MEMO TO : ND Oil and Gas Operators

FROM : James L. Semerad
Manager, Air Quality Permitting/Compliance
Division of Air Quality

RE : Temporary JT skid/liquids knockouts on oil and gas production sites that do not require an Air Quality Permit

DATE : January 29, 2014

The Department has completed review of permit applicability of temporary JT skid/liquids knockouts on oil and gas production sites that operate without a sales gas line in place. These are sources that are not Title V permitted and not a Major source of HAPs. Based on the results of the documents reviewed, and conversations with operators, the units with a processing capability of less than or equal to 2 MMcf/d capacity are not expected to have significant emissions. In addition, these units capture gas that would otherwise be flared. This allows a beneficial use of a resource that would otherwise be wasted and contribute to air pollution. These units are temporary, skid or trailer mounted units that are in place on a well site for typically less than one year. These units are only for the purpose of recovering the liquids and do not further condition the gas. The liquids are then trucked off-site.

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Health does not intend to require operators to obtain a Permit to Construct for a facility with a JT skid/liquids knockout unit that is located on an oil and gas production site unless otherwise necessary due to other equipment located on-site.

Installation Requirements
Prior to installation onsite, the Department requires that the well operator report the equipment on SFN 14334 in the comments section and calculate the reduced gas stream for flaring to account for the site emissions using the Bakken Guidance. If needed, also account for site emissions from the unit (typically if a glycol unit is installed or an engine is powering the unit).

As a reminder: if an engine or generator is used onsite for the powering of equipment it must also be indicated on the SFN 14334 and emissions accounted for. If emissions from the site exceed 100 TPY of any criteria pollutant, 25 TPY for combined HAPs (or 10 TPY for individual HAP), an operator must contact the Department regarding permitting for the site.
Removal Requirements
When the unit is removed from the site, an amended SFN 14334 must be submitted and emissions re-calculated taking into account the gas stream composition and re-configured equipment. As a reminder: if an engine or generator is used onsite for the powering of equipment it must also be indicated on the SFN 14334 and emissions accounted for. If emissions from the site exceed 100 TPY of any criteria pollutant, 25 TPY for combined HAPs (or 10 TPY for individual HAP), an operator must contact the Department regarding permitting for the site.

Additional Air Quality Requirements
While this is not a comprehensive list, there are other regulations that may be applicable at well sites.

- **Organic Compounds Emissions**: The operator shall comply with the applicable requirements of NDAC 33-15-07 – Control of Organic Compounds Emissions.

- **Fugitive Emissions**: The release of fugitive emissions shall comply with the applicable requirements in NDAC 33-15-17 – Restriction of Fugitive Emissions.

- **40 CFR 63, Subpart HH and Subpart HHH**: If there is a dehydration unit in place, it may be subject to 40 CFR 63, Subpart HH and HHH – National Emission Standards for Hazardous Air Pollutants from Oil and Gas Production Facilities and National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. Please review and if for this subpart, EPA Region 8, not the North Dakota Department of Health, is the implementing and enforcement authority, please send all documentation to the following address:

  U.S. EPA Region 8  
  1595 Wynkoop Street  
  Mail Code 8ENF – AT  
  Denver, CO 80202-1129

- **40 CFR 60, Subpart OOOO**: The owner/operator may be subject to the requirements of 40 CFR 60, Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution. EPA Region 8, not the North Dakota Department of Health, is the implementing and enforcement authority. All required documentation must be submitted to EPA Region 8 at the above address.

- **40 CFR 60, Subpart KKK**: The permittee shall comply with all applicable requirements of 40 CFR 60, Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing.

- **Air Pollution from Internal Combustion Engines**: The operator shall comply with all applicable requirements of NDAC 33-15-08-01 – Internal Combustion Engine Emissions Restricted.

- **40 CFR 63, Subpart ZZZZ**: The operator shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air
Pollutants for Stationary Reciprocating Internal Combustion Engines. For this subpart, EPA Region 8, not the North Dakota Department of Health, is the implementing and enforcement authority. Please send all documentation to EPA at the above address.

- **40 CFR 60, Subpart JJJJ**: The operator shall comply with all applicable requirements of 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

- **40 CFR 60, Subpart IIII**: The operator shall comply with all applicable requirements of 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

- **Source Operations**: Operations at the facility shall be in accordance with statements, representations, procedures and supporting data contained in the initial application, and any supplemental information or renewal application(s) submitted thereafter. Any operations not listed in this permit are subject to all applicable North Dakota Air Pollution Control Rules.

- **Odor Restrictions**: The owner/operator shall not discharge into the ambient air any objectionable odorous air contaminant which is in excess of the limits established in NDAC 33-15-16. The owner/operator shall not discharge into the ambient air hydrogen sulfide (H₂S) in concentrations that would be objectionable on land owned or leased by the complainant or in areas normally accessed by the general public. For the purpose of complaint resolution, two samples with concentrations greater than 0.05 parts per million (50 parts per billion) sampled at least 15 minutes apart within a two-hour period and measured in accordance with Section 33-15-16-04 constitute a violation.

JS/MD:saj