


MEMO TO : File
Oil Production Facility Operators and Interested Parties

FROM : L. David Glatt, Director 
Department of Environmental Quality

RE : Compliance Alert - Air Emissions from Onshore Oil and Natural Gas
Production Facilities

DATE : October 5, 2020

Purpose

The purpose of this Compliance Alert is to communicate with operators the improvements as well as the ongoing compliance issues that have been observed at oil and natural gas production facilities in North Dakota. This document also serves to clarify the expectations of the North Dakota Department of Environmental Quality, Division of Air Quality (Department) for the oil and gas industry.

The overall compliance rate from onshore oil and natural gas production facilities that operate in North Dakota has improved significantly since the United States Environmental Protection Agency (EPA) issued its Compliance Alert in September of 2015. These improvements are a direct result of an industry-wide effort to identify and correct deficiencies that were addressed in the Compliance Alert.

Compliance Alert Update

Although significant improvements have been made, inspections conducted by the Department in 2019 and 2020 indicate that further improvements are necessary to achieve consistent compliance with the North Dakota Air Pollution Control Rules.

A summary of the observations is below:

- Inoperable air pollution control equipment:
 - flare and combustor controls set to “OFF” (specifically when the facility is operating)
 - blower fan speeds for air assisted flares and combustors set improperly
 - broken or missing ignitor wires and/or spark ignitors
 - inoperable pilot lights
 - physical damage to control devices (i.e. parts visibly broken)
 - clogged orifices
 - tank vapor lines not aligned with control device

- open or leaking thief hatches on tanks
- gases leaking from flame arrestors
- smoking flares (see EPA Method 22 and 40 CFR 60.18 flare requirements)
- Pressure Relief Valves stuck open or leaking
- venting tank vapor lines
- H₂S odor violations
- venting heater treaters
- leaking or venting compressor engine lines

In August of 2020, EPA's National Enforcement Investigations Center Division conducted a Geospatial Measurement of Air Pollution (GMAP) survey in North Dakota's oil and gas fields. The preliminary findings from this survey are consistent with the Department's aforementioned observations. Note that, as expected, the highest concentrations measured were at facilities where air pollution control devices were either not operating or inoperable – in particular, when flares were out or where excessive leakage from tanks was occurring.

Acknowledgements and Expectations

The Department appreciates operators' ongoing efforts to minimize emissions and to ensure compliance with the North Dakota Air Pollution Control Rules. Operators are encouraged to revisit the EPA's Compliance Alert and to identify and correct deficiencies at production facilities. In particular, please make all efforts necessary to ensure that air pollution control equipment is operated as designed and that all equipment on-site is properly maintained.

The Department will continue to maintain an open dialogue with operators regarding these observations and the continued efforts to achieve the shared goal of protecting human health and the environment of North Dakota.

LDG/JLS/ASR:saj