

Introduction

The Williams Four Corners LLC (WFC) Pump Mesa Central Delivery Point (CDP) currently operates under a construction permit, 0867-M5, dated April 9, 2010 and a Title V operating permit, P037-R2, dated December 20, 2010.

The station is currently permitted to operate the following equipment/sources:

- Fourteen Waukesha L7042GL natural gas-fired compressor engines (Units 1-14);
- One P&A 10 million standard cubic feet per day (MMSCFD) triethylene glycol (TEG) dehydrator (Unit 15);
- Four Enertek 20 MMSCFD TEG dehydrators (Units 16-19);
- One Enertek 10 MMSCFD TEG dehydrator (Unit 20); and
- Startup, shutdown and maintenance emissions (SSM) emissions (Units 1a-14a).

The station is also equipped with miscellaneous liquid storage tanks.

This construction permit application is being submitted for the following modifications:

- Update dehydrator still vent (Units 15a-20a) emissions to address the evolving gas composition;
- Update SSM emissions from the compressors and piping associated with the station (Units 1a-14a) to address the evolving gas composition;
- Add malfunction (Unit M1) emissions;
- Add three tank heaters (Units 21-23). These are exempt units with combined emissions less than 0.5 tons per year per pollutant; and
- Update the miscellaneous liquid storage tank listing (exempt sources).

Section 3

Application Summary

The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will effect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM): Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.nmenv.state.nm.us/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

Summary

The WFC Pump Mesa CDP currently operates under a construction permit, 0867-M5, dated April 9, 2010 and a Title V operating permit, P037-R2, dated December 20, 2010. The applicable regulation is 20.2.72 New Mexico Administrative Code (NMAC). The lowest level regulatory citation is 20.2.72.219.D.1 NMAC.

The station is currently permitted to operate the following equipment/sources:

- Fourteen Waukesha L7042GL natural gas-fired compressor engines (Units 1-14);
- One P&A 10 MMSCFD TEG dehydrator (Unit 15);
- Four Enertek 20 MMSCFD TEG dehydrators (Units 16-19);
- One Enertek 10 MMSCFD TEG dehydrator (Unit 20); and
- SSM emissions (Units 1a-14a).

The station is also equipped with miscellaneous liquid storage tanks.

This construction permit application is being submitted for the following modifications:

- Update dehydrator still vent (Units 15a-20a) emissions to address the evolving gas composition;
- Update SSM emissions from the compressors and piping associated with the station (Units 1a-14a) to address the evolving gas composition;
- Add malfunction (Unit M1) emissions;
- Add three tank heaters (Units 21-23). These are exempt units with combined emissions less than 0.5 tons per year per pollutant; and
- Update the miscellaneous liquid storage tank listing (exempt sources).

There are no modifications to de-bottleneck impacts or change the facility's major/minor status (both prevention of significant deterioration [PSD] & Title V).

Startup, Shutdown and Maintenance Emissions

For the engines, dehydrators (still vent and reboiler), equipment leaks (valves, connectors, seals, etc.), malfunctions, and storage tanks, it is concluded there are no SSM emissions in excess of those identified for steady-state operation as seen in Section 2 (Table 2-E). Discussions justifying this conclusion are provided in Section 6.

SSM emissions from blowdowns of the compressors and piping associated with the plant are calculated from the quantity of gas vented during each event, the composition of the gas, and the number of events. The number of blowdowns events are estimated based on historical operations. A safety factor is included.

Section 16

Air Dispersion Modeling

NSR (20.2.72 NMAC) and PSD (20.2.74 NMAC) Modeling: Provide an air quality **dispersion modeling** demonstration (if applicable) as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines. If air dispersion modeling has been waived for this permit application, attach the AQB Modeling Section modeling waiver documentation.

SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.nmenv.state.nm.us/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.

Title V (20.2.70 NMAC) Modeling: Title V applications must specify the NSR Permit number for which air quality dispersion modeling was last submitted. Additionally, Title V facilities reporting new SSM emissions require modeling or a modeling waiver to demonstrate compliance with standards.

The modifications in this application (see Section 3) do not affect pollutants for which modeling is required.

- The dehydrator still vent emissions, SSM emissions and malfunction emissions include only VOC and HAPs. The modeling of VOC emissions is not required for PSD minor modifications (this application is for a PSD minor modification). Modeling is not required for HAPs.
- The three tank heaters and miscellaneous liquid storage tanks are exempt sources.

Therefore, in accordance with direction received from Eric Peters, NMAQB, modeling is not required and a waiver is not needed.