San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

JUL 12 2012

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

Re: **Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)**
District Facility # S-1703
Project # 1121681

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authorities to Construct for Macpherson Oil Company, located at the heavy oil production stationary source in the central Kern County fields, which has been issued a Title V permit. Macpherson Oil Company is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The ATCs authorize installation of a new 7000 bbl wash tank to be connected to an existing vapor control system for a Thermally Enhanced Oil Recovery (TEOR) operation.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authorities to Construct # S-1703-143-19 and '-211-0 with Certificate of Conformity. After demonstrating compliance with the Authorities to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures
cc: Richard Edgehill, Permit Services

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
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34946 Flyover Court
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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

JUL 12 2012

Richard Scholl
Macpherson Oil Company
PO Box 5368
Bakersfield, CA 93388

Re: Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)
District Facility # S-1703
Project # 1121681

Dear Mr. Scholl:

Enclosed for your review is the District's analysis of your application for Authorities to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The ATCs authorize installation of a new 7000 bbl wash tank to be connected to an existing vapor control system for a Thermally Enhanced Oil Recovery (TEOR) operation.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review

Install new 7,000 bbl wash tank connected to existing TEOR vapor control system

Facility Name:	Macpherson Oil Company	Date:	July 11, 2012
Mailing Address:	PO Box 5368 Bakersfield, CA 93388	Engineer:	Richard Edgehill
		Lead Engineer:	Allan Phillips
Contact Person:	Richard Scholl, Facilities Engineer		
Telephone:	661-393-3204 ext 107		
Application #(s):	S-1703-143-19 and '-211-0		
Project #:	S-1121681		
Deemed Complete:	May 29, 2012		

AS SURFACE
JUL 11 2012

I. Proposal

Macpherson Oil Company (MOC) has requested an Authorities to Construct (ATCs) to install a new 7000 bbl wash tank (ATC S-1703-211-0) to be connected to the existing vapor control system (VCS) listed on TEOR operation permit S-1703-143. The new wash tank will replace existing storage tank S-1703-109.

Modification of a shared VCS to include a new tank is also not a NSR modification according to District FYI-111. Therefore the change to S-1703-143 is administrative and not subject to the requirements of BACT, offsets, and public notice.

Note that gas processed by TEOR operation S-1703-143 is limited by permit condition to contain less than 10% VOCs by weight and, therefore, according to District policy SSP 2015, fugitive emissions are not assessed. Vapors from tank S-1703-211-0 will also be limited to less than 10% by weight. Therefore the project does not result in an increase in VOC emissions. BACT, offsets and public notice are not triggered.

Disposition of Outstanding ATCs

Current PTO S-1703-143-17 is included in **Attachment I**.

MOC received their Title V Permit on May 31, 2001. This modification can be classified as a Title V minor modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. MOC must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC(s) issued with this project.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4623	Storage of Organic Liquids (05/19/05)
Rule 4401	Steam Enhanced Crude Oil Production Wells (06/16/11)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

All equipment is located in the heavy oil central stationary source. TEOR operation S-1703-143 is authorized at Sections 7, 17, 18, 19 and 20 T28S/R29E and Sections 12 and 13 T28S/R28E. Proposed tank S-1703-211-0 will be located at SW Section 17, T28S, R29E. A photograph of the proposed location is included in **Attachment** II. The District has verified that the equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

Steam is utilized to enhance heavy oil recovery. Steam generators produce steam that is injected into the strata to reduce viscosity. Condensed water is extracted with the produced oil and routed to vapor-controlled water/oil separators and tanks. Vapors from affected well vents are collected and routed to knockouts and compressor stations for injection back into the formation or use as supplemental fuel in steam generators.

Crude oil production tank batteries receive production from crude oil recovery operations. These facilities separate the produced water from the crude oil prior to shipment. Produced water is piped to the produced water tank and dehydrated oil is piped to the stock tanks and then pumped to a sales line for delivery to a refining operation.

Proposed New Tank
The new wash tank S-1703-211 will replace existing tank S-1703-109, with vapors vented to VCS S-1703-143. The VOC content of the vapors is expected to be less than 10% by weight. Therefore pursuant to District policy SSP-2015, no emissions are assessed to components serving the tank.

A plot plan is included in **Attachment III**.

V. Equipment Listing

Pre-Project Equipment Description:

ATC S-1703-143-17: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION SERVING UP TO 250 WELLS INCLUDING HEAT EXCHANGERS, SEPARATORS, KNOCKOUTS AND COMPRESSOR STATIONS WITH OPEN OR CLOSED CASING VENTS CONNECTED TO WELL VENT VAPOR CONTROL SYSTEM AND TANK VAPOR CONTROL SYSTEMS S-1703-139, -144, AND -184 SERVED BY H2S SCRUBBER SYSTEM WITH COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION OF NONCONDENSIBLE VAPORS OR TO GAS DISPOSAL WELL

Proposed Modification:

ATC S-1703-143-19: MODIFICATION OF THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION SERVING UP TO 250 WELLS INCLUDING HEAT EXCHANGERS, SEPARATORS, KNOCKOUTS AND COMPRESSOR STATIONS WITH OPEN OR CLOSED CASING VENTS CONNECTED TO WELL VENT VAPOR CONTROL SYSTEM AND TANK VAPOR CONTROL SYSTEMS S-1703-139, -144, AND -184 SERVED BY H2S SCRUBBER SYSTEM WITH COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION OF NONCONDENSIBLE VAPORS OR TO GAS DISPOSAL WELL: CONNECT TANK S-1703-211 TO VAPOR CONTROL SYSTEM

Post Project Equipment Description:

PTO S-1703-143-19: THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION SERVING UP TO 250 WELLS INCLUDING HEAT EXCHANGERS, SEPARATORS, KNOCKOUTS AND COMPRESSOR STATIONS WITH OPEN OR CLOSED CASING VENTS CONNECTED TO WELL VENT VAPOR CONTROL SYSTEM, TANK S-1703-211, AND TANK VAPOR CONTROL SYSTEMS S-1703-139, -144, AND -184 SERVED BY H2S SCRUBBER SYSTEM WITH COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION OF NONCONDENSIBLE VAPORS OR TO GAS DISPOSAL WELL

PTO S-1703-211-0: 7000 BBL CRUDE OIL WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-143

VI. Emission Control Technology Evaluation

New tank S-1703-211 will be connected to TEOR VCS S-1703-143 with a VOC control efficiency expected to be 99% required by Section 3.50 of Rule 4401. The VCS must be maintained "leak free" as reflected by a stringent I&M program with prompt and diligent repair of leaks.

VII. General Calculations

A. Assumptions

- Facility operates 24 hr/day, 365 days/yr
- Per District Policy SSP-2015, Procedures for Quantifying Fugitive VOC Emissions at Petroleum and SOCMI Facilities, VOC emissions from components at oil and gas production operations handling vapors with a VOC content of less than 10% are considered negligible and not assessed. Therefore, pre and post-project emissions from TEOR operation S-1703-143 and emissions from wash tank S-1703-211 are equal to 0 lb /day VOC. A gas analysis is provided in **Attachment IV**.
- Components in heavy oil and heavy oil/water service are considered negligible (District practice).
- There are no fugitive emissions components added to TEOR operation S-1703-143.
- As mentioned in the proposal section, the proposed change to TEOR operation S-1703-143 is not a NSR modification and therefore NSR calculations for S-1703-143 are not required. PE2 will be calculated for inclusion in the PAS emissions profile.

B. Emission Factors

There are no VOC emissions as the gas handled by the vapor control system contains < 10%, therefore VOC emissions considered negligible and not assessed.

HRA emissions - applicant has provided the following fugitive emissions component counts. Spreadsheet calculations are included in **Attachment V**.

Fugitive Emissions Component Counts (gas/light liquid)

	Valves	Pump Seals	Others	Connectors	Flanges
S-1703-211	80	0	80	240	240

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Tank S-1703-211 is new and therefore PE1 = 0.

2. Post Project Potential to Emit (PE2)

Permit Unit	VOC - Daily PE2 (lb/day)	VOC - Annual PE2 (lb/Year)
S-1703-143	0.0	0
S-1703-211	0.0	0

Emissions Profiles are included in **Attachment VI**.

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

MOC has no ERC certificates.

Applicant has provided a calculation of SSPE1 (**Attachment VII**) which is listed below.

Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
Pre-Project SSPE (SSPE1)	57,194	20,406	40,538	179,499	1,771,034

4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

There is no change to the PE of any unit at the facility. Therefore the SSPE2 = SSPE1.

Post Project Stationary Source Potential to Emit [SSPE2] (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
Post Project SSPE (SSPE2)	57,194	20,406	40,538	179,499	1,771,034

5. Major Source Determination

Pursuant to Section 3.24 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values.

However, Section 3.24.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site."

Major Source Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
Pre-Project SSPE (SSPE1)	57,194	20,406	40,538	179,499	1,771,034
Post Project SSPE (SSPE2)	57,194	20,406	40,538	179,499	1,771,034
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	No	No	No	Yes

As seen in the table above, the facility is a Major Source for NOx and VOC. The facility's Major Source status for each pollutant is not changing as a result of this project.

6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

As shown in Section VII.C.5 above, the facility is not a Major Source for any pollutant.

Therefore BE= PE1.

S-1703-211-0 is a new emissions unit and therefore BE = 0.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the, increases in fugitive emissions are not included in the SB 288 Major Modification calculation. This project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in the Federal Major Modification determination. This project does not constitute a Federal Major Modification and no further analysis is required.

9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. The QNEC for S-1703-211 PE1/4 = 0 lb/qtr.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

As seen in Section VII.C.2 above, the applicant is proposing to install a new wash tank with VOC emissions less than 2 lb/day. Therefore BACT is not triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated; therefore BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

As discussed in Section I above, there are no modified emissions units associated with this project. Therefore BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does not constitute an SB 288 or Federal Major Modification for NO_X emissions. Therefore BACT is not triggered for any pollutant.

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	57,194	20,406	40,538	179,499	1,771,034
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets Calculations required?	Yes	No	No	No	Yes

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for NOx and VOC. However PE2 = 0 for these air contaminants and therefore offsets will not be required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:
a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
c. Any project which results in the offset thresholds being surpassed, and/or
d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in VII.C.7, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units with a PE>100 lb/day associated with this project. Therefore public noticing is not required for this project for PE > 100 lb/day is not required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO_X	57,194	57,194	20,000 lb/year	No
SO_X	20,406	20,406	54,750 lb/year	No
PM_{10}	40,538	40,538	29,200 lb/year	No
CO	179,499	179,499	200,000 lb/year	No
VOC	1,771,034	1,771,034	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO_x	57,194	57,194	0	20,000 lb/year	No
SO_x	20,406	20,406	0	20,000 lb/year	No
PM_{10}	40,538	40,538	0	20,000 lb/year	No
CO	179,499	179,499	0	20,000 lb/year	No
VOC	1,771,034	1,771,034	0	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

2. Public Notice Action

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

For the tanks, the DELs are stated in the form of VOC emissions (lb/day).

Proposed Rule 2201 (DEL) Conditions:

S-1703-211-0:

Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Y

E. Compliance Assurance

1. Source Testing

To maintain the exemption from fugitive emissions (VOC content of the vapors in the tank will be below 10% by weight) regular testing will be required:

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]

2. Monitoring

VOC content of the vapors in the tank will be below 10% by weight. Therefore no monitoring is required.

3. Recordkeeping

The permittee will be required to keep records verifying that the vapors stored in the tank remain below 10% by weight of VOC:

Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201]

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]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit pursuant to Section 3.20 of this rule:

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.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application. The Title v Compliance Certification form is included in **Attachment VIII**.

Continued compliance with this rule is expected.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates the New Source Performance Standards from 40 CFR Part 60. 40 CFR Part 60, Subpart Kb could potentially apply to the new storage tank.

Pursuant to 60.110b (b), Subpart Kb does not apply to a vessel with a design capacity less than or equal to 1,589.874 cubic meters (10,000 barrels) used for petroleum storage at a production facility prior to custody transfer. Since the new wash tank has a capacity less than or equal to 1,589.874 cubic meters and is used at a production facility prior to custody transfer, Subpart Kb does not apply.

Therefore, the requirement of this subpart is not applicable to this project.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (**Attachment IX**), the total facility prioritization score including this project was greater than one. Therefore, a health risk assessment was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
S-1703-211	1.61 E-11	No

The project is approvable without TBACT

Rule 4401 Steam-enhanced Crude Oil Production Well Vents

PTO ATC S-1703-143-17 (base document) includes updated Rule 4401 conditions. The project is not expected to affect the compliance status of the rule.

Continuous compliance is expected.

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). Visible emissions are not expected from the petroleum processing tanks. Also, based on past inspections of the facility continued compliance is expected.

Rule 4623 Storage of Organic Liquids

This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

The new tank will be served by VCS S-1703 -143 with an expected control efficiency exceeding 99%.

Continued compliance with Rule 4623 requirements is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;

- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District conducted a Risk Management Review and concludes that potential health impacts are less than significant.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue ATCs S-1703-143-19 and '-211-0 subject to the permit conditions on the attached draft ATCs in **Attachment X.**

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1703-143	3020-05-D	84,000 gallon tank	$185.00
S-1703-211	3020-05-E	294,000 gallon tank	$246.00

Attachments
I: PTO S-1703-143-17
II: Photograph
III: Plot Plan
IV: Gas Analysis
V: Fugitive Emissions Calculation
VI: Emissions Profiles
VII: SSPE Calculation
VIII: Title V Compliance Certification Form
IX: HRA
X: Draft ATCs

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ATTACHMENT I
PTO S-1703-143-17

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1703-143-17 **EXPIRATION DATE:** 07/31/2016

SECTION: NE20 **TOWNSHIP:** 28S **RANGE:** 29E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION SERVING UP TO 250 WELLS INCLUDING HEAT EXCHANGERS, SEPARATORS, KNOCKOUTS AND COMPRESSOR STATIONS WITH OPEN OR CLOSED CASING VENTS CONNECTED TO WELL VENT VAPOR CONTROL SYSTEM AND TANK VAPOR CONTROL SYSTEMS S-1703-139, -144, AND -184 SERVED BY H2S SCRUBBER SYSTEM WITH COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION OF NONCONDENSIBLE VAPORS OR TO GAS DISPOSAL WELL

PERMIT UNIT REQUIREMENTS

1. TEOR wells are authorized at Sections 7, 17, 18, 19 and 20 T28S/R29E and at Sections 12 and 13 T28S/R28E. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The operation shall be equipped with heat exchangers, free water knockouts, gas liquid separators, vapor compressors with electric motors, and compressed vapor piping to any of the following steam generators S-1703-157, -158, -159, -160, -161, or '-162. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Noncondensibles shall be incinerated in steam generators S-1703-157, -158, -159, -160, -161, or '-162 or injected into DOGGR-approved disposal well. [District NSR Rule] Federally Enforceable Through Title V Permit
4. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
5. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
6. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
7. The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC content of gas shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401 3.20] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.1 and 5.5.2] Federally Enforceable Through Title V Permit
12. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.6.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
13. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or a gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
14. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.6.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.9 of Rule 4401. [District Rule 4401 5.7.1] Federally Enforceable Through Title V Permit
15. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401 5.7.2] Federally Enforceable Through Title V Permit
16. An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401 5.7.3] Federally Enforceable Through Title V Permit
17. The annual inspection requirements of Section 5.8.1 through Section 5.8.5 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10 wt %) or less, as determined by the test methods in Section 6.3.5 of Rule 4401. [District Rule 4401 4.9] Federally Enforceable Through Title V Permit
18. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401 5.8.1] Federally Enforceable Through Title V Permit
19. An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401 5.8.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. In addition to the inspections required by Section 5.8.1 of Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401 5.8.3] Federally Enforceable Through Title V Permit
21. In addition to the inspections required by Sections 5.8.1, 5.8.2 and 5.8.3 of Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Section 5.8.4.1 of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401 5.8.4] Federally Enforceable Through Title V Permit
22. An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401 5.8.5] Federally Enforceable Through Title V Permit
23. District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401 5.8.6] Federally Enforceable Through Title V Permit
24. An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401 5.9.1] Federally Enforceable Through Title V Permit
25. An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and 5.9.2.3 of Rule 4401, or the component is found to be in compliance with the requirements of this rule. [District Rule 4401 5.9.2] Federally Enforceable Through Title V Permit
26. An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401 5.9.3] Federally Enforceable Through Title V Permit
27. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 4 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit
28. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit
29. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.5] Federally Enforceable Through Title V Permit
30. The time of the initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component 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, whichever comes earlier. [District Rule 4401 5.9.7] Federally Enforceable Through Title V Permit
32. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401 6.1.1] Federally Enforceable Through Title V Permit
33. An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401 6.1.3] Federally Enforceable Through Title V Permit
34. The results of source tests conducted pursuant to Section 4.6.2 of Rule 4401 shall be submitted to the APCO within 60 days after the completion of the source test. [District Rule 4401 6.1.4] Federally Enforceable Through Title V Permit
35. Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401 6.1.5] Federally Enforceable Through Title V Permit
36. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401 6.1.6] Federally Enforceable Through Title V Permit
37. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401 6.1.7] Federally Enforceable Through Title V Permit
38. Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401 6.1.8] Federally Enforceable Through Title V Permit
39. Operator shall submit to the APCO not later than June 14, 2007 a list of all gauge tanks, as defined in Section 3.17. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401 6.1.9] Federally Enforceable Through Title V Permit
40. The results of gauge tank TVP testing conducted pursuant to Section 6.2.5 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401 6.1.10] Federally Enforceable Through Title V Permit
41. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401 6.1.11] Federally Enforceable Through Title V Permit
42. An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. [District Rule 4401 6.2.1] Federally Enforceable Through Title V Permit
43. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless flare. [District Rule 4401 6.2.2] Federally Enforceable Through Title V Permit
44. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 for a vapor control system which does not have a VOC destruction device. [District Rule 4401 6.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. An operator seeking approval pursuant to Section 6.2.2 or Section 6.2.3 shall submit a written request and supporting information to the APCO. The District shall evaluate the request and if approved by the APCO, the District shall provide EPA and ARB with a copy of the evaluation and shall request EPA and ARB approval. The District evaluation and the APCO request shall be deemed approved unless EPA or ARB objects to such approval in writing within 45 days of the receipt of the APCO request. [District Rule 4401 6.2.4] Federally Enforceable Through Title V Permit

46. An operator shall comply with the following requirements for each gauge tank, as defined in Section 3.17 of Rule 4401: Conduct an initial TVP testing of the produced fluid in each gauge tank not later than June 14, 2007. Thereafter, an operator shall conduct periodic TVP testing of each gauge tank at least once every 24 months during summer (July - September), and whenever there is a change in the source or type of produced fluid in the gauge tank. The TVP testing shall be conducted at the actual storage temperature of the produced fluid in the gauge tank using the applicable TVP test method specified in Section 6.4 of Rule 4623 (Storage of Organic Liquids). The operator shall submit the TVP testing results to the APCO as specified in Section 6.1.10 of Rule 4401. [District Rule 4401 6.2.5] Federally Enforceable Through Title V Permit

47. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401 6.3.1] Federally Enforceable Through Title V Permit

48. VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401 6.3.2] Federally Enforceable Through Title V Permit

49. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401 6.3.3] Federally Enforceable Through Title V Permit

50. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401 6.3.5] Federally Enforceable Through Title V Permit

51. Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak. the date of repair, replacement, or removal from operation of leaking components, identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401 6.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

52. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

ATTACHMENT II
Photograph

N

0 400' 800'
GRAPHIC SCALE

S-1409-109
Being replaced

NOTES:

DIVERSIFIED PROJECT SERVICES INTERNATIONAL
Bakersfield, CA
(661) 371-2800
www.dpsiinc.com
PROJECT: 111110

REV. NO	DATE	REVISED	DESTROY ALL PRINTS BEARING EARLIER DATE	REV BY	CKD BY	APP'D
A	11/23/11	ISSUED FOR REVIEW		GV	JC	JC

APPROVED FOR CONSTRUCTION

A. F. E.	DATE	SIGNED

DRAWN BY GV
CHECKED BY JC
TRACED BY
TRACE CKD
APP'D
APP'D
SCALE —
DATE 11/23/11

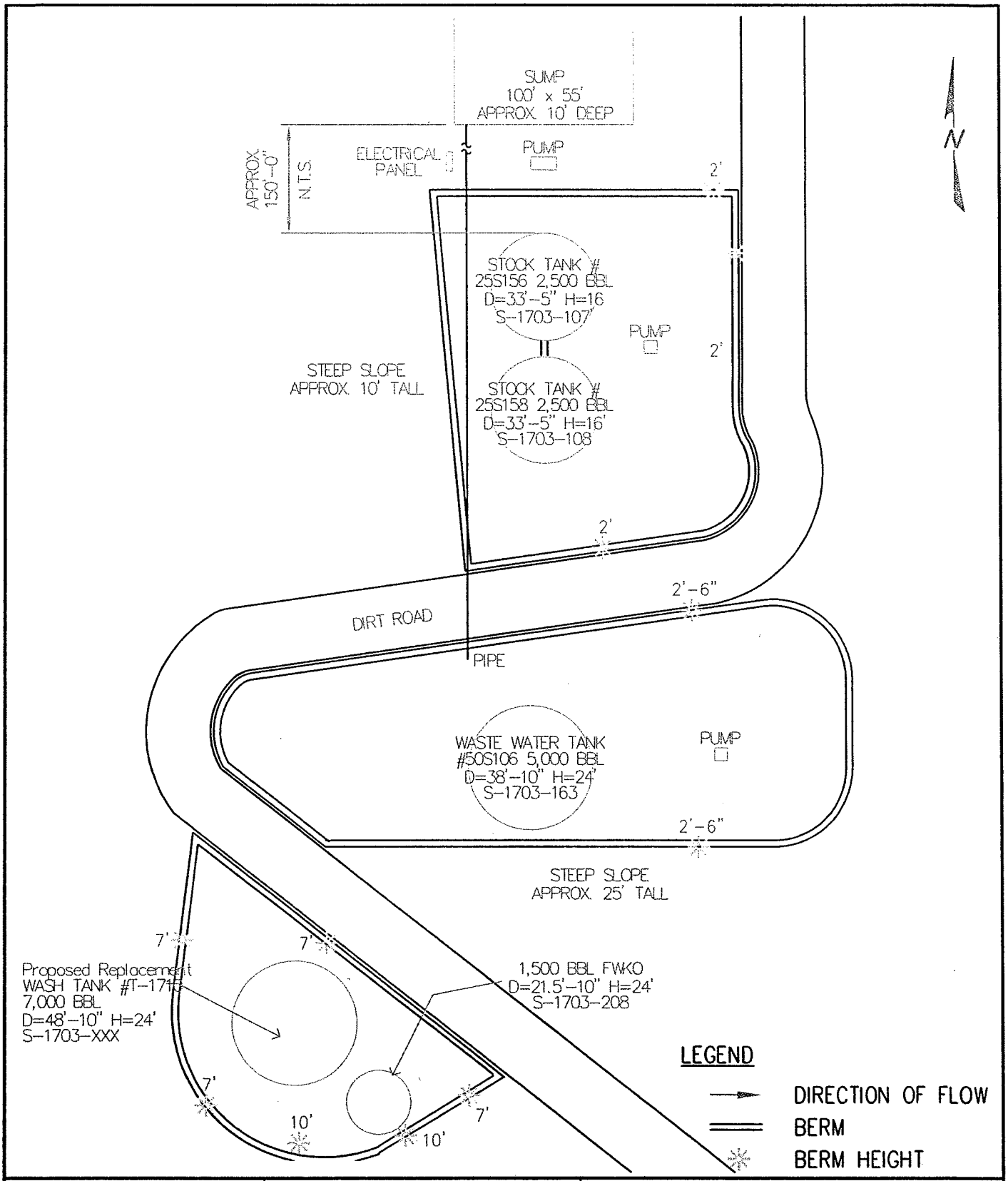
MACPHERSON Oil Company
ROUND MOUNTAIN UNIT - KERN COUNTY, CA

MOC - FWKO TANK
TANK SETTING
ROUND MOUNTAIN RD, KERN COUNTY, CA

DRAWING NUMBER: Aerial-001 REV: A
SHEETS SHEET 1
CADD FILE: Aerial-001.dwg DATE: BY: REV:

L:\Projects\111110 - MOC - Stephens FWKO Tank\Design\Drawings\AERIAL\Aerial-001.dwg 11-23-11 09:58:26 AM gvalles

ATTACHMENT III
Plot Plan



Insight Environmental Consultants

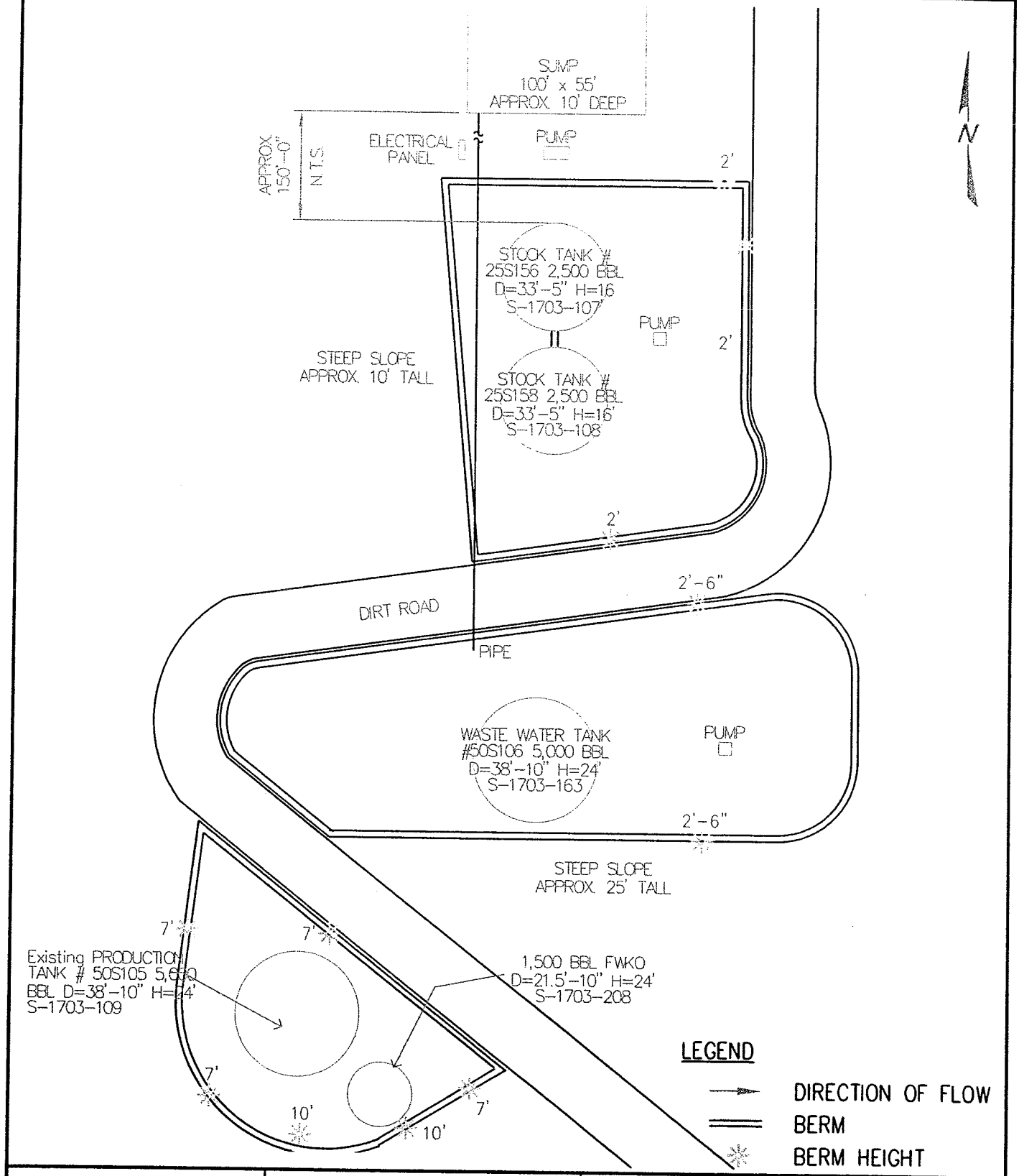
MOC
MACPHERSON OIL COMPANY

SPCC PLAN
MACPHERSON OIL Co.
OLCESE
PRODUCTION FACILITY

NO SCALE

DATE: 10/29/2009

Post-Project



Insight Environmental Consultants

MACPHERSON OIL COMPANY

SPCC PLAN
MACPHERSON OIL Co.
OLCESE
PRODUCTION FACILITY

NO SCALE

DATE: 10/29/2009

Pre-Project

ATTACHMENT IV
Gas Analysis

PGT
Pacific Gas Technology, Inc.

E-mail pgtech@earthlink.net

4100 Burr Street
P.O. Box 80847
Bakersfield, CA 93380-0847
Telephone (661) 324-1317
Fax (661) 324-2746

Macpherson Oil Co.
P.O. Box 5368
Bakersfield, CA 93388
Attn: Jesse Martinez

Sampled: 7/13/2011
Submitted: 7/14/2011
Analyzed: 7/14/2011
Reported: 7/19/2011

Gas Analysis by Chromatography - ASTM D 3588-98

Company:
Location:
Description: Section 18 TVR

Lab No.: 110650-3
Sample Time:
Sample Type:

Component	Mole %	Weight %	G/MCF
Oxygen	0.48	0.80	
Nitrogen	2.54	3.70	
Carbon Dioxide	9.08	20.78	
Hydrogen	ND	0.00	
Carbon Monoxide	ND	0.00	
Methane	86.63	72.27	
Ethane	0.93	1.45	
Propane	0.08	0.18	0.022
iso-Butane	0.19	0.57	0.062
n-Butane	0.03	0.09	0.009
iso-Pentane	0.04	0.15	0.015
n-Pentane	ND	0.00	0.000
Hexanes Plus	ND	0.00	0.000
Totals	100.00	100.00	0.109

			Values Corrected for Compressibility
Specific Volume, ft3/lb		19.73	
Compressibility (Z) Factor		0.9978	
Specific Gravity, Calculated		0.6640	0.6652
GROSS			
BTU/ft3	Dry	902.2	904.2
	Wet	886.4	888.4
BTU/lb	Dry	17802.9	17843.0
BTU/lb	Wet	17491.4	17530.7
NET			
BTU/ft3	Dry	812.8	814.6
	Wet	798.6	800.4
BTU/lb	Dry	16039.0	16075.1
BTU/lb	Wet	15758.3	15793.8

CHONS	Weight %
Carbon	61.764
Hydrogen	18.629
Oxygen	15.907
Nitrogen	3.700
Sulfur	0.000
F FACTOR @ 68 deg F, dscf/MMBTU	8715
F FACTOR @ 60 deg F, dscf/MMBTU	8585

		Method
Hydrogen Sulfide, ppm	TR<1	GC/FPD
Total Sulfur, ppm	Not Tested	ASTMD 3246
Dew Point, deg F	Not Tested	Bureau of Mines
Moisture, lbs H2O/MMCF	Not Tested	Bureau of Mines

ND : None Detected
Tr : Trace

PGT
Pacific Gas Technology, Inc.

E-mail pgtech@earthlink.net

4100 Burr Street
P.O. Box 80847
Bakersfield, CA 93380-0847
Telephone (661) 324-1317
Fax (661) 324-2746

Macpherson Oil Co.
P.O. Box 5368
Bakersfield, CA 93388
Attn: Jesse Martinez

Sampled: 7/12/2011
Submitted: 7/14/2011
Analyzed: 7/15/2011
Reported: 7/19/2011

Gas Analysis by Chromatography - ASTM D 3588-98

Company:
Location:
Description: Section 12 TVR

Lab No.: 110650-2
Sample Time:
Sample Type:

Component	Mole %	Weight %	G/MCF
Oxygen	0.57	0.97	
Nitrogen	2.84	4.25	
Carbon Dioxide	7.85	18.45	
Hydrogen	ND	0.00	
Carbon Monoxide	ND	0.00	
Methane	88.38	75.71	
Ethane	0.31	0.50	
Propane	0.05	0.12	0.014
iso-Butane	ND	0.00	0.000
n-Butane	ND	0.00	0.000
iso-Pentane	ND	0.00	0.000
n-Pentane	ND	0.00	0.000
Hexanes Plus	ND	0.00	0.000
Totals	100.00	100.00	0.014

			Values Corrected for Compressibility
Specific Volume, ft3/lb		20.26	
Compressibility (Z) Factor		0.9979	
Specific Gravity, Calculated		0.6466	0.6477
GROSS			
BTU/ft3	Dry	899.4	901.3
	Wet	883.6	885.5
BTU/lb	Dry	18225.2	18264.2
BTU/lb	Wet	17906.3	17944.6
NET			
BTU/ft3	Dry	809.9	811.6
	Wet	795.7	797.4
BTU/lb	Dry	16412.0	16447.1
BTU/lb	Wet	16124.8	16159.3

CHONS	Weight %
Carbon	62.214
Hydrogen	19.150
Oxygen	14.387
Nitrogen	4.248
Sulfur	0.000
F FACTOR @ 68 deg F, dscf/MMBTU	8698
F FACTOR @ 60 deg F, dscf/MMBTU	8568

		Method
Hydrogen Sulfide, ppm	TR<1	GC/FPD
Total Sulfur, ppm	Not Tested	ASTMD 3246
Dew Point, deg F	Not Tested	Bureau of Mines
Moisture, lbs H2O/MMCF	Not Tested	Bureau of Mines

ND : None Detected
Tr : Trace

PGT
Pacific Gas Technology, Inc.

E-mail pgtech@earthlink.net

4100 Burr Street
P.O. Box 80847
Bakersfield, CA 93380-0847
Telephone (661) 324-1317
Fax (661) 324-2746

Macpherson Oil Co.
P.O. Box 5368
Bakersfield, CA 93388
Attn: Jesse Martinez

Sampled: 7/12/2011
Submitted: 7/12/2011
Analyzed: 7/14/2011
Reported: 7/19/2011

Gas Analysis by Chromatography - ASTM D 3588-91

Company:
Location:
Description: Hoyt CVR Gas

Lab No.: 110650-1
Sample Time:
Sample Type:

Component	Mole %	Weight %	G/MCF
Oxygen	ND	0.00	
Nitrogen	0.32	0.39	
Carbon Dioxide	23.38	45.20	
Hydrogen	ND	0.00	
Carbon Monoxide	ND	0.00	
Methane	75.57	53.25	
Ethane	0.50	0.66	
Propane	0.14	0.27	0.039
iso-Butane	0.04	0.10	0.013
n-Butane	0.05	0.13	0.016
iso-Pentane	ND	0.00	0.000
n-Pentane	ND	0.00	0.000
Hexanes Plus	ND	0.00	0.000
Totals	100.00	100.00	0.068

Specific Volume, ft3/lb		16.67	Values Corrected		
Compressibility (Z) Factor		0.9973	for Compressibility	**CHONS**	**Weight %**
Specific Gravity, Calculated		0.7861	0.7879	Carbon	53.140
				Hydrogen	13.604
GROSS				Oxygen	32.862
BTU/ft3	Dry	778.5	780.7	Nitrogen	0.394
	Wet	764.9	767.0	Sulfur	0.000
BTU/lb	Dry	12976.3	13011.6		
BTU/lb	Wet	12749.2	12783.9	F FACTOR @	8897
NET				68 deg F, dscf/MMBTU	
BTU/ft3	Dry	701.3	703.2		
	Wet	689.0	690.9	F FACTOR @	8763
BTU/lb	Dry	11688.1	11720.0	60 deg F, dscf/MMBTU	
BTU/lb	Wet	11483.6	11514.9		

Hydrogen Sulfide, ppm	Not Tested	*Method*	GC/FPD
Total Sulfur, ppm	TR<1	*Method*	ASTMD 3246
Dew Point, deg F	Not Tested	*Method*	Bureau of Mines
Moisture, lbs H2O/MMCF	Not Tested	*Method*	Bureau of Mines

ND : None Detected *Tr : Trace*

PGT
Pacific Gas Technology, Inc.

E-mail pgtech@earthlink.net

4100 Burr Street
P.O. Box 80847
Bakersfield, CA 93380-0847
Telephone (661) 324-1317
Fax (661) 324-2746

Macpherson Oil Co.
P.O. Box 5368
Bakersfield, CA 93388
Attn: Richard Scholl

Sampled: 7/19/2011
Submitted: 7/20/2011
Analyzed: 7/22/2011
Reported: 7/25/2011

Gas Analysis by Chromatography - ASTM D 3588-98

Company:
Location:
Description: Section 20

Lab No.: 110672-1
Sample Time:
Sample Type:

Component	Mole %	Weight %	G/MCF
Oxygen	ND	0.00	
Nitrogen	4.18	3.81	
Carbon Dioxide	50.66	72.42	
Hydrogen	ND	0.00	
Carbon Monoxide	ND	0.00	
Methane	44.70	23.29	
Ethane	0.41	0.40	
Propane	0.05	0.07	0.014
iso-Butane	ND	0.00	0.000
n-Butane	ND	0.00	0.000
iso-Pentane	ND	0.00	0.000
n-Pentane	ND	0.00	0.000
Hexanes Plus	ND	0.00	0.000
Totals	100.00	100.00	0.014

Specific Volume, ft3/lb	12.33	**Values Corrected for Compressibility**	
Compressibility (Z) Factor	0.9965		
Specific Gravity, Calculated	1.0628	1.0662	

GROSS			
BTU/ft3	Dry	460.0	461.7
	Wet	452.0	453.6
BTU/lb	Dry	5671.3	5691.3
BTU/lb	Wet	5572.1	5591.7
NET			
BTU/ft3	Dry	414.3	415.8
	Wet	407.1	408.5
BTU/lb	Dry	5108.0	5126.0
BTU/lb	Wet	5018.6	5036.3

CHONS	**Weight %**
Carbon	37.588
Hydrogen	5.949
Oxygen	52.657
Nitrogen	3.806
Sulfur	0.000
F FACTOR @ 68 deg F, dscf/MMBTU	9747
F FACTOR @ 60 deg F, dscf/MMBTU	9601

		Method	
Hydrogen Sulfide, ppm	6,550	*Method*	GC/FPD
Total Sulfur, ppm	Not Tested	*Method*	ASTMD 3246
Dew Point, deg F	Not Tested	*Method*	Bureau of Mines
Moisture, lbs H2O/MMCF	Not Tested	*Method*	Bureau of Mines

ND : None Detected *Tr : Trace*

ATTACHMENT V
Fugitive Emissions Calculations

Macpherson Oil Company
Component Increase from Proposed Modifications
S-1703-210

Fugitive Emissions Using Screening Emission Factors

California Implementation Guidelines for Estimating Mass Emissions
of Fugitive Hydrocarbon Leaks at Petroleum Facilities
Table IV-2c. Oil and Gas Production
Screening Value Ranges Emission Factors

Percentage of components with ≥ 10,000 ppmv leaks allowed? 0 %

Equipment Type	Service	Component Count	Total allowable leaking components	Screening Value EF - TOC < 10,000 ppmv (lb/day/source)	Screening Value EF - TOC ≥ 10,000 ppmv (lb/day/source)	TOC emissions (lb/day)
Valves	Gas/Light Liquid	80	0	1.852E-03	7.333E+00	0.15
	Light Crude Oil	0	0	1.005E-03	3.741E+00	0.00
	Heavy Crude Oil	0	0	7.408E-04	N/A*	0.00
Pump Seals	Gas/Light Liquid	0	0	5.270E-02	4.709E+00	0.00
	Light Crude Oil	0	0	1.402E-02	4.709E+00	0.00
	Heavy Crude Oil	0	0	N/A	N/A	N/A
Others	Gas/Light Liquid	80	0	7.778E-03	7.281E+00	0.62
	Light Crude Oil	0	0	6.931E-03	3.757E-01	0.00
	Heavy Crude Oil	0	0	3.016E-03	N/A*	0.00
Connectors	Gas/Light Liquid	240	0	6.349E-04	1.370E+00	0.15
	Light Crude Oil	0	0	5.291E-04	1.238E+00	0.00
	Heavy Crude Oil	0	0	4.233E-04	4.233E-04	0.00
Flanges	Gas/Light Liquid	240	0	1.482E-03	3.228E+00	0.36
	Light Crude Oil	0	0	1.270E-03	1.376E+01	0.00
	Heavy Crude Oil	0	0	1.217E-03	N/A*	0.00
Open-ended Lines	Gas/Light Liquid	0	0	1.270E-03	2.905E+00	0.00
	Light Crude Oil	0	0	9.524E-04	1.175E+00	0.00
	Heavy Crude Oil	0	0	7.937E-04	3.762E+00	0.00

* Emission factor not available. All components from equipment type and service will be assessed as < 10,000 ppmv

Total Organic Compound (TOC) Emissions = **1.28 lb/day**

467 lb/yr

Methane Wt % of TOC from Gas Analyses = 22.29%
CO2 wt % relative to TOC from Gas Analyses = 72.42%

Methane CO2 (eqv) = 1.28 lb/day x 365 x 0.2229 x 23 (CO2 eqv factor) / 2204.6 lbs/metric ton = 1.09 ton / year
CO2 = 1.28 lb/day x 365 x .7242 / 2204.6 lbs/metric ton = 0.15 ton/year

Total CO2 (eqv) from proposed modification = 1.09 + 0.15 = 1.24 ton / year

ATTACHMENT VI
Emissions Profiles

Application Emissions

Permit #: S-1703-143-19 **Last Updated**
Facility: MACPHERSON OIL COMPANY 07/02/2012 EDGEHILR

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Application Emissions

Permit #: S-1703-211-0 **Last Updated**
Facility: MACPHERSON OIL COMPANY 07/02/2012 EDGEHILR

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	0.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	0.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

ATTACHMENT VII
SSPE Calculation

Macpherson Oil Company					*SSPE1 as of 4/2012*			
						lb/year		
Facility	*Unit*	*Mo*	*Equipment Description*	*NOx*	*SOx*	*PM10*	*CO*	*VOC*
S-1703	2	1	2.28 MM btu/hr Locomotive Boiler	Permit surrendered for S-1703-192-0				
S-1703	3	1	2.28 MM btu/hr Locomotive Boiler	Permit surrendered for S-1703-192-0				
S-1703	4	1	5.25 MM btu/hr Locomotive Boiler	Permit surrendered for S-1703-192-0				
S-1703	5	3	5.0 MM btu/hr Locomotive Boiler	Permit surrendered for S-1703-192-0				
S-1703	12	4	2,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	16	6	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	17	4	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	18	4	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	19	4	5,000 Bbl Petroleum Storage Tank	0	0	0	0	94,576
S-1703	20	4	5,000 Bbl Petroleum Storage Tank	0	0	0	0	94,576
S-1703	21	4	3,000 Bbl Petroleum Storage Tank	0	0	0	0	56,751
S-1703	22	4	3,000 Bbl Petroleum Storage Tank	0	0	0	0	56,751
S-1703	23	4	2,000 Bbl Petroleum Storage Tank	0	0	0	0	38,286
S-1703	24	4	2,000 Bbl Petroleum Storage Tank	0	0	0	0	38,286
S-1703	25	4	2,000 Bbl Petroleum Storage Tank	0	0	0	0	38,286
S-1703	26	4	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	27	3	10 MM Btu/hr Kaldair Flare	0	0	0	0	0
S-1703	28	4	450 Bhp Internal Combustion Engine	Permit surrendered for S-1703-192-0				
S-1703	29	4	450 Bhp Internal Combustion Engine	Permit surrendered for S-1703-192-0				
S-1703	67	1	Gasoline Storage Tanks	Replaced by S-1703-199				
S-1703	73	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	74	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	75	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	76	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	77	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	78	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	79	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	80	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	81	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	82	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	83	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	84	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	85	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	86	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	87	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	88	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	89	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	90	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	91	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	92	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	93	3	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	94	4	250 Bbl Petroleum Storage Tank	0	0	0	0	9,335
S-1703	95	3	1,000 Bbl Petroleum Storage Tank	Proposed offset for Sand Removal Basin				
S-1703	96	3	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	97	3	500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	98	1	5,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	99	3	500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	100	3	500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	101	3	500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				

Macpherson Oil Company				SSPE1 as of 4/2012				
						lb/year		
Facility	Unit	Mo	Equipment Description	NOx	SOx	PM10	CO	VOC
S-1703	102	3	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	103	3	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	104	3	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	105	3	2,500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	106	3	1,000 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	107	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	108	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	109	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	113	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	114	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	115	3	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	116	3	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	117	3	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	118	3	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	119	3	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	120	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	126	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	127	3	250 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	128	3	1,500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	129	3	1,500 Bbl Petroleum Storage Tank	0	0	0	0	28,393
S-1703	130	3	2,000 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	131	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	132	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	133	3	2,500. Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	134	3	TEOR Operation with 6 wells	0	0	0	0	6,132
S-1703	139	8	10,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	140	7	6,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	141	3	5,000 Bbl Petroleum Storage Tank	0	0	0	0	94,576
S-1703	142	1	750 Bbl Petroleum Storage Tank	Permit surrendered for S-1703-192-0				
S-1703	143	18	TEOR Operation with 250 wells	0	0	0	0	0
S-1703	144	7	2,000 Bbl Petroleum Storage Tank	Replaced by S-1703-208				
S-1703	145	8	1,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	146	8	10,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	150	8	3,300 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	152	7	2,500 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	154	2	TEOR Operation with 6 wells	Combined with S-1703-143-3. Permit cancelled.				
S-1703	156	3	5,000 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	157	11	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	158	10	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	159	12	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	160	12	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	161	15	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	162	11	62.5 MM Btu/hr Steam Generator	4,653	1,560	4,161	15,374	1,643
S-1703	163	3	5,000 Bbl Petroleum Storage Tank	0	0	0	0	94,576
S-1703	164	3	750 Bbl Petroleum Storage Tank	0	0	0	0	14,213
S-1703	165	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	166	3	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	167	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	168	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240

Macpherson Oil Company					*SSPE1 as of 4/2012*			
						lb/year		
Facility	*Unit*	*Mo*	*Equipment Description*	*NOx*	*SOx*	*PM10*	*CO*	*VOC*
S-1703	169	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	170	7	3,400 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	171	7	100 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	172	3	250 Bbl Petroelum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	173	3	250 Bbl Petroelum Storage Tank	0	0	0	0	4,801
S-1703	174	3	250 Bbl Petroelum Storage Tank	0	0	0	0	4,801
S-1703	175	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	176	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	177	3	500 Bbl Petroelum Storage Tank	0	0	0	0	9,593
S-1703	178	3	500 Bbl Petroelum Storage Tank	0	0	0	0	9,593
S-1703	179	3	3,000 Bbl Petroelum Storage Tank	0	0	0	0	56,751
S-1703	180	11	62.5 MM Btu/hr Steam Generator	4,653	1,560	4,928	15,374	1,643
S-1703	181	9	62.5 MM Btu/hr Steam Generator	4,653	1,560	4,161	16,588	3,833
S-1703	183	2	2,000 Bbl Petroelum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	184	9	10,000 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	185	0	450 Bbl Petroleum Storage Tank	Not Implemented - ATC was Canceled				
S-1703	186	4	2,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	187	2	500 Bbl Petroleum Storage Tank	Replaced by S-1703-203				
S-1703	191	1	500 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	192	2	62.5 MM Btu/hr Steam Generator	4,653	1,560	4,161	14,160	3,285
S-1703	193	0	10,000 Bbl Water Tank	0	0	0	0	0
S-1703	194	1	Sand Removal Basin	0	0	0	0	2,190
S-1703	195	0	10,000 Bbl Wastewater Tank	0	0	0	0	0
S-1703	196	0	217 Bhp Emergency Generator	0	0	0	0	0
S-1703	197	0	10,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	198	0	85 MM Btu/hr Steam Generator	4,505	2,122	2,234	13,711	4,095
S-1703	199	0	Gasoline Dispensing Operation	0	0	0	0	66
S-1703	200	0	10,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	201	0	908 Bbl WEMCO	0	0	0	0	0
S-1703	202	0	908 Bbl WEMCO	0	0	0	0	0
S-1703	203	0	1,000 Bbl Fixed Roof Slop Tank	0	0	0	0	0
S-1703	204	0	85 MM Btu/hr Steam Generator	5,406	2,122	2,234	13,711	4,095
S-1703	205	0	1,000 Bbl Fixed Roof Stock Tank	0	0	0	0	0
S-1703	206	0	500 Bbl Fixed Roof Stock Tank	0	0	0	0	0
S-1703	207	0	908 Bbl WEMCO	0	0	0	0	0
S-1703	208	0	6,200 Bbl Fixed Roof Storage Tank	0	0	0	0	0
S-1703	209	0	1500 BBl FWKO	0	0	0	0	0
S-1703	210	0	85 MM Btu/hr Steam Generator	5,406	2,122	2,234	13,711	4,095
SSPE1				**57,194**	**20,406**	**40,538**	**179,499**	**1,771,034**

Notes:

Blank values for a particular permit unit do not necessarily relfect zero emissions. For units with blank values, the PE must still be determined based on physical PE or as limited by permit condition.

Uncontrolled storage tank values are based on 1 turnover per day and a TVP of 0.5 psia.

Macpherson Oil Company

Facility	Unit	Mo	Equipment Description	Proposed SSPE2 lb/year NOx	SOx	PM10	CO	VOC
S-1703	2	1	2.28 MM btu/hr Locomotive Boiler	Permit surrendered for S-1703-192-0				
S-1703	3	1	2.28 MM btu/hr Locomotive Boiler	Permit surrendered for S-1703-192-0				
S-1703	4	1	5.25 MM btu/hr Locomotive Boiler	Permit surrendered for S-1703-192-0				
S-1703	5	3	5.0 MM btu/hr Locomotive Boiler	Permit surrendered for S-1703-192-0				
S-1703	12	4	2,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	16	6	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	17	4	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	18	4	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	19	4	5,000 Bbl Petroleum Storage Tank	0	0	0	0	94,576
S-1703	20	4	5,000 Bbl Petroleum Storage Tank	0	0	0	0	94,576
S-1703	21	4	3,000 Bbl Petroleum Storage Tank	0	0	0	0	56,751
S-1703	22	4	3,000 Bbl Petroleum Storage Tank	0	0	0	0	56,751
S-1703	23	4	2,000 Bbl Petroleum Storage Tank	0	0	0	0	38,286
S-1703	24	4	2,000 Bbl Petroleum Storage Tank	0	0	0	0	38,286
S-1703	25	4	2,000 Bbl Petroleum Storage Tank	0	0	0	0	38,286
S-1703	26	4	100 Bbl Petroleum Storage Tank	0	0	0	0	1,904
S-1703	27	3	10 MM Btu/hr Kaldair Flare	0	0	0	0	0
S-1703	28	4	450 Bhp Internal Combustion Engine	Permit surrendered for S-1703-192-0				
S-1703	29	4	450 Bhp Internal Combustion Engine	Permit surrendered for S-1703-192-0				
S-1703	67	1	Gasoline Storage Tanks	Replaced by S-1703-199				
S-1703	73	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	74	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	75	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	76	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	77	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	78	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	79	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	80	3	1,000 Bbl Petroleum Storage Tank	0	0	0	0	19,157
S-1703	81	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	82	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	83	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	84	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	85	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	86	1	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	87	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	88	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	89	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	90	1	1,500 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	91	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	92	3	2,500 Bbl Petroleum Storage Tank	0	0	0	0	47,240
S-1703	93	3	500 Bbl Petroleum Storage Tank	0	0	0	0	9,593
S-1703	94	4	250 Bbl Petroleum Storage Tank	0	0	0	0	9,335
S-1703	95	3	1,000 Bbl Petroleum Storage Tank	Proposed offset for Sand Removal Basin				
S-1703	96	3	1,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	97	3	500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	98	1	5,000 Bbl Petroleum Storage Tank	Tank abandoned. Permit surrendered 12/2008				
S-1703	99	3	500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	100	3	500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	101	3	500 Bbl Petroleum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				

Macpherson Oil Company					*Proposed SSPE2*			
						lb/year		
Facility	*Unit*	*Mo*	*Equipment Description*	*NOx*	*SOx*	*PM10*	*CO*	*VOC*
S-1703	102	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	103	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	104	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	105	3	2,500 Bbl Petroelum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	106	3	1,000 Bbl Petroelum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	107	3	2,500 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	108	3	2,500 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	109	3	2,500 Bbl Petroelum Storage Tank	Tank replaced by replacement tank XXX May 2012				0
S-1703	113	3	1,000 Bbl Petroelum Storage Tank	0	0	0	0	19,157
S-1703	114	3	2,500 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	115	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	116	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	117	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	118	3	500 Bbl Petroelum Storage Tank	0	0	0	0	9,593
S-1703	119	3	500 Bbl Petroelum Storage Tank	0	0	0	0	9,593
S-1703	120	3	2,500 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	126	3	1,000 Bbl Petroelum Storage Tank	0	0	0	0	19,157
S-1703	127	3	250 Bbl Petroelum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	128	3	1,500 Bbl Petroelum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	129	3	1,500 Bbl Petroelum Storage Tank	0	0	0	0	28,393
S-1703	130	3	2,000 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	131	3	2,500 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	132	3	2,500 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	133	3	2,500. Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	134	3	TEOR Operation with 6 wells	0	0	0	0	6,132
S-1703	139	8	10,000 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	140	7	6,000 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	141	3	5,000 Bbl Petroelum Storage Tank	0	0	0	0	94,576
S-1703	142	1	750 Bbl Petroelum Storage Tank	Permit surrendered for S-1703-192-0				
S-1703	143	18	TEOR Operation with 250 wells	0	0	0	0	0
S-1703	144	7	2,000 Bbl Petroelum Storage Tank	Replaced by S-1703-208				
S-1703	145	8	1,000 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	146	8	10,000 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	150	8	3,300 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	152	7	2,500 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	154	2	TEOR Operation with 6 wells	Combined with S-1703-143-3. Permit cancelled.				
S-1703	156	3	5,000 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	157	11	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	158	10	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	159	12	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	160	12	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	161	15	62.5 MM Btu/hr Steam Generator	4,653	1,560	3,285	15,374	1,643
S-1703	162	11	62.5 MM Btu/hr Steam Generator	4,653	1,560	4,161	15,374	1,643
S-1703	163	3	5,000 Bbl Petroelum Storage Tank	0	0	0	0	94,576
S-1703	164	3	750 Bbl Petroelum Storage Tank	0	0	0	0	14,213
S-1703	165	3	1,000 Bbl Petroelum Storage Tank	0	0	0	0	19,157
S-1703	166	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	167	3	2,500 Bbl Petroelum Storage Tank	0	0	0	0	47,240
S-1703	168	3	2,500 Bbl Petroelum Storage Tank	0	0	0	0	47,240

Macpherson Oil Company					*Proposed SSPE2*			
						lb/year		
Facility	*Unit*	*Mo*	*Equipment Description*	*NOx*	*SOx*	*PM10*	*CO*	*VOC*
S-1703	169	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	170	7	3,400 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	171	7	100 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	172	3	250 Bbl Petroelum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	173	3	250 Bbl Petroelum Storage Tank	0	0	0	0	4,801
S-1703	174	3	250 Bbl Petroelum Storage Tank	0	0	0	0	4,801
S-1703	175	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	176	3	100 Bbl Petroelum Storage Tank	0	0	0	0	1,904
S-1703	177	3	500 Bbl Petroelum Storage Tank	0	0	0	0	9,593
S-1703	178	3	500 Bbl Petroelum Storage Tank	0	0	0	0	9,593
S-1703	179	3	3,000 Bbl Petroelum Storage Tank	0	0	0	0	56,751
S-1703	180	11	62.5 MM Btu/hr Steam Generator	4,653	1,560	4,928	15,374	1,643
S-1703	181	9	62.5 MM Btu/hr Steam Generator	4,653	1,560	4,161	16,588	3,833
S-1703	183	2	2,000 Bbl Petroelum Storage Tank	Tank removed in December 2009. Permit surrendered 6/2011.				
S-1703	184	9	10,000 Bbl Petroelum Storage Tank	0	0	0	0	0
S-1703	185	0	450 Bbl Petroleum Storage Tank	Not Implemented - ATC was Canceled				
S-1703	186	4	2,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	187	2	500 Bbl Petroleum Storage Tank	Replaced by S-1703-203				
S-1703	191	1	500 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	192	2	62.5 MM Btu/hr Steam Generator	4,653	1,560	4,161	14,160	3,285
S-1703	193	0	10,000 Bbl Water Tank	0	0	0	0	0
S-1703	194	1	Sand Removal Basin	0	0	0	0	2,190
S-1703	195	0	10,000 Bbl Wastewater Tank	0	0	0	0	0
S-1703	196	0	217 Bhp Emergency Generator	0	0	0	0	0
S-1703	197	0	10,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	198	0	85 MM Btu/hr Steam Generator	4,505	2,122	2,234	13,711	4,095
S-1703	199	0	Gasoline Dispensing Operation	0	0	0	0	66
S-1703	200	0	10,000 Bbl Petroleum Storage Tank	0	0	0	0	0
S-1703	201	0	908 Bbl WEMCO	0	0	0	0	0
S-1703	202	0	908 Bbl WEMCO	0	0	0	0	0
S-1703	203	0	1,000 Bbl Fixed Roof Slop Tank	0	0	0	0	0
S-1703	204	0	85 MM Btu/hr Steam Generator	5,406	2,122	2,234	13,711	4,095
S-1703	205	0	1,000 Bbl Fixed Roof Stock Tank	0	0	0	0	0
S-1703	206	0	500 Bbl Fixed Roof Stock Tank	0	0	0	0	0
S-1703	207	0	906 Bbl WEMCO	0	0	0	0	0
S-1703	208	0	6,200 Bbl Fixed Roof Storage Tank	0	0	0	0	0
S-1703	209	0	1500 Bbl FWKO	0	0	0	0	0
S-1703	210	0	85 MM Btu/hr Steam Generator	5,406	2,122	2,234	13,711	4,095
S-1703	XXX	0	7000 Bbl Wash Tank replacing '-109	0	0	0	0	0
SSPE2				**57,194**	**20,406**	**40,538**	**179,499**	**1,723,794**
				NOx	***SOx***	***PM10***	***CO***	***VOC***
			Pre-project SSPE1	57,194	20,406	40,538	179,499	1,771,034
			Project IPE	0	0	0	0	-47,240
			Major Source Thresholds	20,000	140,000	140,000	200,000	20,000

Macpherson Oil Company					*Proposed SSPE2*			
						lb/year		
Facility	*Unit*	*Mo*	*Equipment Description*	*NOx*	*SOx*	*PM10*	*CO*	*VOC*
			Federal Major Mod Threshold	0	80,000	30,000	--	0
			Offset Threshold	20,000	54,750	29,200	200,000	20,000
			Offsets Required @ 1.5:1	0		0		-70,860
Notes:								
Blank values for a particular permit unit do not necessarily reflect zero emissions. For units with blank								
values, the PE must still be determined based on physical PE or as limited by permit condition.								
Uncontrolled storage tank values are based on 1 turnover per day and a TVP of 0.5 psia.								

ATTACHMENT VIII
Title V Compliance Certification Form

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

COMPANY NAME: **Macpherson Oil Company**	FACILITY ID: **S – 1703**
1. Type of Organization: ☒ Corporation ☐ Sole Ownership ☐ Government ☐ Partnership ☐ 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

5/22/12
Date

Jody Butler
Name of Responsible Official (please print)

Operations Superintendent
Title of Responsible Official (please print)

Replace tank S-1703-109 at the Olcese Facility.

ATTACHMENT IX
HRA

San Joaquin Valley Air Pollution Control District
Risk Management Review

To:	Richard Edgehill – Permit Services
From:	Cheryl Lawler – Technical Services
Date:	July 6, 2012
Facility Name:	MacPherson Oil Company
Location:	SW Section 17, T28S, R29E
Application #(s):	S-1703-143-19 & 211-0
Project #:	S-1121681

A. RMR SUMMARY

RMR Summary			
Categories	**Existing TEOR Operation & a New Wash Tank (Units 143-19 & 211-0)**	**Project Totals**	**Facility Totals**
Prioritization Score	0.00	0.00	>1
Acute Hazard Index	0.00	0.00	0.01
Chronic Hazard Index	0.00	0.00	0.00
Maximum Individual Cancer Risk	**1.61E-11**	1.61E-11	3.94E-06
T-BACT Required?	**No**		
Special Permit Conditions?	**No**		

I. Project Description

Technical Services received a request on July 2, 2012, to perform a Risk Management Review to install a new 7000 bbl wash tank (Unit 211-0) to be connected to an existing vapor control system listed on TEOR operation Unit 143-19. The new wash tank will replace an existing storage tank that will be cancelled (Unit 109-2).

II. Analysis

Toxic emissions were calculated using emission factors for toxic fugitive emissions from oilfield equipment, along with VOC fugitive emission rates supplied by the processing engineer. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEART's database. The prioritization score for the project was less than 1.0 (see RMR Summary Table); however, the facility's combined prioritization scores totaled to greater than one. Therefore, a refined Health Risk Assessment was required and performed for the project. AERMOD was used with area source parameters outlined below and concatenated 5-year meteorological data from Bakersfield to determine maximum dispersion factors at the nearest residential and business receptors. The dispersion factors were input

into the HARP model to calculate the Chronic and Acute Hazard Indices and the Carcinogenic Risk.

The following parameters were used for the review:

Analysis Parameters			
Source Type	Area	**Closest Receptor (m)**	1920
Average Release Height (m)	7.3	**Type of Receptor**	Residence
Average Tank Radius (m)	3.3	**Location Type**	Rural

III. Conclusions

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with the project is **1.61E-11**, which is less than the 1 in a million threshold. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

ATTACHMENT X
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-1703-143-19 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: MACPHERSON OIL COMPANY
MAILING ADDRESS: PO BOX 5368
BAKERSFIELD, CA 93388

LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE
CA

SECTION: NE20 **TOWNSHIP:** 28S **RANGE:** 29E

EQUIPMENT DESCRIPTION:
MODIFICATION OF THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION SERVING UP TO 250 WELLS INCLUDING HEAT EXCHANGERS, SEPARATORS, KNOCKOUTS AND COMPRESSOR STATIONS WITH OPEN OR CLOSED CASING VENTS CONNECTED TO WELL VENT VAPOR CONTROL SYSTEM AND TANK VAPOR CONTROL SYSTEMS S-1703-139, -144, AND -184 SERVED BY H2S SCRUBBER SYSTEM WITH COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION OF NONCONDENSIBLE VAPORS OR TO GAS DISPOSAL WELL: CONNECT TANK S-1703-211 TO VAPOR CONTROL SYSTEM

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. TEOR wells are authorized at Sections 7, 17, 18, 19 and 20 T28S/R29E and at Sections 12 and 13 T28S/R28E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The operation shall be equipped with heat exchangers, free water knockouts, gas liquid separators, vapor compressors with electric motors, and compressed vapor piping to any of the following steam generators S-1703-157, -158, -159, -160, -161, or '-162. [District NSR Rule] 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

DRAFT

DAVID WARNER, Director of Permit Services
S-1703-143-19 : Jul 2 2012 11:18AM -- EDGEHILR : Joint Inspection NOT Required

5. Noncondensibles shall be incinerated in steam generators S-1703-157, -158, -159, -160, -161, or '-162 or injected into DOGGR-approved disposal well. [District NSR Rule] Federally Enforceable Through Title V Permit
6. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
7. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
8. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
9. The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
11. VOC content of gas shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
12. {4272} Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401 3.20] Federally Enforceable Through Title V Permit
13. {4273} An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.1 and 5.5.2] Federally Enforceable Through Title V Permit
14. {4274} An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.6.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
15. {4275} An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or a gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
16. {4276} An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.6.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.9 of Rule 4401. [District Rule 4401 5.7.1] Federally Enforceable Through Title V Permit
17. {4277} Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401 5.7.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

18. {4278} An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401 5.7.3] Federally Enforceable Through Title V Permit

19. The annual inspection requirements of Section 5.8.1 through Section 5.8.5 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10 wt %) or less, as determined by the test methods in Section 6.3.5 of Rule 4401. [District Rule 4401 4.9] Federally Enforceable Through Title V Permit

20. {4279} Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401 5.8.1] Federally Enforceable Through Title V Permit

21. {4280} An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401 5.8.2] Federally Enforceable Through Title V Permit

22. {4281} In addition to the inspections required by Section 5.8.1 of Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401 5.8.3] Federally Enforceable Through Title V Permit

23. {4282} In addition to the inspections required by Sections 5.8.1, 5.8.2 and 5.8.3 of Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Section 5.8.4.1 of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401 5.8.4] Federally Enforceable Through Title V Permit

24. {4283} An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401 5.8.5] Federally Enforceable Through Title V Permit

25. {4284} District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401 5.8.6] Federally Enforceable Through Title V Permit

26. {4285} An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401 5.9.1] Federally Enforceable Through Title V Permit

27. {4286} An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and 5.9.2.3 of Rule 4401, or the component is found to be in compliance with the requirements of this rule. [District Rule 4401 5.9.2] Federally Enforceable Through Title V Permit

28. {4287} An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401 5.9.3] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

29. {4288} Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 4 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit

30. {4289} The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit

31. {4290} The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.5] Federally Enforceable Through Title V Permit

32. {4291} The time of the initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.6] Federally Enforceable Through Title V Permit

33. {4292} If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component 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, whichever comes earlier. [District Rule 4401 5.9.7] Federally Enforceable Through Title V Permit

34. {4293} The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401 6.1.1] Federally Enforceable Through Title V Permit

35. {4295} An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401 6.1.3] Federally Enforceable Through Title V Permit

36. {4296} The results of source tests conducted pursuant to Section 4.6.2 of Rule 4401 shall be submitted to the APCO within 60 days after the completion of the source test. [District Rule 4401 6.1.4] Federally Enforceable Through Title V Permit

37. {4297} Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401 6.1.5] Federally Enforceable Through Title V Permit

38. {4298} Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401 6.1.6] Federally Enforceable Through Title V Permit

39. {4299} An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401 6.1.7] Federally Enforceable Through Title V Permit

40. {4300} Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401 6.1.8] Federally Enforceable Through Title V Permit

41. {4301} Operator shall submit to the APCO not later than June 14, 2007 a list of all gauge tanks, as defined in Section 3.17. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401 6.1.9] Federally Enforceable Through Title V Permit

42. {4302} The results of gauge tank TVP testing conducted pursuant to Section 6.2.5 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401 6.1.10] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

43. {4303} An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401 6.1.11] Federally Enforceable Through Title V Permit

44. {4304} An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. [District Rule 4401 6.2.1] Federally Enforceable Through Title V Permit

45. {4305} If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless flare. [District Rule 4401 6.2.2] Federally Enforceable Through Title V Permit

46. {4306} If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 for a vapor control system which does not have a VOC destruction device. [District Rule 4401 6.2.3] Federally Enforceable Through Title V Permit

47. {4307} An operator seeking approval pursuant to Section 6.2.2 or Section 6.2.3 shall submit a written request and supporting information to the APCO. The District shall evaluate the request and if approved by the APCO, the District shall provide EPA and ARB with a copy of the evaluation and shall request EPA and ARB approval. The District evaluation and the APCO request shall be deemed approved unless EPA or ARB objects to such approval in writing within 45 days of the receipt of the APCO request. [District Rule 4401 6.2.4] Federally Enforceable Through Title V Permit

48. {4308} An operator shall comply with the following requirements for each gauge tank, as defined in Section 3.17 of Rule 4401: Conduct an initial TVP testing of the produced fluid in each gauge tank not later than June 14, 2007. Thereafter, an operator shall conduct periodic TVP testing of each gauge tank at least once every 24 months during summer (July - September), and whenever there is a change in the source or type of produced fluid in the gauge tank. The TVP testing shall be conducted at the actual storage temperature of the produced fluid in the gauge tank using the applicable TVP test method specified in Section 6.4 of Rule 4623 (Storage of Organic Liquids). The operator shall submit the TVP testing results to the APCO as specified in Section 6.1.10 of Rule 4401. [District Rule 4401 6.2.5] Federally Enforceable Through Title V Permit

49. {4309} The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401 6.3.1] Federally Enforceable Through Title V Permit

50. {4310} VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401 6.3.2] Federally Enforceable Through Title V Permit

51. {4311} Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401 6.3.3] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

52. {4312} The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401 6.3.5] Federally Enforceable Through Title V Permit

53. {4313} Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak. the date of repair, replacement, or removal from operation of leaking components, identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401 6.4] Federally Enforceable Through Title V Permit

54. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: S-1703-211-0 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: MACPHERSON OIL COMPANY
MAILING ADDRESS: PO BOX 5368
BAKERSFIELD, CA 93388

LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:
7000 BBL CRUDE OIL WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-143

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Permit S-1703-109 shall be canceled upon implementation of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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

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

DRAFT

DAVID WARNER, Director of Permit Services
S-1703-211-0 : Jul 11 2012 9:03AM -- EDGEHILR : Joint Inspection NOT Required

7. 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
8. 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
9. 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
10. 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
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 2201] 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
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] Federally Enforceable Through Title V Permit