

## Rulemaking | Synopsis

### North Dakota Administrative Code (NDAC) 33.1-15-07 & Adoption of 40 CFR 60 Subparts OOOO & OOOOa into NDAC 33.1-15-12

*Disclaimer: This document is intended to provide information to interested parties. It is not intended as a complete regulatory review nor final agency action.*

#### Current Action

---

The North Dakota Department of Environmental Quality (NDDEQ) is soliciting comments on the following:

How do recent EPA rulemakings on 40 CFR 60, Subparts OOOO and OOOOa (aka Quad-O and Quad-Oa) impact NDDEQ's anticipated adoption of these rules?

Anticipating that the NDDEQ adopts Quad-O/Oa, should it:

- 1) amend NDAC 33.1-15-07-02.1 as requested in the Petition for Rulemaking<sup>1</sup>,
- 2) amend NDAC 33.1-15-07-02.1 but with different language, or
- 3) not amend NDAC 33.1-15-07-02.1.

The NDDEQ is in the process of rulemaking to adopt Quad-O/Oa as mandated in House Bill 1024 (HB1024<sup>2</sup>) from the 66<sup>th</sup> Legislative Assembly, which would amend NDAC 33.1-15-12-02 to include 40 CFR 60, Subparts OOOO and OOOOa and adopt by reference. The Department is seeking input if it should also amend NDAC 33.1-15-07 – Control of Organic Compounds Emissions (Chapter 7) Section 2. Requirements for organic compounds gas disposal, Subsection 1 (NDAC 33.1-15-07-02.1)?

The Department is also seeking comment on any other relevant questions or technical issues related to the adoption of Quad-O/Oa and changes to NDAC 33.1-15-07-02.1.

#### NDAC 33.1-15-07-02.1 Petition

---

NDAC 33.1-15-07-02.1 states the following:

*No person shall cause or permit the emission of organic compounds gases and vapors, except from a vapor blowdown system or emergency relief system, unless these gases and vapors are burned by flares, or an equally effective control device as approved by the department.*

The petitioner proposed changes to NDAC 33.1-15-07-02.1. reads:

[Note: light text is petitioner added, crossed out texted is petitioner removed, *italic text* is original rule text.]

---

<sup>1</sup> <https://deq.nd.gov/AQ/Notices/RuleRevisions/Chapt7/2019.06.12FinalLettertoDEQ-BAR.pdf>

<sup>2</sup> See <https://www.legis.nd.gov/assembly/66-2019/bill-actions/ba1024.html>

*No person shall cause or permit the emission of organic compounds gases and vapors, except from a vapor blowdown system or emergency relief system, unless these gases and vapors are "fugitive emissions" as defined in section 1(14)<sup>3</sup>, and emissions control equipment ~~burned by flares, or an equally effective control device as approved by the department~~ is installed and operated in accordance with sections [the Department's implementing regulations for Quad O and Quad Oa]<sup>4</sup>. Provided the requirements of these sections are met, then fugitive emissions from such equipment shall be exclusively regulated under section 17 ("Restriction of Fugitive Emissions")<sup>5</sup>. *Minor sources, as determined by the department and not subject to New Source Performance Standards (NSPS), may be granted exemptions to this subsection.**

The petitioners proposed language would remove the language that requires organic gases and vapors to be controlled by flares or an equally effective control device, unless that control device is required under 40 CFR 60, Subpart OOOO or OOOOa. This change would limit and prevent the Department from being able to control organic compounds from sources other than those in the oil and natural gas industrial sectors covered by Quad-O/Oa, which could result in the unintended result of higher emissions of organic compounds from other industrial and agricultural sources throughout the state.

The language as proposed by the petitioner could also threaten the Department's EPA approved 2015 Ozone Infrastructure State Implementation Plan (ISIP). Section 110(l) of the Federal Clean Air Act (CAA) states that the EPA may not approve a SIP revision if it would interfere with any applicable requirement concerning attainment and reasonable further progress. Additionally, EPA cannot approve a SIP in one state that contributes to the nonattainment of another state. The demonstration that the changes to Chapter 7 do not interfere with attainment of the ozone NAAQS in North Dakota or in other states could be very difficult and time consuming.

## Background & History

---

The Control of Organic Compounds (NDAC 33.1-15-07, e.g. Chapter 7) has been part of North Dakota's EPA-approved state implementation plan (SIP) since 1970. The requirement for organic compounds gas disposal has existed since 1972, when hydrocarbons were added as a National Ambient Air Quality Standard (NAAQS), which are to be protective of human health and the environment. Organic compounds include volatile organic compounds (VOCs) which are compounds that react with sunlight in the atmosphere to form ground-level ozone (O<sub>3</sub>). In 1979, EPA removed hydrocarbons from the NAAQS and replaced it with ozone. The ozone NAQQS was revised in 1997 to an 8-hour standard of 80 parts per billion (ppb), and that standard was lowered in 2008 to 75 ppb and again in 2015 to 70 ppb (i.e., has become more stringent)<sup>6</sup>. EPA has also discussed lowering the ozone standard further to 60 ppb, which could cause North Dakota to be classified as a "nonattainment" area (i.e., not in compliance with the NAAQS).

---

<sup>3</sup> The Petitioner language incorrectly references NDAC 33.1-15-01-04.14 which is a subsection.

<sup>4</sup> The Department assumes this to reference NDAC 33.1-15-12-01 Subpart OOOO and Subpart OOOOa as they would be cited after rulemaking to adopt these two subparts.

<sup>5</sup> Petitioner language incorrectly references NDAC 33.1-15-17 as "section 17 ("Restriction of Fugitive Emissions")" when it is Chapter 17.

<sup>6</sup> For more detailed information on the Ozone NAQQS see: <https://www.epa.gov/ground-level-ozone-pollution>, <https://www.govinfo.gov/content/pkg/FR-2015-10-26/pdf/2015-26594.pdf>, and <https://www.epa.gov/sites/production/files/2016-02/documents/20151001ria.pdf>

If any of the NAAQS are exceeded, North Dakota will be designated as being in “nonattainment” and federal highway funding may be withheld until North Dakota demonstrates compliance with the NAAQS (is back in “attainment”). After an area is designated as nonattainment, the state has up to three years to produce a State Implementation Plan (SIP), which outlines the measures that will be taken to reduce emission levels and re-attain the standard. To achieve attainment, North Dakota may be required to adopt more stringent control requirements, conduct non-attainment new source review and implement strict permitting requirements into the SIP to re-obtain “attainment” status. If non-attainment occurs, this would result in rulemaking and more extensive permitting to address reductions in VOC and nitrogen oxides (NO<sub>x</sub>) or other ozone (O<sub>3</sub>) precursors to reduce ambient concentrations of ozone.

The United States Environmental Protection Agency (EPA) first published 40 CFR 60, Subpart OOOO (Quad-O) in 2012<sup>7</sup>. On September 18, 2015, the EPA published 40 CFR 60, Subpart OOOOa (Quad-Oa). These two regulations have undergone several rulemaking actions by EPA and legal challenges.<sup>8</sup> In 2019, during the 66<sup>th</sup> Legislative Session, the NDDEQ was instructed to adopt and implement these two subparts, which would mean that NDDEQ would be the agency implementing these two regulations instead of EPA Region 8, who currently implements these regulations. If NDDEQ adopts Quad-O/Oa, EPA still retains oversight authority.

40 CFR 60, Subparts OOOO and OOOOa apply to VOC and methane emissions from the natural gas and oil wells, crude oil transport, and natural gas transmission sectors. These subparts focus on design requirements for gas collection to route to control devices and best practices for the control of emissions. It specifies a leak detection and repair (LDAR) program with requirements for an operating and maintenance (O&M) program and specifies recordkeeping, monitoring, and reporting requirements. Organic compound leaks that are discovered during the required LDAR checks (quarterly to semi-annually, depending on the source) are not considered violations under Quad-O/Oa, but rather initiates the requirement for timely repairs. If the discovered leaks are not addressed within a specified time period, an enforcement action may be warranted. The intent of an LDAR program is to codify O&M requirements and fix leaks at specified intervals (quarterly, semi-annually) rather than allow leaks (e.g. emissions) for possibly years.

---

<sup>7</sup> See <https://www.epa.gov/stationary-sources-air-pollution/crude-oil-and-natural-gas-production-transmission-and-distribution> for more information about EPA’s rulemaking on Quad-O.

<sup>8</sup> See <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/new-source-performance-standards-and> for more information about EPA’s rulemaking on Quad-Oa.