

**Statement of Basis - Narrative**  
**NSR Permit**

**Company:** Williams Four Corners, LLC  
**Facility:** Thompson Compressor Station  
**Permit No(s):** 0761M9 and P018R2  
**Tempo/IDEA ID No.:** 1191 - PRN20110002  
**Permit Writer:** Melinda Owens

**Fee Tracking**

|                 |  |
|-----------------|--|
| <b>Tracking</b> | <b>NSR tracking entries completed:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                             |
|                 | <b>NSR tracking page attached to front cover of permit folder:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
|                 | <b>Paid Invoice Attached:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                      |
|                 | <b>Balance Due Invoice Attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                               |
|                 | <b>Invoice Comments:</b> \$500 filing fee paid 7/5/11. Balance of \$1,320 paid 8/5/11.   |

|                      |  |                                      |
|----------------------|--|--------------------------------------|
| <b>Permit Review</b> | <b>Date to Enforcement:</b> NA, SSM conditions previously reviewed | <b>Inspector Reviewing:</b> NA       |
|                      | <b>Date Enf. Review Completed:</b> NA                              | <b>Date of Reply:</b> (if necessary) |
|                      | <b>Date to Applicant:</b> TBD                                      | <b>Date of Reply:</b> TBD            |
|                      | <b>Date of Comments from EPA:</b> NA                               | <b>Date to EPA:</b> NA               |
|                      | <b>Date to Supervisor:</b> TBD                                     |                                      |

**1.0 Plant Process Description:**

The Thompson Compressor Station compresses pipeline quality natural gas using natural gas-fired, reciprocating compressor engines and turbines. Liquid hydrocarbons separated from the field gas are intermittently received at Thompson during pigging operations natural sweeping and stored in Tanks T-3 and T-12, releasing flash emissions. At any time, one of the tanks is shut-in, awaiting a tanker truck to unload the tank, while the other tank is receiving condensate from the separator. The facility is permitted for operation of one natural gas fired Solar Saturn 10-T1300 turbine, one Solar Saturn 10-T1200 turbine, one Waukesha 9390GL compressor engine, one White Superior 8GT825 compressor engine, one 21,000 gal condensate tank, and one 16,800 gal condensate tank. Other sources include four 218 MBtu/hr natural gas fired heaters associated with high and low side separators and receivers), fugitive emissions from process piping (valves, flanges, seals, etc.), and storage tanks.

**2.0 Description of this Modification:**

**SSM:** In accordance with 20.2.7.15 NMAC, WFC is applying to permit emissions exceeding an emission limitation due to routine and predictable startup, shutdown, and maintenance (SSM). For this facility SSM emissions include venting natural gas from compressors (Units 1a-3a, 9a & 14a) and associated piping resulting in emissions of 187.9 pph and 12.4 tons per year of VOCs and small quantities of HAPs. This represents

an increase from 7.1 tons per year of SSMs in Permit 0761M8R1, issued August 26, 2010.

**Malfunction:** Applying for a maximum of 10 tpy of VOC emissions from periodic venting of natural gas caused by malfunctions as defined in 20.2.7.7.E NMAC. This request is in accordance with AQB's guidance Implementation Guidance for Permitting SSM Emissions and Excess Emissions dated January 1, 2011.

**3.0 Source Determination:**

1. The emission sources evaluated include Thompson Compressor Station.

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

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? Yes

**4.0 PSD Applicability:**

A. The source, as determined in the Source Determination above, is an **existing major PSD** source. SSM emissions are existing and none are due to a modification. A portion or all of the 10 tpy malfunction emissions may be in addition to existing malfunction emissions but none are due to a modification. Regardless, the combined emission rates from SSM and Malfunction are less than 40 tpy VOC, which is less than the significant emission rate in Table 2, 20.2.74.502 NMAC.

B. Netting is not required; project emissions are not significant.

C. BACT is not required for this permit revision since this is not a major PSD modification.

**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)                     |
|---------------|------------|--------------------|---|
| P018R2M1      | TBD        | TV significant Mod | Currently in house, to incorporate the NSR changes. |

| Permit Number | Issue Date | Action Type                             | Description of Action (Changes)   |
|---------------|------------|---|---|
| 0761M9*       | TBD        | NSR Significant Revision                | <p><b>SSM:</b> In accordance with 20.2.7.15 NMAC, WFC is applying to permit emissions exceeding an emission limitation due to routine and predictable startup, shutdown, and maintenance (SSM). For this facility SSM emissions include venting natural gas from compressors (Units 1a-3a, 9a &amp; 14a) and associated piping resulting in emissions of 187.9 pph and 12.4 tons per year of VOCs and small quantities of HAPs. This is an increase from Permit 0761M8R1, issued August 26, 2010, in permitted SSM emissions of 7.1 tons per year.</p> <p><b>Malfunction:</b> Apply for a maximum of 10 tpy of VOC emissions from venting caused by malfunctions as defined in 20.2.7.7.E NMAC. This is in accordance with AQB's guidance <u>Implementation Guidance for Permitting SSM Emissions and Excess Emissions</u> dated January 1, 2011.</p> |
| 0761M8R1      | 8/26/10    | NSR Tech Rev                            | This Technical Revision, as requested by the facility, consists of a change in monitoring requirements for the SSM emission from the compressors and associated piping. The SSM emissions rate is based on facility blowdown volumetric flowrate, rather than annual number of events per compressor and facility.  |
| 0761M8        | 5/24/10    | NSR Significant /PSD Minor Modification | This action includes: the addition of one Solar Centaur 40-4700S turbine (Unit 14) and 2 catalytic heaters (exempt Units 15 & 16). There is updating of emissions for: particulates, equipment leaks (F1), truck loading (Unit F2), tank flashing & working/breathing emissions for Tanks 3 & 12 (into a single emissions cap). Additionally, the operating parameters for existing engines (Units 2 & 3) and turbines (Units 1 & 9) are updated to match manufacturer's data.  |
| P018R2*       | 2/15/10    | Title V Renewal                         | Update the Title V permit with the NSR changes of 0761M7R2.   |
| 0761M7R2      | 2/23/09    | Administrative Revision                 | Corrected serial numbers for compressor engines units 1-3 and 9 to S428435, 76240, X00130, S401519, respectively  |
| P018R1M3      | 2/21/08    | Title V Modification                    | Replaced Unit 4, a Solar Turbine T1001, with Unit 9, a Solar Turbine T1200.   |
| 0761M7R1      | 9/15/06    | Admin Rev                               | Changed the company name from Williams Field Services to Williams Four Corners, LLC on August 23, 2006.   |
| P018R1M2      | 9/15/06    | Administrative Revision                 | Changed the company name from Williams Field Services to Williams Four Corners, LLC on August 23, 2006.   |
| P018R1M1      | 6/2/06     | Title V Modification                    | Changed Responsible Official to Don Wieburg, Director, Four Corners Area.   |
| 0761M7        | 02/21/06   | Significant Revision                    | Replaced the existing Solar Saturn T1001 (891 hp) with a Solar Saturn 10-T1200 (997 hp) because Unit 4 is due for an overhaul and no longer supported by the manufacturer.  |

| Permit Number | Issue Date | Action Type             | Description of Action (Changes)   |
|---------------|------------|-------------------------|---|
| 0761M6        | 2/7/05     | PSD Minor Modification  | <p>Updated permitted emissions from the condensate storage tank (Unit T-3) with potential flash emissions. The November 2001 construction permit application and the December 2002 Title V operating permit application identified two storage tanks (Units T-3 and T-4) as having the potential for flash emissions. Unit T-4 is no longer permitted to store condensate with the potential for flash emissions. All condensate with the potential for flash emissions will initially be stored in Unit T-3. If extra storage capacity is required (for example, if weather delays access by haul trucks), flashed condensate will be transferred from Unit T-3 to Unit T-12 until the condensate can be transported off-site.</p> <p>WFS also requests that the option to operate the Caterpillar G3516TALE reciprocating engine (Unit 5) be removed from the permit. A Waukesha 9390GL (Unit 2) has been installed and WFS has no plans to reinstall the G3S 16TALE.</p> |
| 0761M6R1      | 12/3/04    | Administrative Revision | Updated all of Williams' serial numbers.  |
| P018R1        | 08/10/04   | Title V Renewal         | Title V permit renewal and incorporated 761-M3, M4, M4R1, M5, and M5R1.   |
| 0761M5R2      | 7/23/04    | Administrative Revision | Rescinded M5 and made M4 the most current permit.   |
| 0761M5R1      | 5/26/04    | Administrative Revision | Like kind replacement of one Waukesha 9390GL. New serial # is 363885.   |
| 0761M5        | 6/21/02    | Significant Revision    | <p>Added a 100 mscfd dehydrator; Added a flare to control existing condensate tank flash emissions and overhead still vent emissions from the proposed 100 mmscfd dehydrator; and</p> <p>Either retrofit the existing White Superior 8GTS2S engine with Clean Bum combustion technology or replace the unit with a Waukesha 5794LT engine to increase horsepower and reduce emissions.</p>  |
| 0761M4R1      | 11/1/01    | Administrative Revision | Like kind replacement of natural gas-fired turbine.   |
| 0761M4        | 6/16/00    | Minor Modification      | This modification consists of increasing the emission limits for the White Superior 8GT825 reciprocating engine (Unit 3) and the Solar Saturn 1100 turbine (Unit 4).  |
| 0761M3        | 12/1/98    | Minor Modification      | Replaced Clark RA-4 compressor engine with either a Waukesha 9390 GL or a Solar Saturn 10-T1300.  |
| P018          | 10/13/98   | New Title V             | Initial TV permit to incorporate NSR permit 0761 through 0761-M2.   |
| 0761M2        | 9/10/96    | Modification            | Replaced the White Superior 8G825 IC engine with a Solar Saturn 10-T1300.   |
| 0761M1        | 11/3/92    | Modification            | Updated emission limits to reflect values of recent performance testing.  |

| Permit Number | Issue Date | Action Type         | Description of Action (Changes)   |
|---------------|------------|---------------------|---|
| 0761          | 6/19/91    | Construction Permit | Permitted 1 Superior 8G825 IC, 1 Clark RA4 IC, 1 Superior 825 HP IC, and 1 Solar Saturn 887 hp turbine. |

#### **6.0 Public Response/Concerns:**

On August 22, 2011, WildEarth Guardians (WEG) and San Juan Citizens Alliance (SJCA) submitted written comments specifically regarding the application to permit startup, shutdown, maintenance, and malfunction emissions. Submittal of written comments was before the end of the 30-day comment period. They have also requested to review the draft permits before issuance.

To date, this permit writer is not aware of any other public comments or concerns with this permit application.

The Department's analysis was made available 9/16/2011.

WEG & SJCA were provided a copy of the analysis on: 9/16/2011. Thirty days will be provided for review in accordance with 20.2.72.206.A(3) NMAC.

WEG & SJCA were provided a copy of the draft permit on: 9/16/2011

#### **7.0 Compliance Testing:**

| Unit No. | Compliance Test  | Test Dates |
|----------|--|------------|
| 1        | Tested in accordance with EPA test methods for NOx and CO as required by permit. | 01/30/97   |
| 2        | Tested in accordance with EPA test methods for NOx and CO as required by permit. | 01/25/00   |
| 3        | Tested in accordance with EPA test methods for NOx and CO as required by permit. | 07/01/99   |
| 9        | Tested in accordance with EPA test methods for NOx and CO as required by permit. | 05/13/08   |
| 14       | NA**   | NA         |

\*\* Initial compliance test is not imposed on Unit 14 because it must comply with the requirements of NSPS Subpart KKKK

#### **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. Were emissions from startup, shutdown, and scheduled maintenance operations calculated and included in the emission tables? **Yes, in accordance with 20.2.7.15 NMAC, the applicant has submitted an application to permit emissions from routine and predictable startup, shutdown, and maintenance.**

**9.0 Compliance and Enforcement Status [Title V only]:** N/A, not a TV permit.

**10.0 Modeling:** The emissions subject to this permit revision are VOCs and HAPS which are not subject to air dispersion modeling. This is not a PSD major modification.

VOC is a precursor to the criteria pollutant, ozone. The AQB tracks compliance with the ozone National Ambient Air Quality Standards through monitoring and does not require pre-construction single source ozone modeling. Ozone modeling is too cost prohibitive to attach to a typical permit application. However, applications for PSD major new or modifications may require ozone modeling if the facility-wide VOC emissions are 100 tpy or more. These applicants are required to contact AQB and EPA to determine if ozone modeling is required.

Regional ozone modeling for the Four Corners area was done in 2009 (see <http://www.nmenv.state.nm.us/aqb/4C/Modeling.html>) and the Air Quality Bureau is continuing to analyze ozone in the region.

Previous modeling was performed for NSR 0761M7. In his 12/30/2005 report, David Heath stated that the modeling analysis demonstrated that normal operation of the facility neither causes nor significantly contributes to any exceedances of applicable air quality standards. The standards relevant at this facility are NMAAQS for NO2 and CO, and NAAQS for NO2 PSD increment in Class I and Class II areas.

**11.0 State Regulatory Analysis(NMAC/AOCR):**

The permit writer verified the state and federal regulatory applicability determinations that applied to the units and the activity of venting from SSM and Malfunction emissions in permit application number 0761M9. Some determinations are taken from the Title V Permit P018R2 statement of basis.

According to the applicant's applicability determination and verification by the department, the venting of natural gas due to SSM or malfunction and any units from which this venting would occur are not currently subject to any NSPS or NESHAP. Regardless, the permitting of SSM and/or malfunction emissions do not supersede any other federal or state regulation. The most stringent requirement applies.

| <b>20 NMAC</b> | <b>Title</b>                             | <b>Applies (Y/N)</b> | <b>Comments</b>   |
|----------------|--|----------------------|---|
| <b>2.1</b>     | General Provisions, Significant Figures  | Y                    | 20.1.116 Significant Figures apply  |
| <b>2.3</b>     | 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. |
| <b>2.7</b>     | Excess Emissions                         | Y                    | Applies to all facilities' sources  |
| <b>2.33</b>    | Gas Burning Equipment - Nitrogen Dioxide | N                    | Does not exceed the minimal level of heat input established by the regulation.  |

| <b>20 NMAC</b> | <b>Title</b>                                    | <b>Applies (Y/N)</b> | <b>Comments</b>  |
|----------------|---|----------------------|--|
| 2.34           | Oil Burning Equipment - Nitrogen Dioxide        | N                    | This facility does not burn oil  |
| 2.35           | Natural Gas Processing Plant – Sulfur           | N                    | This facility is not a natural gas processing plant.   |
| 2.37           | Petroleum Processing Facilities                 | N                    | This facility is not a petroleum processing facility.  |
| 2.38           | Hydrocarbon Storage Facilities                  | N                    | This facility does not store hydrocarbons containing H2S   |
| 2.61           | Smoke and Visible Emissions                     | Y                    | Engines (units 2 and 3) and turbines (units 1, 9, and 14) are Stationary Combustion Equipment.   |
| 2.70           | Operating Permits                               | Y                    | Source is major for NO <sub>x</sub> , CO, VOCs, as defined at 20.2.70.200 NMAC. PTE is > 100 TPY for each.   |
| 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                    | NSR Permits are the applicable requirement, including 20.2.72 NMAC.  |
| 2.73           | NOI & Emissions Inventory Requirements          | Y                    | Applicable to all facilities that require a permit. PER > 10 tpy for NO <sub>x</sub> , CO and VOC.   |
| 2.74           | Permits-Prevention of Significant Deterioration | Y                    | Source is not one of the 28 listed – PTE > 250 tpy 328.8 tpy of NO <sub>x</sub> .<br>This facility is a PSD major source subject to PSD applicability determination in 20.2.74.200 NMAC. According to the applicant and department review, this permitting action is not a PSD major modification. |
| 2.75           | Construction Permit Fees                        | Y                    | This facility is subject to 20.2.72 NMAC.71 NMAC.  |
| 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, as amended through January 31, 2009. 40 CFR 60 Subparts GG and KKKK apply.  |
| 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 not located in, nor does it affect an adjacent non-attainment area.   |
| 2.82           | MACT Standards for Source Categories of HAPs    | N                    | This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR 63.  |

## 12.0 Federal Regulatory Analysis:

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

| <b>NSPS Subpart (40 CFR 60)</b> | <b>Title</b>  | <b>Applies (Y/N)</b> | <b>Comments</b>  |
|---------------------------------|---|----------------------|--|
| A                               | General Provisions  | Y                    | Applies if any other subpart applies. GG and KKKK apply  |
| 40 CFR60.40a, Subpart Da        | Performance Standards for Electric Utility Steam Generating Units,  | N                    | Not an electric utility steam generating unit.   |
| 40 CFR 60, Subpart Ka           | Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 | N                    | Tanks do not have a storage capacity greater than 151,416 liters (40,000 gallons) for petroleum liquids for which construction is commenced after May 18, 1978.                        |
| 40 CFR 60.330 Subpart GG        | Stationary Gas Turbines   | Y                    | Unit 1 has a heat input greater than the 10 MMBtu/hour threshold, and was installed in 1996 which is after the October 3, 1977 applicability date.                                     |
| 40 CFR 60, Subpart KKKK         | Standards of Performance for Stationary Gas Turbines  | Y                    | Both Units 9 & 14 have a heat input greater than the 10 MMBtu/hour threshold. Unit 9 was installed after the February 18, 2005 applicability date. Unit 14 has not yet been installed. |
| 40 CFR Part 60 Subpart LLL      | Standards of Performance for Onshore Natural Gas Processing: SO2 Emissions  | N                    | The facility is not a Onshore Natural Gas Processing facility with SO2 Emissions   |
| 40 CFR Part 60 Subpart JJJJ     | Standards of Performance for Stationary Spark Ignition Internal Combustion Engines  | N                    | Engines at the facility were manufactured/ constructed prior to the trigger dates.   |

| <b>NESHAP Subpart (40 CFR 61)</b> | <b>Title</b>       | <b>Applies (Y/N)</b> | <b>Comments</b>   |
|-----------------------------------|--------------------|----------------------|---|
| A                                 | General Provisions | N                    | Applies if any other subpart applies; no subpart applies. |

| MACT Subpart<br>(40 CFR 63) | Title   | Applies<br>(Y/N) | Comments   |
|-----------------------------|---|------------------|--|
| A                           | General Provisions  | N                | Applies if any other subpart applies and none apply.   |
| 40 CFR 63.760 Subpart<br>HH | Oil and Natural Gas<br>Production Facilities  | N                | The facility does not have any of the<br>affected sources.   |
| 40 CFR 63 Subpart<br>YYYY   | National Emission Standards<br>for Hazardous Air Pollutants<br>for Stationary Combustion<br>Turbines  | N                | The facility is not a major source of<br>HAPs.   |
| 40 CFR 63 Subpart<br>ZZZZ   | National Emissions<br>Standards for Hazardous Air<br>Pollutants for Stationary<br>Reciprocating Internal<br>Combustion Engines (RICE<br>MACT) | N                | Facility is an area source of HAPS.<br>Existing Unit 2 (4SLB, 1864 hp) and<br>Unit 3 (4SRB, 958 hp) do not have to<br>meet the requirements of this subpart<br>and of subpart A per 63.6590(b)(3). |

| Miscellaneous | Title  | Applies<br>(Y/N) | Comments  |
|---------------|--|------------------|---|
| 40 CFR 64     | Compliance Assurance<br>Monitoring           | N                | The facility does not have control<br>equipment.  |
| 40 CFR 68     | Chemical Accident<br>Prevention              | N                | Does not store any identified<br>substances.  |
| 40 CFR 70     | Title V - State Operating<br>Permit Programs | N                | Operating Permit Program – is not<br>applicable – New Mexico State has full<br>delegated authority and Title V is<br>administered under 20.2.70 NMAC. |

**13.0 Exempt and/or Insignificant Equipment that do not require monitoring:**

**NSR Exempt Equipment (not entered into Tempo database)**

| Description                                | JUSTIFICATION  |
|--|--|
| T-1 210 bbl glycol storage tank            | 20.2.72.202(B)(2)(b) NMAC: Vapor pressure of < 0.2 PSI,<br>records shall be maintained |
| T-2 210 bbl methanol storage tank          | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                               |
| T-4 70 bbl produced water storage tank     | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                               |
| T-5 800 gal Ambitrol storage tank          | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year, VP<br>< 10 mm Hg             |
| T-6 100 gall produced water storage tank   | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year, VP<br>< 10 mm Hg             |
| T-7 800 gal Lube Oil storage tank          | 20.2.72.202(B)(2)(b) NMAC: Vapor pressure of < 0.2 PSI,<br>records shall be maintained |
| T-8a/8b Two 500 gal Lube Oil storage tanks | 20.2.72.202(B)(2)(b) NMAC: Vapor pressure of < 0.2 PSI,<br>records shall be maintained |
| T-9 50 bbl produced water storage tank     | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                               |
| T-10 70 bbl produced water storage tank    | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                               |
| T-11 100 bbl produced water storage tank   | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                               |

| Description                                  | JUSTIFICATION   |
|--|---|
| T-15 50 bbl storage tank (unit blowdown)     | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                            |
| T-16 45 bbl storage tank (facility blowdown) | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                            |
| T-17 4000 gal deionized water storage tank   | 20.2.72.202(B)(2)(b) NMAC: Vapor pressure of < 0.2 PSI, records shall be maintained |
| T-18 300 gal soap storage tank               | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                            |
| T-19 125 gal solvent storage tank            | 20.2.72.202(B)(2)(b) NMAC: Vapor pressure of < 0.2 PSI, records shall be maintained |
| 15 & 16 catalytic heaters                    | 20.2.72.202B(5) NMAC: Potential to emit < ½ ton per year                            |

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

**Specific Condition B. SSM VOC Emission Limits** – Condition limits emissions from routine and predictable emissions due to startup, shutdown, and/or maintenance (SSM). SSM emission are due to venting of field gas. Permittee demonstrates compliance with limits by applying the mol % VOC content from the most recent gas analysis to the amount of field gas vented.

**Specific Condition C. Malfunction Emission Limits** – Malfunction emissions are also from venting field gas. Since they are not predictable, the permittee must identify the source of the malfunction emissions so that enforcement and compliance can determine if any state or federal regulations were violated during the malfunction event. The permittee tracks malfunction emissions in the same manner as for SSM emissions.

**General Condition 1.** Reiterates the requirement that SSM emissions be minimized regardless if the SSM emission limit has been met or not (20.2.72.14.A NMAC).

**General Condition 2.** Emphasizes that although malfunction emission limits may be established, permittees must still minimize emissions during startup, shutdown, and malfunction. This requirement applies regardless if the malfunction limit has been met or not.

**15.0 For Title V action: Cross Reference Table** – Not required for NSR

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

**Emission Estimate Verification:**

The permit writer verified the calculations and assumptions used in emission estimates.

SSM emissions are due to venting of predictable quantities of field gas from turbines, compressors, and associated piping during routine and predictable startup or shutdown.

Turbine/compressor Units 1a, 9a, and 14a are calculated to emit SSM gas loss of 11,215 scf per event. With 105 startups and shutdowns per year, the VOC emission rate is 8.9 tons per year.

Engine/compressor Unit 2a is calculated to emit SSM gas loss of 3,610 scf per event. With 384 startups and shutdowns per year, the VOC emission rate is 3.5 tons per year.

A 0.3 mol % VOC content was applied to the cubic feet of gas vented to determine VOC emissions. The percent VOCs was determined from a 6/2/11 extended gas analysis. HAPs were determined using the same method. No hydrogen sulfide was detected in the gas.

**Malfunction** emissions due to venting of field gas apply to all operations at the facility except combustion and dehydrator still vent emissions.

Applicant requested 10 tpy VOC malfunction emissions, which is the allowable limit according to department guidance and does not exceed any permitting threshold.

There are no NESHAP applicable to these activities and so no HAP limits apply.