

## STATEMENT OF BASIS

To: Reviewers

Through: Lori Bocchino, Operating Permit Program Manager

From: Hillary Killorn, P.E., Operating Permit Engineer

Subject: Draft Operating Permit 3-1-018-2 for Williams Field Services, Opal Gas Plant

Date: May 9, 2014 (*Addendum June 26, 2014*)

Attached is the draft modification of Wyoming Air Quality Standards and Regulations (WAQSR) Chapter 6, Section 3 operating permit 3-1-018-2 for the Opal Gas Plant. The operating permit is being modified at the request of the permittee to incorporate requirements which have become applicable to the Opal Gas Plant since the issuance of permit 3-1-018-1, issued July 20, 2011. In addition to the applicable requirements from the permits and waivers listed below, this operating permit incorporates a revised Preventative Maintenance Plan and a revised Compliance Assurance Monitoring (CAM) plan as requested by the permittee and approved by the Division.

Permit MD-12097 (9/13/11): modified operations at the plant to allow routing the 1 BSCFD glycol dehydrator flash tank offgas stream to either the glycol dehydrator thermal oxidizer (unit 46) or the TXP3/TXP4/TXP5 flare (unit 18A). The permit also superseded the benzene limit on the glycol dehydrator thermal oxidizer (unit 46) with a 1.0 tons per year (TPY) benzene limit on the 1 BSCFD glycol dehydrator and required compliance with applicable requirements of 40 CFR 63, Subpart HH.

Waiver wv-13561 (9/19/12): authorized the construction of a 350 MMscfd glycol dehydration contactor to reduce the water content of inlet gas streams prior to entering the cryogenic plants. The contactor is required to utilize the 1 BSCFD glycol dehydrator glycol regeneration system, and emissions from the combined system still vent must be controlled with a thermal oxidizer (unit 46). This thermal oxidizer is required to be smokeless. Waiver wv-13561 corrected (10/17/12): included revisions to the facility emissions summary tables at the end of the original waiver.

Waiver wv-15407 (10/11/13): authorized operation of two existing emergency diesel fire pump engines and one existing standby diesel engine used to power a portable air compressor that have been at the facility since 2006 but had not yet been permitted. The 380 hp Cummins NT-85-F2 and 330 hp Caterpillar G3406C diesel engines (units SB-01 and SB-02) are each limited to 100 hours of non-emergency operation each year. The 68 hp John Deere 4219D diesel engine (unit SB-03) is limited to 500 hours of non-emergency operation each year. All three engines are required to have operational hour meters and comply with 40 CFR 63, Subpart ZZZZ. 40 CFR 60, Subpart IIII does not apply to these engines at this time as they were all manufactured prior to April 1, 2006.

Waiver wv-15955-1 (3/3/14): authorized the installation of one 122 hp John Deere JD4045HF diesel engine (unit SB-04) used to drive a portable air compressor. This engine is limited to 1,000 hours of operation per calendar year, tracked with a non-resettable hour meter. The engine shall also be U.S. EPA Tier 4i certified and comply with all applicable requirements of 40 CFR 60, Subpart IIII and 40 CFR 63, Subpart ZZZZ.

Upon reviewing the requirements that have become applicable to the facility since the issuance of operating permit 3-1-018-1, it was found that the 1 BSCFD glycol dehydrator no longer meets the exemption in §63.764(e)(1)(ii) of 40 CFR 63, Subpart HH, as described in the Statement of Basis for operating permit 3-1-018A. The exemption as published in the most recent issuance of the subpart (version year 2013) only applies to area sources, while this facility is a major source of hazardous air pollutants (HAPs) with potential emissions of total HAPs at 23.2 TPY and of formaldehyde at 12.2 TPY. Therefore, the 1 BSCFD glycol dehydrator is subject to all applicable requirements of 40 CFR 63, Subpart HH.

WAQSR Chapter 6, Section 2 Permit MD-12097 superseded the benzene limit on the glycol dehydrator thermal oxidizer (unit 46) with a benzene limit on the 1 BSCFD glycol dehydrator to coincide with changes made in 40 CFR 63, Subpart HH. Permit MD-12097 also requires the facility to fully comply with all other applicable requirements in 40 CFR 63, Subpart HH. Since the 1 BSCFD glycol dehydrator is subject to Subpart HH, and the benzene limit on the unit coincides with the benzene requirements in Subpart HH, and the facility is required to conduct monitoring according to Subpart HH to meet these requirements, CAM does not apply to the 1.0 TPY benzene limit on the 1 BSCFD glycol dehydrator from Permit MD-12097. Therefore, CAM requirements have been removed from the glycol dehydrator thermal oxidizer (unit 46) and have not been applied to the TPX3/TPX4/TPX5 flare (unit 18A) in operating permit 3-1-018-2.

The permit revisions include the following:

- Table of Contents: repagination as required; Appendices B and C are reserved while Appendices E-M have been removed; included 40 CFR 60, Subparts OOOO and IIII, as well as 40 CFR 63, Subpart ZZZZ to the list of applicable requirements; corrected reference to 40 CFR 63, Subpart DDDDD.
- General Information: updated Responsible Official and contact information.
- Source Emission Points Table: updated permit references to: MD-914A, MD-917A3 corrected, MD-12097, wv-13561 corrected, and wv-15955-1; included the three emergency diesel engines permitted by wv-15407 and the one non-emergency diesel engine permitted by wv-15955-1.
- Total Facility Estimated Emissions: updated according to the latest estimates provided with waiver wv-15955-1.
- References throughout the permit have been updated to reflect the amendment of permit MD-914 to MD-914A, the correction of permit MD-917A3 to MD-917A3 corrected and to include permits/waivers MD-12097, wv-13561 corrected, wv-15407 and wv-15955-1.
- Condition F1: clarified applicable visible emission requirements for the plant flares (units 18A through 18E); included visible emission requirements for the four diesel engines; renumbered sub-conditions as appropriate.
- Condition F3: included VOC and HAP control requirements for the glycol dehydrator/glycol dehydration contactor still vent and thermal oxidizer (unit 46) and the TXP3/TXP4/TXP5 flare (unit 18A); revised the benzene limit for the 1 BSCFD glycol dehydrator; included operational requirements for the TXP3/TXP4/TXP5 flare (unit 18A).

- Condition F4: included the operation and maintenance requirements, as well as the operating hour limits, for the four diesel fired engines from waivers wv-15407 and wv-15955-1.
- Condition F8: updated the test methods required for benzene testing for the 1 BSCFD glycol dehydrator.
- Condition F9: included visible emission monitoring requirements for the four diesel engines.
- Condition F10: included current Division language indicating that the Division's portable analyzer monitoring protocol is available on-line or from the Division upon request.
- Condition F11: included operating hours monitoring requirements for the four diesel engines.
- Condition F12: updated the method for determining compliance with the benzene limit; revised the CAM and pilot flame monitoring requirements for unit 53; removed the CAM requirements from unit 46; included control device monitoring for the 1 BSCFD glycol dehydrator.
- Conditions F14 & F15: included recordkeeping requirements for the four diesel fired engines.
- Condition F16: revised CAM recordkeeping requirements for unit 53; included benzene and control device monitoring records for the 1 BSCFD glycol dehydrator.
- Condition F18: included calendar year-to-date operating hours reporting for the four diesel fired engines.
- Conditions F18, F19 & F20: updated to include language indicating that reports are to reference the corresponding permit condition which requires their submission.
- Condition F20: clarified CAM reporting requirements for unit 53; included reporting requirements for required benzene monitoring.
- Condition F21: corrected to refer to the corresponding reporting requirement.
- Condition F24: included applicable notification requirements from waiver wv-15955-1.
- Condition F25: renumbered from condition F24 in operating permit 3-1-018-1.
- 40 CFR Part 60 Subparts: the conditions have been replaced with updated language referencing current versions of the standards and associated general provisions. Additionally, the facility has applicable requirements under 40 CFR 60, Subpart IIII and may have applicable requirements under 40 CFR 60, Subpart OOOO, therefore these subparts have been added to the NSPS list.
- 40 CFR Part 63 Subparts: the conditions have been replaced with updated language referencing current versions of the standards and associated general provisions. Additionally, 40 CFR 63, Subpart ZZZZ was added to the NESHAP list as an applicable requirement.
- Chapter 7, Section 3 Compliance Assurance Monitoring Requirements: included current Division language indicating that the requirements are available on-line or from the Division upon request; removed unit 46 from the CAM requirements.
- Condition C1: updated to reflect current Division language; included the requirements for 40 CFR 60, Subparts IIII and OOOO and 40 CFR 63, Subparts ZZZZ and HH; included

requirements for diesel engine, greenhouse gas reporting and accidental release prevention compliance certification; included requirements for benzene, control equipment operation and flare 18A compliance certification; renumbered sub-conditions as appropriate.

- State Only Permit Conditions: updated to be consistent with recent revisions to the state ambient standards.
- Summary Tables: updated to reflect changes made throughout the permit; included tables for the four diesel engines and the 1 BSCFD glycol dehydrator; split unit 46 and unit 53 into separate tables to clarify applicable requirements.
- Appendix A: included the revised Preventative Maintenance Plan.
- Appendices B & C: reserved.
- Appendix D: included the revised CAM plan.
- Appendix E through M: removed.

Addendum – June 26, 2014

*Comments were received by the permittee on June 23, 2014. Changes were made to the draft operating permit in response to the comments which were administrative in nature and therefore did not require an additional public comment period.*