# Statement of Basis - Narrative
# NSR Permit

**Company:** Western Refining Southwest, Inc.
**Facility:** Western Refining Wingate Facility
**Permit No(s).**: 1313-M6 and P117R2M1
**Tempo/IDEA ID No.**: 884 - PRN20150001
**Permit Writer:** Daren K. Zigich

## Fee Tracking

| | |
|---|---|
| **Tracking** | **NSR tracking entries completed:** [] Yes [X] No |
| | **NSR tracking page attached to front cover of permit folder:** [X] Yes [] No |
| | **Paid Invoice Attached:** [X Yes [] No [] NR |
| | **Balance Due Invoice Attached:** [] Yes [X] No |
| | **Invoice Comments:** Paid in full 7/28/15 |

| | | |
|---|---|---|
| **Permit Review** | **Date to Enforcement:** 9/15/15 | **Inspector Reviewing:** Sondra Sage |
| | **Date Enf. Review Completed:** 9/29/15 | **Date of Reply:** N/A |
| | **Date to Applicant:** 8/28/15 & 9/15/15 | **Date of Reply:** N/A |
| | **Date of Comments from EPA:** NR | **Date to EPA:** NR |
| | **Date to Supervisor:** 9/30/15 | |

1.0 **Plant Process Description:**

This facility was a natural gas liquids fractionating plant that is now (under NSR permit 1313-M6) converting into a petroleum bulk storage and transloading facility. It is located at UTM Zone 12, UTMH 714 km, UTMV 3934.85 km, approximately 6 miles East of Gallup, New Mexico in McKinley County.

The function of the facility was to fractionate hydrocarbon liquids from a natural gas liquid stream into propane, n-butane, iso-butane, and other fractions using a distillation train. Products are transported from the facility via pipeline, truck, and railcar. The bulk of the new operation will include the existing liquefied petroleum storage and loading sources and the new transloading and storage of crude oil. The crude oil arrives at the facility via truck and pipeline from sources in the four corners region. The crude oil is stored in two new storage tanks TK-1 and TK-2 and loaded onto railcars for transportation to points outside the area.

The candlestick flare (emission unit #17) is a part of this major Title V source and is currently located on the Navajo Indian Reservation. Consequently, this emission unit is not included in this construction permit since NMED has no regulating authority of air quality in Indian Country.

## 2.0 **Description of this Modification:**

This modification consists of changing the primary function of the facility to a crude oil trans-loading facility. As a result, the facility will now be categorized under the SIC code for petroleum bulk stations and terminals (SIC code 5171) instead of under the category for natural gas liquids (SIC code 1321). In addition to the crude trans-loading operations, Western will install a vapor combustion unit (VCU-1) and two external floating roof tanks (TK-1 and TK-2) and retire or remove existing emissions units 7, 11, 12, 19, 27, 28, 29.

After this modification the source will become a PSD major source with a 100 TPY applicability threshold as a petroleum storage and transfer units with a total storage capacity exceeding 300,000 bbl (20.2.74.501.Q NMAC). See further PSD applicability discussion in Section 4.0.

## 3.0 **Source Determination:**

1. The emission sources evaluated include **all equipment at the facility**.

2. Single Source Analysis:

A. SIC Code: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes, the facility is changing the primary facility SIC from 1321 to 5171. Although some units at the facility may, individually, fall under SIC 1321 the primary function of the facility will now fall under 5171.

B. Common Ownership or Control: Are the facilities under common ownership or control? Yes

C. Contiguous or Adjacent: Are the facilities located on one or more contiguous or adjacent properties? Yes

3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, or 20.2.74 NMAC applicability purposes? No, a candlestick flare (Unit 17) is located on adjacent property that is under the permitting jurisdiction of the Navajo EPA. The current PTE of Unit 17, according to the Navajo EPA issued Title V permit SOB is:

NOx – 5.2 TPY
CO – 10.4 TPY
VOC – 34.1 TPY

These additional emissions do not change the PSD applicability of the facility (see below).

## 4.0 **PSD Applicability:**

A. The source, as determined in 3.0 above, is an existing PSD Minor Source (< 250 TPY including the emissions from Unit 17), as it was before this modification as a non-listed source (natural gas processing plant). It will become an existing PSD major source after the modification by changing from a non-listed to a listed source category with an applicability threshold of 100 TPY.

B. The project emissions for this modification do not change the PSD applicability of the facility based on the initial SIC of 1321 (emissions < 250 TPY). However, with the change in SIC to 5171 and a proposed total storage capacity of greater than 300,000 barrels (240,000 new crude oil plus the existing liquefied petroleum storage capacity of approximately 115,000 barrels) the facility will become a PSD major source (>100 TPY) since it will now be one of the 28 listed source categories (Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels). Western questions whether or not the liquefied petroleum storage capacity should be included in the applicability threshold of 300,000 barrels, but since the source categories are generally applied to certain SICs and only one SIC applies to this type of operation, this permit writer sees no viable argument to support non-applicability. Therefore, it is presumed the facility will become a Major PSD source following completion of the modification.

**The permittee (Western) argues the following in a July 10, 2015 email from Ed Riege:**

In response to your comments on Wingate's PSD applicability as a stationary source "Petroleum storage and transfer units with a total capacity exceeding 300,000 barrels", we would like to provide more background information.

First, the definition of "petroleum" stated in Ms. Jane Romero-Kotovsky's email dated June 24, 2015 was based on a major source applicability determination letter authored by Mr. Douglas Neeley at USEPA in 1998. The letter is attached to this email and can also be found on EPA Region 7 website: http://www.epa.gov/region7/air/title5/t5memos/apl_mek1.pdf Through our research, this 1998 letter is the only official applicability clarification provided by USEPA for the listed source category - Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

Second, we understand that EPA has incorporated SIC code as one of the criteria for the 28 source categories after the 1997 Clean Air Act (CAA) Amendment. All petroleum storage and transfer facilities are 5171 regardless the storage capacity. We disagree the applicability to be determined based on the SIC code definition only since the key qualifier is the 300,000 barrels storage capacity for the petroleum storage and transfer units. In research of the 300,000 barrels as qualifier for the PSD listed 28 source categories in the original 1977 CAA Amendment, this source category was considered based on "evaporation losses" from petroleum storage vessels. See pages 6 and 7 of the attached 2007 final rule Prevention of Significant Deterioration, Nonattainment New Source Review, and Title V: Treatment of Certain Ethanol Production Facilities Under the ''Major Emitting Facility'' Definition.

*"section 111 of the CAA requires the Administrator of EPA to establish Federal standards of performance for new stationary sources which may significantly contribute to air pollution and was intended by Congress to complement the other air quality management approaches authorized by the 1970 CAA. ….. The Research Corp. study was also relied on by Congress in identifying the 28 categories of stationary sources specifically listed in the definition of the term ''major emitting facility'' in section 169(1) of the CAA. 122 Cong. Rec. 24,520–23 (1976). As explained by Senator McClure in the Congressional Record, the EPA Administrator examined the data from the draft Research Corp. study and determined that 19 of the stationary source categories examined should initially be classified as major emitting facilities. Senator McClure*

*further explained that the Senate Committee added nine more categories of stationary sources to the 19 selected by EPA for a total of 28 source categories. 122 Cong. Rec. at 24,521.2 ……*

*As a result of Senator McClure's action, the table from the draft Research Corp. report containing the list of 190 types of sources was printed in the Congressional Record. The approximately 190 source categories identified in Research Corporation's report were further classified into ten general groups for purposes of the study—stationary combustion sources, chemical processing industries, food and agricultural industries, mineral products industries, metallurgical industries, and miscellaneous sources (evaporation losses, petroleum industry, wood products industry, and assembly plants). "*

For Western Wingate Facility, the storage vessels in question are pressurized tanks that cannot release "evaporation losses". It is also evident that pressurized tanks are excluded from NSPS K under 40 CFR 60.111(a)(1). With these background information, we believe the 300,000 barrels qualifier for the PSD source category should be limited to storage vessels that are able to emit evaporation losses under normal operations.

**AQB Response:**

Western's argument states that the potential to emit (evaporation loss) should be considered when determining applicable storage capacity, yet the EPA letter referenced excluded gasoline storage tanks (high evaporative loss vessels) because gasoline does not meet the definition of petroleum as define in the referenced NSPS regulations. NSPS regulations and associated definitions post-date the PSD 28 source category list and should not be used for defining a source type or industry in that listing. The list of 28 apply to general operations and industries based on commerce classifications (SIC) whereas, the NSPS regulations apply to specific emissions sources *which may significantly contribute to air pollution*. Sources covered by NSPS regulations may or may not be part of the 28 source/industry category list.

Western uses the 2007 final rule preamble Prevention of Significant Deterioration, Nonattainment New Source Review, and Title V: Treatment of Certain Ethanol Production Facilities Under the ''Major Emitting Facility'' Definition to argue that the list is not based simply on the SIC, yet the document referenced states (see page 24068, first column of May 1, 2007 FR) that EPA did in fact make the list general in nature with the intention that further narrowing of the source categories was possible at a later time. That is what EPA did for the fuel ethanol industry. To date, no such action has occurred for the petroleum bulk stations and terminals sector. As with the ethanol industry, EPA must narrow the scope, in the regulation, of the source category, Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, before NMED can eliminate the liquefied petroleum storage capacity from the determination of whether the facility is a PSD major source as defined in 20.2.74.7.AG(1) NMAC.

The PSD regulation does not state that the capacity of the pressurized storage tanks are excluded when defining this source category. Finally, the overall facility capacity affects the level of all emissions both up and down stream of the storage vessels and therefore cannot be ignored.

C. Netting is not required.
D. BACT is not required.

5.0 **History (In descending chronological order, showing NSR and TV):** *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| 1313M6 | 10/9/15 | Sig Rev | The facility will now be categorized under the SIC code for petroleum bulk stations and terminals (SIC code 5171) instead of under the category for natural gas liquids (SIC code 1321). In addition to the crude trans-loading operations, Western will install a vapor combustion unit (VCU-1) and two external floating roof tanks (TK-1 and TK-2) and retire or remove existing emissions units 7, 11, 12, 19, 27, 28, 29. |
| *1313M5R4 | 12/23/14 | Tech Rev. | Unit 26, Blowdown emissions from loading hoses, applies to both loading and off-loading of product to and from railcar and truck. |
| *P117R2M1 | 11/26/2014 | Admin Rev. | Change of facility ownership from Conoco to Western Refining |
| *1313M5R3 | 11/26/2014 | Admin Rev. | Change of facility ownership from Conoco to Western Refining |
| *P117R2 | 12/6/2013 | TV Renewal | |
| 1313M5R2 | 6/11/2013 | Admin (this should not have been required) | This revision consists of an Administrative Revision to change the Company Environmental Contact to Clara M. Cardoza, Environmental Coordinator and the Facility Contact to Janelle Vestal, Compliance Coordinator. |
| *1313M5R1 | 9/24/2013 | Admin - Reopening | Update/replace General Condition B111.C2 & 3. Replaced all General Conditions to the current version. This superseded permit 1313M5. |
| 1313M5 | 6/4/2012 | Sig Rev | Add one or two 60,000 pph boilers (units 27 and/or 28) to the facility for 1000 hours of operation each per year, or one 120,000 pph boiler (unit 29) to the facility for 1000 hours of operation per year; Update the emergency diesel RICE generator and two diesel RICE fire pumps in the list of exempt units; Remove three (3) Ingersoll-Rand RICE listed as Units 1, 2, and 3 per administrative revision 1313-M4-R2; Remove the ground pit flare (unit 9); Modify fugitive emissions for the VRU (unit 11) based on revised component counts; and include combined Start up, Shut down, Maintenance/Malfunction (SSM/M) emissions per NMED Guidance. |
| P117R1M1 | 9/3/10 | Admin | Clarifies removal of Units 1-3 |
| 1313M4R2 | 8/27/10 | Admin | Removed units 1-3 |
| P117R1 | 4/7/08 | Renewal | TV Renewal |
| P117M3 | 1/16/06 | Minor Mod | Withdrawn |
| 1313M4R1 | 8/31/04 | Admin | This revision consists of removing emission unit No. 15-Chrysler natural gas engine, s/n 43742. |
| P117M2 | 7/20/04 | Admin | This revision consists of removing emission unit No. 15-Chrysler natural gas engine, s/n 43742. |

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|---|---|---|---|
| P117M1 | 5/27/04 | Sig Mod | The modification consists of increasing the allowable NOx emissions from Boiler #4 (Unit #7) based on recent stack testing. |
| 1313M4 | 7/18/03 | Sig Rev | The revision consists of increasing the allowable NOx emissions from Boiler #4 (Unit #7) based on recent stack testing. Several fugitive emissions units have been re-categorized to more accurately reflect plant activities and the shutdown of equipment. Emissions limits have been revised for several fugitive emissions units to reflect the use of the latest emission factors. |
| 1313M3 | 11/02 | Sig Rev | The revision consists of removing Unit #17 (Candlestick Flare) from the permit, splitting the currently merged engine stacks (Units 1-3) into separate stacks each having a minimum stack height of fifty-three (53) feet and including one ground pit flare in the permit. |
| P117 | 9/16/02 | New TV | New TV permit |
| 1313M2 | 07/01 | Sig Rev | This modification added a previously shutdown boiler (boiler #4) to the ConcoPhillip's Wingate facility. |
| 1313M1 | 05/99 | Sig Rev | This modification replaced four existing boilers with a new 209 MMBTU/hr low $NO_x$ Nebraska boiler and clarified NSPS Subpart KKK applicability for Train B, the butamer compressors and the loadout area. |
| 1313R3 | 9/8/97 | Sig Rev | This permit authorized the decommissioning of Train A except the existing treater and dryer, the construction of the depropanizer used in Train B and the construction of the Butamer which is a chemical process that converts normal butane to iso-butane. The Butamer reacts n-butane with hydrogen gas to create iso butane. |
| 1313R2 | 5/30/96 | Tech Rev | This permit revised the $NO_2$ emission rates of the three Ingersoll engines, and the five boilers at the facility. Also, established the candlestick flare as an independent emission source. |
| 1313R1 | 02/24/94 | Tech Rev | This permit revised emission rates of previously grandfathered emission units and clarified NSPS Subpart KKK applicability. The previous permit stated that NSPS applied to the whole facility instead of just the VRU. |
| 1313 | 12/22/93 | New Permit | Meridian Oil received a permit allowing for the construction and operation of a Vapor Recovery Unit. The VRU consists of two compressors, associated valves, flanges and pumps. The VRU's emission rate is 1.6 lbs per hour. This was the first change at the facility that required a permitting action. This facility was previously grandfathered. |

6.0 **Public Response/Concerns:** As of October 6, 2015, this permit writer aware of one public comment or concern. The letter from James Wilson of the Rehoboth Christian School states concern about the effects of the transloading facility on the 520 +/- enrolled students at the school. The letter also states the following:

"We want to make sure that the NM Environment Department Air Quality Bureau will protect the local environment (Rehoboth Christian School) from excessive pollution caused by industrial activities that take place within the property boundary of the stated terminal. We want to make sure that this includes air emission limitations, pollution control requirements, maintenance requirements and recordkeeping requirements."

All notification letters (initial, second and final) sent to this interested party are available on TEMPO and in the permit file.

7.0 **Compliance Testing:** No recent compliance testing.

8.0 **Startup and Shutdown:**

A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? Yes
B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? Yes
C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? Yes
D. Does the facility have emissions due to routine or predictable startup, shutdown, and maintenance? If so, have all emissions from startup, shutdown, and scheduled maintenance operations been permitted? Yes

9.0 **Compliance and Enforcement Status [Title V only]:** NA

10.0 **Modeling:** The modeling report by Sufi Mustafa dated September 8, 2015 shows NOx and CO pollutants are within standards. All other pollutants were evaluated and determined to be below the modeling thresholds (emissions rates) and thus were not modeled.

11.0 **State Regulatory Analysis(NMAC/AQCR):** Applicability from Title V SOB P117-R2

| 20 NMAC | Title | Applies (Y/N) | Comments |
|---|---|---|---|

| 20 NMAC | Title | Applies (Y/N) | Comments |
|---|---|---|---|
| **2.1** | GENERAL PROVISIONS | Y | The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so is subject to Part 1 General Provisions, Update to Section 116 of regulation for Significant figures & rounding. Applicable with no permitting requirements. |
| **2.3** | Ambient Air Quality Standards | Y | 20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.<br>20.2.3.9 NMAC, LIMITATION OF APPLICABILITY TO 20.2.70 NMAC. The requirements of this part are not applicable requirements under 20.2.70 NMAC, as defined by that part. This section does not limit the applicability of this part to sources required to obtain a permit under 20.2.72 NMAC, nor does it limit which terms and conditions of permits issued pursuant to 20.2.72 NMAC are applicable requirements for permits issued pursuant to 20.2.70 NMAC. |
| **2.7** | Excess Emissions | Y | Applies to all facilities' sources |
| **2.33** | Gas Burning Equipment - Nitrogen Dioxide | N | This facility does not have existing gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit<br>Note: **"New gas burning equipment"** means gas burning equipment, the construction or modification of which is commenced after February 17, 1972. |
| **2.37** | Petroleum Processing Facilities | N | This facility is no longer subject to the requirements of 20.2.37.7.C NMAC for "New Natural Gas Processing Plants for which a modification commenced on or after July 1, 1974. Permit action 1313-M6 changes the SIC of the facility and the facility is no longer considered a natural gas processing plant. |
| **2.38** | Hydrocarbon Storage Facilities | N | 20.2.38 NMAC **See Regulation using link above then cut and paste applicable sections** |
| **2.61** | Smoke and Visible Emissions | Y | Applies to the VCU-1 and NSR exempt sources EG-1, FP-1 and FP-2 |

| 20 NMAC | Title | Applies (Y/N) | Comments |
|---|---|---|---|
| **2.70** | Operating Permits | Y | PTE **is** ≥ 100 TPY, Source is major for VOC<br>Source **is** one of the 28 listed – PTE ≥ 100 tpy (must consider fugitive and stack emissions) facility has Petroleum Storage and Transfer units with a total storage capacity greater than 300,000 bbls (20.2.70.7.R(2)(v) NMAC) |
| **2.71** | Operating Permit Fees | Y | Source is subject to 20.2.70 NMAC as cited at 20.2.71.109 NMAC. |
| **2.72** | Construction Permits | Y | PER > 10 pph or 25 tpy for a criteria pollutant, or |
| **2.73** | NOI & Emissions Inventory Requirements | Y | Applicable to all facilities that require a permit.<br>PER > 10 tpy for a criteria pollutant |
| **2.74** | Permits-Prevention of Significant Deterioration | Y | Source **is** one of the 28 listed – PTE ≥ 100 tpy (must consider fugitive and stack emissions) facility has Petroleum Storage and Transfer units with a total storage capacity greater than 300,000 bbls (20.2.74.501.Q NMAC). Total capacity = 355,000 bbls, TK-1 and TK-2 combined = 240,000 bbls and total liquefied petroleum storage (pressure vessels) = 115,000 bbls. |
| **2.75** | Construction Permit Fees | Y | In accordance with 20.2.75.11.E an annual NSR enforcement and compliance fee shall not apply to sources subject to 20.2.71 NMAC, but NSR permit fees do apply. |
| **2.77** | New Source Performance | Y | Applies to any stationary source constructing or modifying and which is subject to the requirements of 40 CFR Part 60, and 40 CFR 60 Subpart Kb, NNN, RRR and JJJJ applies. |
| **2.78** | Emissions Standards for HAPs | N | This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 61. |
| **2.79** | Permits – Nonattainment Areas | N | This facility is or is not located in a non-attainment area. Non-attainment Link |
| **2.82** | MACT Standards for Source Categories of HAPs | Y | This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63, and 40 CFR 63 Subpart ZZZZ applies. This facility emits 9.4 tpy total HAPS. |

12.0 **Federal Regulatory Analysis:**

| Air Programs Subchapter C (40 CFR 50) | National Primary and Secondary Ambient Air Quality Standards | Applies (Y/N) | Comments |
|---|---|---|---|

| | | | |
|---|---|---|---|
| C | Federal Ambient Air Quality Standards | Y | Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard. |

| **NSPS Subpart (40 CFR 60)** | **Title** | **Applies (Y/N)** | **Comments** |
|---|---|---|---|
| A | General Provisions | Y | Applies if any other subpart applies and Kb, NNN, RRR, and JJJJ applies |
| 40 CFR 60.40b, Subpart Db | Electric Utility Steam Generating Units | N | All steam generating units are removed in permit 1313-M6. |
| 40 CFR 60.40b, Subpart Dc | Small Industrial-Commercial-Institutional Steam Generating Units | N | All steam generating units are removed in permit 1313-M6. |
| 40 CFR 60b, Subpart Kb | Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced **After** July 23, 1984 | Y | This facility has storage vessels with a capacity greater than or equal to 75 cubic meters ($m^3$) that are used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification commenced after July 23, 1984. Applies to crude oil storage tanks TK-1 and TK-2. |
| 40 CFR 60, Subpart KKK | Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants | N | Permit action 1313-M6 changes the SIC of the facility and the facility is no longer considered a natural gas processing plant. |
| 40 CFR 60 Subpart NNN | Standards of Performance for VOC Emissions from SOCMI Distillation Operations | Y | The affected source is a facility which was constructed, modified, or reconstruction commenced after December 30, 1983.The Butamer Deisobutanizer at this facility produces VOC emissions from synthetic organic chemical manufacturing industry distillation operations. |
| 40 CFR 60 Subpart RRR | Standards of Performance for VOC Emissions from SOCMI Reactor Operations | Y | The Isobutanizer Reactors at this facility produces VOC emissions from synthetic organic chemical manufacturing industry reactor processes. |
| 40 CFR Part 60 Subpart IIII | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | Y | Emergency generator EG-1 is subject to NSPS IIII as it commenced construction after July 11, 2005 and was manufactured after April 1, 2006. |
| 40 CFR Part 60 Subpart JJJJ | Standards of Performance for Stationary Spark Ignition Internal Combustion | Y | The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion |

| NSPS Subpart (40 CFR 60) | Title | Applies (Y/N) | Comments |
|---|---|---|---|
| | Engines | | engines (ICE) as specified in paragraphs (a)(1) through (5) of section 60.4230. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.<br>Unit FP-2 is an existing unit which was reconstructed after June 12, 2006, and is therefore subject to NSPS JJJJ. |

| NESHAP Subpart (40 CFR 61) | Title | Applies (Y/N) | Comments |
|---|---|---|---|
| A | General Provisions | N | Applies if any other subpart applies and no part applies |
| 40 CFR 61 Subpart E | National Emission Standards for Mercury | N | The provisions of this subpart are applicable to those stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and **incinerate or dry wastewater treatment plant sludge** |
| 40 CFR 61 Subpart V | National Emission Standards for Equipment Leaks (Fugitive Emission Sources) | N | The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart. VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP. VHAP means a substance regulated under this subpart for which a standard for equipment leaks of the substance has been promulgated. Benzene is a VHAP (See 40 CFR 61 Subpart J). Link to 40 CFR 61 Subpart V, Note: If 40 CFR 60 also applies source only needs to comply with this part. |

| MACT Subpart (40 CFR 63) | Title | Applies (Y/N) | Comments |
|---|---|---|---|
| A | General Provisions | Y | Applies if any other subpart applies and |

| MACT Subpart (40 CFR 63) | Title | Applies (Y/N) | Comments |
|---|---|---|---|
| | | | ZZZZ applies |
| 40 CFR 63 Subpart ZZZZ | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT) | Y | A facility is subject to this subpart if they own or operate a stationary RICE at a major **OR** area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.<br>Unit FP-2 is an existing unit which was reconstructed after June 12, 2006. It is an emergency stationary RICE located at an area source of HAP emissions and meets the requirements of this subpart by meeting the requirements of NSPS JJJJ.<br>Unit EG-1 is a new emergency RICE located at an area source of HAP emissions and meets the requirements of this subpart by meeting the requirements of NSPS IIII.<br>Unit FP-1 is an existing emergency RICE located at an area source of HAP emissions and is subject to MACT ZZZZ, with a compliance deadline of October 19, 2013. |
| 40 CFR 63 Subpart BBBBBB | **National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities** | N | From **§ 63.11100** Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.<br><br>No products that meet the above definition are stored or transloaded at this facility. |
| 40 CFR 63 Subpart HHHHHH | **National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources** | N | From **§ 63.11180** Facility maintenance means, for the purposes of this subpart, surface coating performed as part of the routine repair or renovation of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity. All surface coating operations at the facility fall under this definition and are therefore meet the facility maintenance exceptions stated from this regulation listed in **§63.11170(a)** |
| 40 CFR 63 Subpart XXXXXX | **National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal** | N | The Facility is not one of the nine source categories listed in § 63.11514. |

| MACT Subpart (40 CFR 63) | Title | Applies (Y/N) | Comments |
|---|---|---|---|
| | **Fabrication and Finishing Source Categories** | | |

| Miscellaneous | Title | Applies (Y/N) | Comments |
|---|---|---|---|
| 40 CFR 64 | Compliance Assurance Monitoring | Y | Units RC-LOAD, RC-UNCAP and VCU-1 are subject to CAM. Potential VOC emissions are greater than 100 TPY but VOCs are controlled to below 100 tpy by the collection and control system VCU-1 |
| 40 CFR 68 | Chemical Accident Prevention | Y | An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under §68.115 Threshold determination and 68.130 List of substances, 68 **Use link for list and more info.**<br>NSR & TV permits should include citation in applicability table, but no other specific permit conditions are required for NSR permits or TV permits. Our TV permit template includes a General Condition meeting the requirement of 68.215. |

## 13.0 Minor NSR Exempt and/or TV Insignificant Equipment:

### NSR Exempt Sources:

| Unit Number | Source Description | Manufacturer | Model No. / Serial No. | Max Capacity / Capacity Units | List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) / Insignificant Activity citation (e.g. IA List Item #1.a) | Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2] |
|---|---|---|---|---|---|---|
| Varies | *Pressure Tanks | Unknown | N/A | Varies | 20.2.72.202.B.5 | Varies |
| | | | N/A | gallons | - | Varies |
| EG-1 | Emergency Diesel RICE Generator | Caterpillar | XQ400 | 563 | 20.2.72.202.B.3 | 2/15/2007 |
| | | | FSE00801 | hp | - | > 2/15/07 |
| FP-1 | South Fire Pump Engine | Unknown | NT-855-F4 | 320 | 20.2.72.202.B.3 | Aug-82 |
| | | | 18103844 | hp | - | > Aug-82 |
| FP-2 | North Fire Pump Engine | Unknown | NT270CBC1 | 320 | 20.2.72.202.B.3 | Manufactured 1980/ Reconstructed |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | 4/17/2007 |
| | | | 60528317 | hp | - | >1980 |
| TK-PAINT | Tank Painting | N/A | N/A | N/A | 20.2.72.202.B.5 | N/A |
| | | | N/A | N/A | - | N/A |
| TK-BLAST | Abrasive Blasting | N/A | N/A | N/A | 20.2.72.202.B.5 | N/A |
| | | | N/A | N/A | - | N/A |

*Pressure Tanks are not a source of air emissions but the capacity of these tanks are including in the total facility capacity calculation for determining if the source is one of the 28 listed sources in the PSD, Nonattainment NSR and TV regulations. See discussion in Section 4.0

14.0 **New/Modified/Unique Conditions** (Format: Condition#: Explanation):

Modified -

Section A107.C

Combined SSM and Malfunction Emissions (VOCs)

**Requirement:**

(1) **Compliance Method**

The permittee shall sample crude oil from either TK-1 or TK-2 and perform an analysis once every year and, on a monthly basis, complete the following monitoring and recordkeeping to demonstrate compliance with the allowable emission limits in Table 107.A for routine or predictable startup, shutdown, and maintenance (SSM); and/or malfunctions (M) herein referred to as SSM/M.

(2) **Emissions included in Permit Limit and/or Reported as Excess Emissions**

(a) All emissions due to routine or predictable startup, shutdown, and/or maintenance (SSM) must be included under and shall not exceed the 10 tpy SSM/M emission limit in this permit. For emissions due to malfunctions, the permittee has the option to report these malfunction emissions as excess emissions under 20.2.7.110.A(2) NMAC or include the emissions under the 10 tpy limit.

(b) Once emissions from a malfunction event are submitted in the final report (due no later than ten days after the end of the excess emissions event) per 20.2.7.110.A(2) NMAC, the event is considered an excess emission and cannot be applied toward the 10 tpy SSM/M limit in this permit.

(3) **Emissions Exceeding the Permit Limit**

If the monthly rolling 12-month total of SSM/M exceeds the 10 tpy emission limit, the permittee shall report the emissions as excess emissions in accordance with 20.2.7.110 NMAC.

(4) **Emissions Due to Preventable Events**

Emissions that are due entirely or in part to poor maintenance, careless operation, or any

other preventable equipment breakdown shall not be included under the 10 tpy SSM/M emission limit. These emissions shall be reported as excess emissions in accordance with 20.2.7.110 NMAC.

**Monitoring:** The permittee shall monitor all SSM/M events. The permittee shall monitor the permitted routine and predictable startups and shutdowns and scheduled maintenance events of the crude oil storage and loading systems including TK-1 and TK-2, VCU-1 and the liquefied petroleum storage and loading systems. The permittee shall also monitor all malfunction events that result in VOC emissions including identification of the equipment or activity that is the source of emissions.

**Recordkeeping:**

(1) **Compliance Method**

(a) Each month records shall be kept of the cumulative total of all VOC emissions related to SSM/M during the first 12 months and, thereafter of the monthly rolling 12 month total of SSM/M VOC emissions. Any malfunction emissions that have been reported in a final excess emissions report per 20.2.7.110.A(2) NMAC, shall be excluded from this total.

(b) Records shall also be kept of the crude oil analysis and the percent VOC of the vented gas based on AP-42 calculations or TANKS 4.09d or later that are used to calculate the VOC emissions. For liquefied petroleum products records shall be kept of the type of liquefied petroleum product and of the volume of total gas vented in MMscf used to calculate the VOC emissions. All liquefied petroleum products shall be assumed to be 100 percent VOC.

(c) The permittee shall identify the equipment or activity and shall describe the event that is the source of emissions.

(2) **Emissions included Under Permit Limit or Reported as Excess Emissions**

The permittee shall record whether emissions are included under the 10 tpy permit limit for SSM/M or if the event is included in a final excess emissions report per 20.2.7.110.A(2) NMAC.

(3) **Condition B109 Records**

The permittee shall keep records in accordance with Condition B109 of this permit except for the following:

(a) The requirement to record the start and end times of SSM/M events shall not apply to venting of known quantities of VOCs as long as the emissions do not exceed the SSM/M emission limit.

(b) The requirement to record a description of the cause of the event shall not apply to SSM/M events as long as the emissions do not exceed the SSM/M emission limit.

**Reporting:** The permittee shall report in accordance with Section B110.

Modified Section A110.A

Fuel and Fuel Sulfur Requirements (Unit VCU-1)

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| **Requirement:** Emission unit VCU-1 shall combust only natural gas containing no more than 0.75 grains of total sulfur per 100 dry standard cubic feet and crude oil vapors from crude oil containing no more than 300 ppmw $H_2S$. |
| **Monitoring:** None |
| **Recordkeeping:** The permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, or fuel gas analysis, specifying the allowable limit or less. If fuel gas analysis is used, the analysis shall not be older than one year.<br><br>The permittee shall demonstrate compliance with the crude oil limit on $H_2S$ by maintaining records of a current crude oil $H_2S$ and total sulfur analysis, specifying the allowable limit or less. The crude oil $H_2S$ and total sulfur analysis shall not be older than one year. |
| **Reporting:** The permittee shall report in accordance with Section B110. |

New - Section A111.A

20.2.61 NMAC Opacity Limit (Unit VCU-1)

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| **Requirement:** Visible emissions from unit VCU-1 shall not equal or exceed an opacity of 20 percent. |
| **Monitoring:** Once every 90 days of operation, an opacity measurement shall be performed on each Unit for a minimum of 10 minutes in accordance with the procedures of 40 CFR 60, Appendix A, Method 9.<br><br>Once every calendar year an opacity measurement shall be performed on each Unit for a minimum of 10 minutes in accordance with the procedures of 40 CFR 60, Appendix A, Method 9. |
| **Recordkeeping:** The permittee shall record the opacity measures with the corresponding opacity readings in accordance with Method 9 in 40 CFR 60, Appendix A. |
| **Reporting:** The permittee shall report in accordance with Section B110. |

New - Section A112.A

Haul Road Control

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| **Requirement:** Truck traffic areas and haul roads going in and out of the plant site shall be paved and cleaned to control particulate emissions. The haul road average silt loading shall be maintained at less than 1.3 grains/square foot of haul road surface. This condition demonstrates compliance with the control efficiency assumptions used in the permit application and modeling waiver request.<br><br>This control measure shall be used on roads as far as the nearest public road. |
| **Monitoring:**<br>1. The permittee shall monitor the frequency of haul road cleaning (sweeping or washing) or equivalent control measures.<br>2. Semi-annually, the permittee shall collect silt loading samples from a minimum of 10 representative (traveled) locations on the haul road to |

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| | verify compliance with the required 1.3 grains/square foot haul road silt loading. More than 10 representative samples may be taken and included in the analysis of average silt loading. |
| **Recordkeeping:** The permittee shall keep records of the haul road cleaning or equivalent control measures and records of all semi-annual silt loading samples and calculated average haul road silt loading. | |
| **Reporting:** The permittee shall report in accordance with Section B110. | |

Delete Sections A201 Engines and A204 Heaters and Boilers and A209.A NSPS subpart KKK requirements under Section A209 Fugitives.

Add Section A203 Tanks

A. 40 CFR 60, Subpart Kb (Tanks TK-1 and TK-2)

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| **Requirement:** The tanks are subject to 40 CFR 60, Subpart Kb and the permittee shall comply with the VOC standard as specified by 40 CFR 60.112b. |
| **Monitoring:** The permittee shall comply with the testing requirements of 40 CFR 60.113b and the monitoring requirements of 40 CFR 60.116b. |
| **Recordkeeping:** The permittee shall maintain records as specified by 40 CFR 60.115b and 60.116b. |
| **Reporting:** The permittee shall comply with reporting requirements of 40 CFR 60.115b. |

B. Truck Unloading – Crude oil (Units TR-HOSE)

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| **Requirement:** Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the total annual crude oil truck unloading (delivery) volume to 9,125,000 barrels per year. |
| **Monitoring:** The permittee shall monitor the crude oil truck unloading volume on a monthly basis. |
| **Recordkeeping:** The permittee shall record the monthly crude oil truck unloading volume. Each month during the first 12 months of monitoring the permittee shall record the cumulative crude oil truck unloading volume and after the first 12 months of monitoring, the permittee shall calculate and record a monthly rolling 12-month total unloading volume.<br><br>Records shall also be maintained in accordance with Section B109. |
| **Reporting:** The permittee shall report in accordance with Section B110. |

C. Railcar Loading – Crude oil (Units RC-UNCAP and RCHOSE)

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| **Requirement:** Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the total annual crude oil loadout volume to 14,600,000 barrels per year and by capturing, routing and controlling the loading emissions through the use of a cap and capture loadout device, closed vent system and Vapor Combustion Unit (VCU-1). |
| **Monitoring:** The permittee shall monitor the crude oil loadout volume on a monthly basis. |

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| **Recordkeeping:** The permittee shall record the monthly crude oil loadout volume. Each month during the first 12 months of monitoring the permittee shall record the cumulative crude oil loadout volume and after the first 12 months of monitoring, the permittee shall calculate and record a monthly rolling 12-month total loadout volume.<br><br>Records shall also be maintained in accordance with Section B109. |
| **Reporting:** The permittee shall report in accordance with Section B110. |

Add Section A206 Vapor Combustor Units

A. Operation (Unit VCU-1)

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| **Requirement:** Crude Oil Railcar loadout shall be controlled by the unit VCU-1. The vapor combustion unit shall be maintained and operated to achieve the emissions limits stated in Section A106. During all crude oil railcar loadout the vapor combustion unit shall maintain proper combustion control over the entire loading period, defined as the period crude oil is flowing into the railcar, by maintaining the temperature at or above the temperature recorded during the latest stack test that demonstrated compliance with the emission limits in Section A106. |
| **Monitoring:** The presence of combustion in the thermal oxidizer shall be monitored continuously using a flame scanner, or any other equivalent device, **and** a thermocouple to detect the presence of a flame and proper operation. In addition, the vapor combustion unit shall be equipped with a well-maintained alarm that signals non-combustion during operation and an associated loadout interlock that automatically shuts down the crude oil loadout. Additionally, time stamps (date and time) of each alarm shall be continuously monitored.<br><br>The monitoring and recording devices shall be maintained in good operating condition. |
| **Recordkeeping:** The permittee shall maintain the following records in accordance with Section B109:<br>- Strip chart or electronic records of the time stamp for each alarm signaling non-combustion during operation.<br>- Manual or electronic record of date and time when loadout is performed without VCU operating.<br>- Strip chart or electronic records of thermocouple temperature readings. Reading shall be recorded a minimum of once every 15 minutes.<br>- Maintenance records for the Vapor Combustion Unit and monitoring devices.<br><br>The permittee shall maintain records in accordance with Section in B109. |
| **Reporting:** The permittee shall report in accordance with Section B110. |

B. Railcar Loading Vapor Capture Device Inspection (Unit RC-LOAD)

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| **Requirement:** Compliance with the allowable emission limits in Table 106.A shall be demonstrated by operating a vapor capture system, that captures and routes VOCs emissions from all railcars being loaded to the vapor combustion unit VCU-1. |
| **Monitoring:** At least once per month, the permittee shall inspect the vapor capture system for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, |

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| holes, or gaps; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatch covers, or other closure devices. In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable and in a manner that minimizes VOC and HAPs emissions to the atmosphere. |
| **Recordkeeping:** The permittee shall record the results of the vapor recovery unit inspections chronologically, noting any maintenance or repairs that are required. |
| **Reporting:** The permittee shall report in accordance with Section B110. |

C. Initial Compliance Test (Unit VCU-1)

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| **Requirement:** Compliance with the allowable emission limits in Table 106.A shall be demonstrated by performing an initial compliance test. |
| **Monitoring:** The permittee shall perform an initial compliance test in accordance with the General Testing Requirements of Section B111. Emission testing is required for NOx, CO and VOC. Testing shall occur during periods of near maximum crude oil vapor production (equal to or greater than 90 percent of the maximum hourly loading capacity 3465 bbl/hr) and shall occur during periods when the ambient temperature is above 60$^{o}$ F. Each test run (sample time) may be limited to less than 1-hour to correspond with periods of equal or greater than 90 percent of maximum hourly loading capacity and near maximum crude oil vapor production.<br><br>The monitoring exemptions of Section B108 do not apply to this requirement. |
| **Recordkeeping:** The permittee shall maintain records in accordance with the applicable Sections in B109, B110, and B111. |
| **Reporting:** The permittee shall report in accordance with the applicable Sections in B109, B110, and B111. |

15.0 **<u>For Title V action: Cross Reference Table between NSR Permit and TV Permit.</u>** N/A

16.0 **Permit specialist's notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.**

A. Emission units EG-1, FP-1 and FP-2 are minor NSR exempt sources that are not Title V insignificant activities. Therefore they are not included in this NSR permit but remain in the Title V permit due to applicability of NSPS subpart IIII (EG-1), NSPS subpart JJJJ (FP-2) and NESHAP subpart ZZZZ (EG-1, FP-1 and FP-2).

B. The Permittee is requesting an applicability determination from USEPA regarding whether or not the source is one of the PSD listed source categories (see discussion in Section 4.0). Until EPA issues a response, the permit will assume the source is a listed source category and is currently a major PSD source. The status of the facility (PSD Major or Minor) is the only item that is in dispute. See Letter from Western to EPA Region 6 dated September 24, 2015 for Western's applicability argument.