

MEMO TO : Interested Parties

FROM : James L. Semerad *JLS*
Director, Division of Air Quality
North Dakota Department of Environmental Quality

RE : Recission of
Permitting of Electric-Driven Compressor Stations

Date : October 21, 2024

Background

The memorandum for the Permitting of Electric-Driven Compressor Stations (Electric Compressor Policy) was established and signed on November 21, 2012. The Electric Compressor Policy does not provide an end date or re-evaluation date and has not been revised since its signing.

Purpose

Prior to 2012, the Department traditionally issued air quality permits to all natural gas compressor stations, which included compressors driven by natural gas-fired engines. Over time, the Department saw an increase in natural gas compressor stations consisting of electric-driven compressors. As stated in the Electric Compressor Policy, *“electric-driven compressors tend to have significantly lower emissions compared to stations with engine-driven compressors.”*

Therefore, the Electric Compressor Policy was developed by the Department to *“establish guidance to be used to determine when an electric-driven compressor station is considered to be a “source of minor significance” which is not required to obtain an air quality permit.”* Even when an air quality permit is not required, the Electric Compressor Policy emphasized that *“the owner/operator of the facility must still comply with the applicable state and federal air pollution rules and regulation.”*

At the time the memorandum was established there were *“generally little or no emissions testing requirements at facilities with electric-driven compressors”* and the Department recognized that the memorandum provided *“general guidance”*.

All Department guidance and policy are based on the information available at the time of establishment, inherently have limitations, and may not be in place indefinitely.

Regulatory Status

The U.S. Environmental Protection Agency (EPA) has developed New Source Performance Standard (NSPS) regulations under 40 CFR Part 60 for the crude oil and natural gas source category. At the time the Electric Compressor Policy was established by the Department, EPA had promulgated NSPS OOOO in August 2012. The EPA strengthened and made the NSPS more comprehensive in June 2016 (NSPS OOOOa). Since 2012, the oil and natural gas source category NSPS has included amendments, litigation, as well as a disapproval under the Congressional Review Act, which brought about regulatory uncertainty.

All sources operating in North Dakota must comply with the applicable NSPS Subparts that have been promulgated, and are periodically reviewed, by the EPA. NSPS Subparts are pollution control standards for new stationary sources and are established for individual industrial or source categories. In addition, these regulations undergo direct review of the specific source categories they regulate and involve public comment and specific rulemaking procedures by EPA.

Since 1982, North Dakota has been adopting applicable NSPS Subparts into the North Dakota Administrative Code (NDAC) Air Pollution Control Rules. NSPS Subparts are now incorporated by reference in the North Dakota Air Pollution Control Rules under Chapter 33.1-15-12 and/or implemented by EPA. The NSPS Subparts have been used in North Dakota air quality regulatory permit reviews for over 40 years. The NSPS regulatory uncertainty for the crude oil and natural gas source category is reflected in the timing of the Department's adoption of NSPS Subparts OOOO and OOOOa in July 2019 into the North Dakota Air Pollution Control Rules under Chapter 33.1-15-12, thereby removing EPA Region 8 as the implementing and enforcing agency.

Since the Electric Compressor Policy was established, the Department has continued to see an increase in the number of new compressor stations consisting of electric-driven compressors with other associated equipment such as storage tanks and emergency flares. Compressor stations as well as compressors are affected sources subject to NSPS OOOO series Subparts requirements (i.e., OOOOa, OOOOb, and OOOOc) for both volatile organic compounds (VOCs) and greenhouse gases (in the form of limitations on methane emissions). Applicability is specific to facilities that began construction, reconstruction, or modification within the following time frames:

- NSPS OOOO - after August 23, 2011, and on or before September 18, 2015,
- NSPS OOOOa - after September 18, 2015, and on or before December 6, 2022, and
- NSPS OOOOb - after December 6, 2022.

In addition, NSPS OOOOc is applicable to existing sources on or before December 6, 2022. At the time of this memo, NSPS OOOOc requires the Department to develop a Clean Air Act 111(d) State Implementation Plan in accordance with the NSPS OOOOc emissions guidelines by March 9, 2026.

Over time, air quality staff have noted implementation inconsistencies and incorrect reliance on the Electric Compressor Policy as well as potential conflicts with the applicable NSPS Subparts. Additionally, the North Dakota Air Pollution Control Rules under Subsection 33.1-15-14-01.9 identifies as a source category capable of causing or contributing to air pollution "*Any source for*

which an applicable federal standard of performance [40 CFR 60] has been adopted in chapter 33.1-15-12.” Subdivision 33.1-15-14-02.1.a also states that “No construction, installation, or establishment of a new stationary source within a source category designated in section 33.1-15-14-01 may be commenced unless the owner or operator thereof shall file an application for, and receive, a permit to construct in accordance with this chapter.” As the NSPS OOOO series Subparts continue to become more restrictive and are made more comprehensive, air quality staff, through active and collaborative oversight, have identified the importance of incorporation of complete source representations, including electric-driven compressors, as well as source requirements into air quality permits.

North Dakota Initiative

The Division of Air Quality is also reviewing agency policies and guidance to determine if they may have become antiquated, overly burdensome, or inefficient. This review is consistent with Governor Burgum’s Red Tape Reduction initiative aimed at eliminating unnecessary and outdated regulations, rules, policies, and procedures to make government more efficient and effective. Based on the review above, the Division has concluded that the Electric Compressor Policy meets the intent of the Red Tape Reduction initiative.

Decision

The U.S. Congress established the foundational framework under Section 111(b) of the Clean Air Act for EPA to set New Source Performance Standards. Section 111(b) provides EPA the authority to promulgate comprehensive regulations and pollution control standards for air pollutants emitted by new stationary sources and are established for source categories. Focusing the air quality regulatory permit reviews on the applicable NSPS Subparts will ensure up to date regulation of sources through active and collaborative oversight in North Dakota.

Therefore, based on review of the above, the memorandum for the Permitting of Electric-Driven Compressor Stations (Electric Compressor Policy) is hereby formally rescinded. Consequently, compressor stations consisting of electric-driven compressors (with other associated equipment including storage tanks, emergency flares, etc.) shall file an application for and receive an air quality permit. When evaluating the application, the air quality staff will consider the facility specific equipment, regulatory applicability, potential emissions, and other details to determine the appropriate permitting processes.

Approved:



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Director
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JLS/DES/DJP:er

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