOCATION:** HEAVY OIL WESTERN STATIONARY SOURCE  
KERN COUNTY, CA

**EQUIPMENT DESCRIPTION:**  
10,000 BBL OR LESS FIXED ROOF TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1246-95

### CONDITIONS

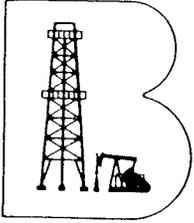
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DAVID WARNER, Director of Permit Services  
S-1246-316-2; Jan 25 2010 9:10AM - DAVIDSOS : Joint Inspection NOT Required



# Berry Petroleum Company

5201 Truxtun Ave.  
Bakersfield, CA 93309-0421

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SEP 20 2011

SJVAPCD  
Southern Region

(661) 616-3900  
www.bry.com

September 19, 2011

Mr. Leonard Scandura  
San Joaquin Valley Unified APCD  
34946 Flyover Court  
Bakersfield, CA 93308

**RE: Title V Modification – Two tanks**

Dear Mr. Scandura:

Berry Petroleum Company (BPC) is implementing Authorities to Construct (ATCs) for two tanks S-1246-95-9 and S-1246-316-2 at BPC's Midway Sunset Oilfield, Kern County Heavy Oil Western Stationary Source. Enclosed for your review please find the following:

- Application for Title V Modification (TVFORM-008)
- Title V Compliance Certification (TVFORM-009)
- Copy of the first page for the referenced ATC

If you should have any questions or require additional information please contact me at (661) 616-3807 or by e-mail at [jjl@bry.com](mailto:jjl@bry.com).

Sincerely,

John Ludwick  
Regulatory Compliance Specialist

CC: Steve Enns, SJVAPCD

Enclosures