



**MAR 21 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-1703**  
**Project # S-1113892**

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. Macpherson Oil Company is proposing a Title V minor permit modification to incorporate the recently issued S-1703-197-0 and '-144-12 into the Title V operating permit. Macpherson Oil Company has proposed connecting a new free water knockout tank, S-1703-197, to the existing vapor control system listed on '-144.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-1703-197-0 and '-144-12, 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

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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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

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



MAR 21 2012

Jody Butler  
Macpherson Oil Company  
P.O. Box 5368  
Bakersfield, CA 93388

**Re: Notice of Minor Title V Permit Modification  
District Facility # S-1703  
Project # S-1113892**

Dear Mr. Butler:

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 S-1703-197-0 and '-144-12 into the Title V operating permit. Macpherson Oil Company has proposed connecting a new free water knockout tank, S-1703-197, to the existing vapor control system listed on '-144.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-1703-197-0 and '-144-12, 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

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**Southern Region**  
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Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585

# TITLE V APPLICATION REVIEW

Minor Modification  
Project #: S-1113892

Engineer: Kris Rickards  
Date: February 21, 2012

Facility Number: S-1703  
Facility Name: Macpherson Oil Company  
Mailing Address: P.O. Box 5368  
Bakersfield, CA 93388

*Reviewed by AP<sup>SUPP</sup> AOE*

MAR 20 2012

Contact Name: Jody Butler  
Phone: 661-393-3204 x103

Responsible Official: Jody Butler  
Title: Operations Superintendent

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## I. PROPOSAL

Macpherson Oil Company is proposing a Title V minor permit modification to incorporate the recently issued S-1703-144-12 and '-197-0 into the Title V operating permit. These ATCs authorize the installation of a new free water knockout tank and connection of this tank to an existing vapor control system.

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 is located in Macpherson's Central Kern County Heavy Oil Stationary Source in the SE/4 of Section 18, Township 28E, Range 29E.

### III. EQUIPMENT DESCRIPTION

**S-1703-144-14:** 2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-240 SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-1703-145, '-146, '-150, '-152, AND '-195 VENTING TO VAPOR CONTROL SYSTEM PERMITTED UNDER S-1703-143 AND/OR DIRECTLY TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, OR '-162 FOR INCINERATION

**S-1703-197-1:** 10,000 BBL FREE WATER KNOCKOUT TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

### 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-1703-144:

No conditions were changed on this permit. The following change to the equipment description reflects the installation of the new tank listed on permit S-1703-197:

2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-240 SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-1703-145, '-146, '-150, '-152, ~~AND '-195,~~ AND '-197 VENTING TO VAPOR CONTROL SYSTEM PERMITTED UNDER S-1703-143 AND/OR DIRECTLY TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION

#### S-1703-197:

This ATC authorized the installation of new equipment. As such, this permit will be converted to a Permit to Operate and does not require review (per Rule 2520 §6.4.4: *Other Changes Not Requiring Permit Amendment*)

## 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;
4. 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;
  - a. 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
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. 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
6. 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 Modified Title V Operating Permit No. S-1703-144-14 & '-197-1
- B. Authorities to Construct No. S-1703-144-12 & '-197-0
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permit No. S-1703-144-9

# ATTACHMENT A

Proposed Modified Title V Operating Permit No.  
(S-1703-144-14 & '-197-1)

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1703-144-14

EXPIRATION DATE: 07/31/2016

SECTION: 18 TOWNSHIP: 28S RANGE: 29E

## EQUIPMENT DESCRIPTION:

2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-240 SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-1703-145, '-146, '-150, '-152, '-195, AND '-197 VENTING TO VAPOR CONTROL SYSTEM PERMITTED UNDER S-1703-143 AND/OR DIRECTLY TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, OR '-162 FOR INCINERATION

## PERMIT UNIT REQUIREMENTS

1. The tank vapors may be introduced into TEOR system S-1703-143 at either the main trunk line, or immediately upstream of the H2S scrubber system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained to prevent leaks. The vapors shall be incinerated to reduce the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4 of Rule 4623 in any of the following steam generators: S-1703-157, -158, -159, -160, -161, or -162; or vapors shall be injected into DOGGR approved wells listed on permit S-1703-143. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
4. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
5. During a 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. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All vessel and vapor control system piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated to methane, to ensure compliance with the provisions of this permit. If any of the vessel components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no vessel components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 ft above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Before disposal of VOC vapors by well injection, the applicant shall obtain written notification from DOGGR that the wells are approvable for injection. [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.

8. 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
9. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. 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
13. 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
14. 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
15. 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
16. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
18. 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
19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
21. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1703-197-1

EXPIRATION DATE: 07/31/2016

**EQUIPMENT DESCRIPTION:**

10,000 BBL FREE WATER KNOCKOUT TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. 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
10. The permittee shall keep accurate records of each organic liquid stored in the tank including TVP and API gravity. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 4623] Federally Enforceable Through Title V Permit
12. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [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.

13. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080]

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

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# ATTACHMENT B

Authorities to Construct No.  
(S-1703-144-12 & '-197-0)

# AUTHORITY TO CONSTRUCT

PERMIT NO: S-1703-144-12

ISSUANCE DATE: 09/08/2010

LEGAL OWNER OR OPERATOR: MACPHERSON OIL COMPANY

MAILING ADDRESS: PO BOX 5368  
BAKERSFIELD, CA 93388

LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE  
CA

SECTION: 18 TOWNSHIP: 28S RANGE: 29E

## EQUIPMENT DESCRIPTION:

MODIFICATION OF 84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-240 WITH VAPOR CONTROL SYSTEM SERVING TANKS S-1703-144, '-145, '-146, '-150, AND '-152 VENTING TO VAPOR CONTROL SYSTEM LISTED ON '-143 OR TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162: ADD TANK '-197 TO 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. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained to prevent leaks. The vapors shall be incinerated to reduce the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4 of Rule 4623 in any of the following steam generators: S-1703-157, -158, -159, -160, or -161; or vapors shall be injected into DOGGR approved wells listed on permit S-1703-143. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit

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

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DAVID WARNER, Director of Permit Services

S-1703-144-12 : Feb 21 2012 3:21PM -- RICKARDK : Joint Inspection NOT Required

4. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
5. During a 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. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All vessel and vapor control system piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated to methane, to ensure compliance with the provisions of this permit. If any of the vessel components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no vessel components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 ft above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Before disposal of VOC vapors by well injection, the applicant shall obtain written notification from DOGGR that the wells are approvable for injection. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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
9. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. 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
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14. 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
15. The permittee shall keep accurate records of each organic liquid stored in the tank including TVP and API gravity. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
16. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

18. 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
19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
21. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080]

# AUTHORITY TO CONSTRUCT

PERMIT NO: S-1703-197-0

ISSUANCE DATE: 09/08/2010

LEGAL OWNER OR OPERATOR: MACPHERSON OIL COMPANY

MAILING ADDRESS: PO BOX 5368  
BAKERSFIELD, CA 93388

LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE  
CA

**EQUIPMENT DESCRIPTION:**

10,000 BBL FREE WATER KNOCKOUT TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

## CONDITIONS

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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. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. [District Rule 2201]
3. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201]
4. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201]
5. 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]
6. 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

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

COPY

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DAVID WARNER, Director of Permit Services

S-1703-197-0 : Feb 21 2012 4:49PM -- RICKARDK : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

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]
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]
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]
10. 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]
11. The permittee shall keep accurate records of each organic liquid stored in the tank including TVP and API gravity. [District Rule 4623, 6.3.6]
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 4623]
13. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201]
14. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080]

# ATTACHMENT C

Emissions Increases

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
S-1703-144	0	0	0	0	0
S-1703-197	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

# ATTACHMENT D

Application

# San Joaquin Valley Air Pollution Control District

[www.valleyair.org](http://www.valleyair.org)

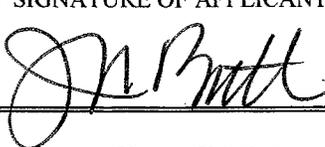
RECEIVED

AUG 25 2011

SJVAPCD  
Southern Region

## Permit Application For:

ADMINISTRATIVE AMENDMENT     MINOR MODIFICATION     SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Macpherson Oil Company	
2. MAILING ADDRESS: STREET/P.O. BOX: <u>P. O. Box 5368</u> CITY: <u>Bakersfield</u> STATE: <u>CA</u> 9-DIGIT ZIP CODE: <u>93388</u>	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: <u>Round Mountain Unit</u> CITY: _____ SE <u>12</u> ¼ SECTION TOWNSHIP <u>28S</u> RANGE <u>28E</u>	INSTALLATION DATE: <u>Under Construction</u>
4. GENERAL NATURE OF BUSINESS: <u>Oil &amp; Gas Production</u>	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)  <u>Modify Title V permit to implement the following ATC:</u>  <u>S-1703-197-0 and -144-12</u>	
6. TYPE OR PRINT NAME OF APPLICANT: <u>Jody Butler</u>	TITLE OF APPLICANT: <u>Operations Superintendent</u>
7. SIGNATURE OF APPLICANT: 	DATE: <u>8/24/11</u> PHONE: (661) 393-3204 ext 103 FAX: (661) 393-8065 EMAIL: <u>jody_butler@macphersonoil.com</u>

*For APCD Use Only:*

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK#: _____
	DATE PAID: _____
	PROJECT NO: <u>S-1113892</u> FACILITY ID: <u>S-1703</u>

*Title V - Minor Mod*

**San Joaquin Valley  
Unified Air Pollution Control District**

**TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM**

**I. TYPE OF PERMIT ACTION (Check appropriate box)**

- SIGNIFICANT PERMIT MODIFICATION       ADMINISTRATIVE  
 MINOR PERMIT MODIFICATION                       AMENDMENT

<b>COMPANY NAME: Macpherson Oil Company</b>	<b>FACILITY ID: S - 1703</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:	
3. Agent to the Owner:	

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

- Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the source 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

8/24/11  
\_\_\_\_\_  
Date

Jody Butler  
\_\_\_\_\_  
Name of Responsible Official (please print)

Operations Superintendent  
\_\_\_\_\_  
Title of Responsible Official (please print)

Implement ATC # S-1703-197-0 and -144-12 into the Title V Permit.

# ATTACHMENT E

Previous Title V Operating Permit No.  
(S-1703-144-9)

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1703-144-9

**EXPIRATION DATE:** 07/31/2016

**SECTION:** 18 **TOWNSHIP:** 28S **RANGE:** 29E

## **EQUIPMENT DESCRIPTION:**

2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-240 SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-1703-145, '-146, '-150, '-152, AND '-195 VENTING TO VAPOR CONTROL SYSTEM PERMITTED UNDER S-1703-143 AND/OR DIRECTLY TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION

## **PERMIT UNIT REQUIREMENTS**

---

1. The tank vapors may be introduced into TEOR system S-1703-143 at either the main trunk line, or immediately upstream of the H2S scrubber system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained to prevent leaks. The vapors shall be incinerated to reduce the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4 of Rule 4623 in any of the following steam generators: S-1703-157, -158, -159, -160, -161, or -162; or vapors shall be injected into DOGGR approved wells listed on permit S-1703-143. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
4. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
5. During a 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. [District Rule 4623] Federally Enforceable Through Title V Permit
6. All vessel and vapor control system piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated to methane, to ensure compliance with the provisions of this permit. If any of the vessel components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no vessel components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 ft above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 4623] Federally Enforceable Through Title V Permit
7. Before disposal of VOC vapors by well injection, the applicant shall obtain written notification from DOGGR that the wells are approvable for injection. [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.

8. 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
9. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. 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
13. 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
14. 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
15. 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
16. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
18. 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 4623] Federally Enforceable Through Title V Permit
19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
21. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

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