6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 49

[EPA-R08-OAR-2015-0709; FRL-10003-12-Region 8]

RIN 2008-AA03

Federal Implementation Plan for Managing Emissions from Oil and Natural Gas Sources on Indian Country Lands within the Uintah and Ouray Indian Reservation in Utah

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to promulgate a Federal Implementation Plan (FIP) under the Clean Air Act (CAA) and the EPA's implementing regulations that consists of control requirements for new, modified, and existing oil and natural gas sources located on Indian country lands within the Uintah and Ouray Indian Reservation (also referred to as the U&O Reservation) to address air quality in and around the Uinta Basin Ozone Nonattainment Area in northeast Utah. The proposed FIP would also continue the streamlined approach to authorize new and modified minor oil and natural gas production sources on the reservation that has been

established through national rulemakings. This proposed U&O FIP will: (1) establish emissions control requirements for oil and natural gas activity that contribute to the Uinta Basin's winter ozone problem; (2) establish regulatory requirements that are the same or consistent between Indian country and neighboring jurisdictions within the Basin; and (3) allow for reasonable continued development of the Basin's oil and natural gas resources on the Indian country lands within the U&O Reservation that are included in the current Uinta Basin Ozone Nonattainment Area. VOC emissions control requirements for existing oil and natural gas sources are currently required in areas of the Basin under Utah jurisdiction, but do not exist for most sources on the U&O Reservation. Additionally, this proposed U&O FIP will ensure new development on the U&O Reservation will not cause or contribute to a NAAQS violation. We are proposing to determine that it is necessary and appropriate to promulgate this proposed U&O FIP to protect air quality on the U&O Reservation, under the authority provided at 40 CFR 49.11 and CAA sections 301(a) and 301(d)(4). We designed this proposed U&O FIP to protect air quality while also providing the regulated community certainty that requirements will be consistent across the Uinta Basin and allow for continued, responsible development of new and modified minor oil and natural gas sources. Unless and until replaced by a Tribal Implementation Plan, this proposed U&O FIP will be implemented by the EPA, or by the Ute Indian Tribe if the EPA delegates that authority to the Tribe.

DATES: Comments must be received on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under the Paperwork

Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Public hearing: A public hearing for this proposal is scheduled to be held on Thursday, February 6, 2020, at the Ute Indian Tribe Administration Offices Auditorium, from 1 p.m. until 5 p.m., and again from 6 p.m. until 8 p.m. (local time). The hearing will be held to accept oral comments on this proposed U&O FIP.

ADDRESSES: The public hearing will be held at the Ute Indian Tribe Administration Offices Auditorium, 6964 East 1000 South, Fort Duchesne, Utah 84026. Submit your comments, identified by Docket ID No. EPA-R08-OAR-2015-0709, by one of the following methods:

- *http://www.regulations.gov*. Follow the online instructions for submitting comments.
- Mail: Carl Daly, Acting Director, Air and Radiation Division, U.S. EPA, Region 8, Mail code 8ARD, 1595 Wynkoop St., Denver, CO 80202-1129.
- Hand Delivery: Carl Daly, Acting Director, Air and Radiation Division, U.S. Environmental Protection Agency (EPA), Region 8, Mail code 8ARD, 1595 Wynkoop Street, Denver, Colorado 80202-1129. Such deliveries are only accepted Monday through Friday, 8:00 a.m. to 4:30 p.m., excluding federal holidays. Special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-R08-OAR-2015-0709. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *http://www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information for which disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *http://www.regulations.gov*. The *http://www.regulations.gov* site is an "anonymous access" system, which means that the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at www.epa.gov/epahome/dockets.htm.

Docket: All documents in the docket are listed in the *http://www.regulations.gov* index. In some instances, we reference documents from the dockets for other rulemakings. For this proposed rule, we have incorporated by reference Docket ID No.

EPA–HQ–OAR–2010–0505[1], Docket ID EPA-R08-OAR-2012-0479[2], Docket ID No. EPA–HQ–OAR–2003–0076, and Docket ID No. EPA–HQ–OAR–2014–0606 into Docket ID EPA-R08-OAR-2015-0709. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information for which disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically at *http://www.regulations.gov* or in hard copy at the following locations: Air and Radiation Division, U.S. EPA, Region 8, Mail code 8ARD, 1595 Wynkoop Street, Denver, Colorado 80202-1129; and Air Quality Program, Ute Indian Tribe, P.O. Box 70, Fort Duchesne, Utah 84026-0190. The EPA requests that if at all possible, you contact the persons listed in the **FOR FURTHER INFORMATION CONTACT** section if you wish to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8:00 a.m. to 4:00 p.m., excluding federal holidays.

FOR FURTHER INFORMATION CONTACT: Ms. Claudia Smith, U.S. EPA, Region 8, Air and Radiation Division, Mail Code 8ARD, 1595 Wynkoop Street, Denver, Colorado 80202-1129, (303) 312-6520, *smith.claudia@epa.gov*.

SUPPLEMENTARY INFORMATION:

Definitions

[1] Final Rule: Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources, *See* 81 FR 35823 (June 3, 2016); docket available at *http://www.regulations.gov*, accessed August 16, 2019.

[2] Final Rule: Federal Implementation Plan for Oil and Natural Gas Well Production Facilities, Fort Berthold Indian Reservation, North Dakota, *See* 78 FR 17835 (March 22, 2013); docket available at *http://www.regulations.gov*, accessed August 16, 2019.

APA: Administrative Procedure Act.

Act or *CAA*: Clean Air Act, unless the context indicates otherwise.

BTU: British Thermal Unit.

CBI: Confidential Business Information.

CDPHE: Colorado Department of Public Health and Environment's Air Pollution Control Division.

CO: carbon monoxide.

EPA, *we*, *us* or *our*: The United States Environmental Protection Agency.

FBIR: Fort Berthold Indian Reservation.

FIP: Federal Implementation Plan.

GOR: gas-to-oil ratio.

HAP: hazardous air pollutants.

LACT: lease automatic custody transfer.

MDEQ: Montana Department of Environmental Quality's Air Resources Management Bureau.

NAAQS: National Ambient Air Quality Standards.

NAICS: North American Industry Classification System.

NDDoH: North Dakota Department of Health's Division of Air Quality.

NESHAP: National Emission Standards for Hazardous Air Pollutants.

NMED: New Mexico Environment Department's Air Quality Bureau.

NOx: nitrogen oxides.

NO2: nitrogen dioxide.

NSPS: New Source Performance Standards.

NSR: New Source Review.

ODEQ: Oklahoma Department of Environmental Quality's Air Quality Division.

PM: particulate matter.

PSD: Prevention of Significant Deterioration.

PTE: potential to emit.

RCT: Railroad Commission of Texas, Oil and Gas Division.

RIA: Regulatory Impact Analysis

SCADA: Supervisory Control and Data Acquisition.

SIP: State Implementation Plan.

SO2: sulfur dioxide.

TAR: Tribal Authority Rule.

TAS: treatment in the same manner as a state.

TIP: Tribal Implementation Plan.

UDEQ: Utah Department of Environmental Quality's Division of Air Quality.

U&O Reservation or the Reservation: Indian country lands within the Uintah & Ouray Indian Reservation.

VOC: volatile organic compound(s).

VRU: vapor recovery unit.

WDEQ: Wyoming Department of Environmental Quality's Air Quality Division.

The information presented in this preamble is organized as follows:

I. General Information

I. General Information

A. What entities are potentially affected by this proposal?

Entities potentially affected by this proposal include the Ute Indian Tribe,[3] as well as new, modified and existing sources that are in the oil and natural gas production and natural gas processing segments of the oil and natural gas sector and are on Indian country[4] lands within the U&O Reservation. All of the Ute Indian Tribe Indian country lands of which the EPA is aware are located within the exterior boundaries of the Reservation, and this proposed U&O FIP will apply to all such lands. To the extent that there are Ute Indian Tribe Dependent Indian Communities under 18 U.S.C. 1151(b) or allotted lands under 18 U.S.C. 1151(c) that are located outside the exterior boundaries of the Reservation, those lands will not be covered by this proposed U&O FIP.[5] In addition,

[3] The Ute Indian Tribe is a federally recognized tribe organized under the Indian Reorganization Act of 1934, with a Constitution and By-Laws adopted by the Tribe on December 19, 1936 and approved by the Secretary of the Interior on January 19, 1937. *See* Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, *See* 82 FR 4915 (January 17, 2017); 48 Stat. 984, 25 U.S.C. 5123 (IRA); Constitution and By-Laws of the Ute Indian Tribe of the Uintah and Ouray Reservation, available at *https://www.loc.gov/law/help/american-indian-consts/PDF/37026342.pdf*, accessed August 16, 2019.

[4] Indian country is defined at 18 U.S.C. 1151 as: (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation, (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

[5] Under the CAA, lands held in trust for the use of an Indian tribe are reservation lands within the definition at 18 U.S.C. 1151(a), regardless of whether the land is formally designated as a reservation. *See* Indian

this proposed rule will not apply to any sources on non-Indian-country lands, including any non-Indian-country lands within the exterior boundaries of the Reservation.[6]

Table 1 – Source Categories Affected by this Proposed Action

Industry Category	NAICS Code	Examples of Regulated Entities/ Description of Industry Category
Oil and Gas Production/Operations	21111	Exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; operation of separators, emulsion breakers, desilting equipment, and field gathering lines for crude petroleum and natural gas; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property Production of crude petroleum, the mining and extraction of oil from oil shale and oil sands, the production of natural gas, sulfur recovery from natural gas, and the recovery of hydrocarbon liquids from oil

Tribes: Air Quality Planning and Management, *See* 63 FR 7254, 7258 (1998) ("Tribal Authority Rule"); *Arizona Pub. Serv. Co. v. EPA*, 211 F.3d 1280, 1285-86 (D.C. Cir. 2000). EPA's references in this proposed U&O FIP to Indian country lands within the exterior boundaries of the U&O Reservation include any such tribal trust lands that may be acquired by the Ute Indian Tribe.

In 2014, the U.S. Court of Appeals for the D.C. Circuit addressed EPA's authority to promulgate a FIP establishing certain CAA permitting programs in Indian country. *Oklahoma Dept. of Environmental Quality v. EPA*, 740 F. 3d 185 (D.C. Cir. 2014). In that case, the court recognized EPA's authority to promulgate a FIP to directly administer CAA programs on Indian reservations but invalidated the FIP at issue as applied to non-reservation areas of Indian country in the absence of a demonstration of an Indian tribe's jurisdiction over such non-reservation area. Because the current proposed rule would apply only on Indian country lands that are within the exterior boundaries of the U&O Reservation, *i.e.*, on Reservation lands, it is unaffected by the *Oklahoma* court decision.

[6] As a result of a series of federal court decisions, there are some non-Indian-country lands within the exterior boundaries of the Uintah and Ouray Indian Reservation. *See* note 19.

		and gas field gases
Crude Petroleum and Natural Gas Extraction	211111	Exploration, development and/or the production of petroleum or natural gas from wells in which the hydrocarbons will initially flow or can be produced using normal pumping techniques or production of crude petroleum from surface shales or tar sands or from reservoirs in which the hydrocarbons are semisolids
Natural Gas Liquid Extraction	211112	Recovery of liquid hydrocarbons from oil and gas field gases; and sulfur recovery from natural gas
Drilling Oil and Gas Wells	213111	Drilling oil and gas wells for others on a contract or fee basis, including spudding in, drilling in, redrilling, and directional drilling
Support Activities for Oil and Gas Operations	213112	Performing support activities on a contract or fee basis for oil and gas operations (except site preparation and related construction activities) such as exploration (except geophysical surveying and mapping); excavating slush pits and cellars, well surveying; running, cutting, and pulling casings, tubes, and rods; cementing wells, shooting wells; perforating well casings; acidizing and chemically treating wells; and cleaning out, bailing, and

		swabbing wells
Engines (Spark Ignition and Compression Ignition) for Electric Power Generation	2211	Provision of electric power to support oil and natural gas production where access to the electric grid is unavailable

This list is not intended to be exhaustive, but rather provides a guide for readers regarding entities potentially affected by this action. To determine whether your source could be affected by this action, you should examine the proposed U&O FIP applicability criteria in § 49.4169. If you have any questions regarding the applicability of this action to a particular entity, contact the appropriate person listed in the **FOR FURTHER INFORMATION CONTACT** section.

B. What should I consider as I prepare my comments to the EPA?

Submitting CBI. Do not submit this information to the EPA through regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to the EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. Send or deliver information identified as CBI only to the following address: Mr. Aaron Zull, c/o Air and Radiation Division U.S. EPA, Region 8, Mail code 8ARD, 1595 Wynkoop St., Denver, CO 80202-1129, and Attention

Docket ID No. EPA-R08-OAR-2015-0709.

Docket. The docket number for this action is EPA-R08-OAR-2015-0709.

Preparing comments. When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
- Respond to specific questions and link comments to specific CFR references when appropriate.
- Explain why you agree or disagree and suggest alternatives. Include specific regulatory text that implements your requested changes.
- Explain technical information and/or data that you used to as the basis of your comment and provide references to the supporting information.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

C. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this proposal will also be posted at: *https://www.epa.gov/air-quality-implementation-plans/approved-air-quality-implementation-plans-region-8* (Approved Air Quality Implementation Plans in Region 8 page).

II. Purpose of This Action

In this action, the EPA is proposing to exercise its authority under sections 301(a) and 301(d)(4) of the CAA and 40 CFR 49.11 to promulgate FIP provisions that are necessary and appropriate to protect air quality on the U&O Reservation and in nearby communities. The purpose of this proposed U&O FIP is threefold. First, this proposed U&O FIP would improve air quality in the U&O Reservation by addressing emissions from oil and natural gas activity that contribute to the winter ozone problem in the physiographic region known as the Uinta Basin,[7] within which the U&O Reservation is located, and where ambient ozone levels have exceeded both the 2008 and the 2015 ozone NAAQS.[8] The EPA designated portions of the Uinta Basin, including large portions of the U&O Reservation, as nonattainment for the 2015 ozone NAAQS.[9]

As recently as February 2019, the Uinta Basin experienced very poor air quality. The problem is caused by emissions of VOC and NO_x reacting in the presence of sunlight and widespread snow cover during temperature inversion conditions to form ground-level ozone at levels that exceed the ozone NAAQS and are, therefore, detrimental to public health. The main sources in the Basin responsible for VOC and NO_x emissions are

[7] For the purpose of this rulemaking, the EPA defines the geographic scope of the Uinta Basin to be consistent with the Uinta Basin 2014 Air Agencies Oil and Gas Emissions Inventory (herein after referred to as the 2014 Uinta Basin Emissions Inventory), which encompasses Duchesne and Uintah counties. The 2014 Uinta Basin Emissions Inventory is available at: *https://deq.utah.gov/air-quality/2014-air-agencies-oil-and-gas-emissions-inventory-uinta-basin*, accessed August 16, 2019.

[8] The 2015 ozone NAAQS is 70 parts per billion (ppb) (40 CFR 50.19). The 2008 ozone NAAQS is 75 ppb. Historical ozone NAAQS information is available at: *https://www.epa.gov/ozone-pollution/table-historical-ozone-national-ambient-air-quality-standards-naaqs*, accessed August 16, 2019.

[9] On April 30, 2018, the EPA designated portions of the Uinta Basin below a contiguous external perimeter of 6,250 ft. as nonattainment for the 2015 ozone NAAQS. This includes land under both state and tribal jurisdiction. For more information, see https://www.epa.gov/ozone-designations/additional-designations-2015-ozone-standards, accessed August 16, 2019.

existing sources in the oil and natural gas sector. As explained in section III.D. (Air Quality Information), available information indicates that winter ozone formation in the Basin is driven by local emissions and is significantly more sensitive to changes in VOC emissions than NO_x emissions. As explained in section III.E. (Emissions Information), available information indicates that the large majority of VOC emissions in the Basin are from existing oil and natural gas activity, and the large majority of those emissions are from existing sources on the U&O Reservation and in the nonattainment area. VOC emissions control requirements for existing oil and natural gas sources currently exist in areas of the Basin under Utah jurisdiction, but do not exist in the U&O Reservation and are necessary to protect air quality.

The CAA does not require an attainment plan for Marginal ozone nonattainment areas.[10] Accordingly, this proposed U&O FIP is not intended to bring the Uinta Basin back into attainment with the ozone standard. However, we do anticipate that this proposed U&O FIP will make a meaningful improvement in air quality through the reduction of VOC, which are an ozone precursor, while also allowing continued construction authorization of new development in the Basin and the positive economic impact that development brings to the Tribe.

This proposed action is driven by the EPA's authority and responsibility to protect

[10] The requirements for Marginal ozone nonattainment areas are specified in Clean Air Act Title I, Part D, subpart 2 (see 42 U.S.C. §7511a(a)) and requirements include: 1) Comprehensive, accurate, current inventory of actual ozone precursor emissions from all sources; 2) Corrections, if necessary, to existing implementation plans to meet specific requirements, including for nonattainment major source permitting; 3) Triennial emissions inventory updates; and 4) General offset requirements for new and modified major sources.

air quality in Indian country arising from provisions in sections 301(a) and 301(d)(4) of the CAA and 40 CFR 49.11. Regarding permitting of new or modified sources of air pollution in nonattainment areas in Indian country, the reviewing authority must demonstrate that construction authorization of minor sources would not cause or contribute to a NAAQS violation in the nonattainment area (*see* 49.155(a)(7)(ii)) and that construction authorization of major sources would provide a net air quality benefit in the nonattainment area (*see* 40 CFR 49.169(b)(4)). While the CAA Indian country nonattainment permit program for *major* sources specifies offset requirements as the method to make such a demonstration (*see* 40 CFR 49.169(b)(3)), the CAA Indian country nonattainment permit program for *minor* sources is not prescriptive as to how to make such a demonstration. The requirements in this proposed U&O FIP resulting in VOC emission reductions from existing sources would improve air quality and also allow the EPA to rely on those reductions to meet the NAAQS protection requirements for continued construction authorization of new or modified minor sources in the nonattainment area.

Regarding the focus on VOC emission reductions in this proposed U&O FIP, according to the Uinta Basin Ozone Studies, which consist of field studies conducted in the Basin from 2011 to 2014,[11] improvements in ozone levels in the Basin are most likely to come from VOC emissions reductions from existing oil and natural gas sources. After

[11] Utah DEQ: Ozone in the Uinta Basin: Overview Web page with reports on Uinta Basin ozone field studies from 2011 to 2014: *https://deq.utah.gov/air-quality/ozone-in-the-uinta-basin*, accessed August 16, 2019. The RIA for this rule contains detailed discussion of the studies and can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

a careful analysis of emissions data provided by industry in the 2014 Uinta Basin Emissions Inventory, we have determined that most of the existing oil and natural gas sources on the U&O Reservation are largely uncontrolled for VOC and other emissions. Therefore, in developing this rule, we have concentrated on determining the most effective control requirements to reduce VOC emissions from oil and natural gas sources to address the winter ozone exceedances.

Second, the proposed control requirements are intended to be the same as or consistent with the requirements applicable to similar sources on Utah-regulated lands, to promote a more consistent regulatory environment across the Basin. Where we are proposing to regulate existing equipment or activities that are regulated by EPA standards for the oil and natural gas sector, we also have consulted those EPA standards.

We are proposing to make the final rule effective on the date of publication. We are proposing that compliance with the FIP for sources that construct on or after the effective date of the final rule would be required upon startup. Compliance for sources that commence construction before the effective date of the final rule would be required no later than 18 months after the effective date of the final rule.

Finally, given the number of oil and natural gas projects in the Basin that are already approved or are in the federal review and approval process through evaluations conducted under the National Environmental Policy Act (NEPA) by other federal agencies,[12] in the coming years the EPA could receive a large number of applications for

[12] Spreadsheet titled "Uinta Basin OG NEPA Evaluations 9.11.19.pdf", available in the Docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709), lists oil and natural gas production projects in the Uinta Basin that have been subject to evaluation under NEPA.

authorization to construct new and modified synthetic minor oil and natural gas sources on the U&O Reservation and registrations of new and modified true minor oil and natural gas sources on the U&O Reservation under the National O&NG FIP. We recently took action to reinstate the streamlined construction authorization mechanism available for true minor oil and natural gas sources in Indian country through the National O&NG FIP (codified at 40 CFR part 49, subpart C, §§ 49.101-49.105)[13] for the portions of the U&O Reservation that are included in the area of the Uinta Basin that has been designated nonattainment for the 2015 ozone NAAQS.[14] In the separate action, we amended the National O&NG FIP to extend its geographic coverage to the Indian country portions of the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area. In addition to providing a streamlined construction authorization mechanism to new and modified true minor oil and natural gas sources,[15] the National O&NG FIP requires compliance with a suite of eight federal oil and natural gas sector emissions standards[16]

[13] Final Rule: Federal Implementation Plan for True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector; Amendments to the Federal Minor New Source Review Program in Indian Country to Address Requirements for True Minor Sources in the Oil and Natural Gas Sector, 81 FR 35943 (June 3, 2016); docket No. EPA-HQ-OAR-2014-0606, available at http://www.regulations.gov, accessed August 16, 2019..

[14] Final Rule: Amendments to Federal Implementation Plan for Managing Air Emissions from True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector, 84 FR 21240 (May 14, 2019); Docket No. EPA-HQ-OAR-2014-0606, available at http://www.regulations.gov, accessed August 16, 2019..

[15] As defined in the Federal Minor New Source Review Program in Indian Country at 40 CFR 49.152, a true minor source is a source that emits or has the potential to emit regulated NSR pollutants in amounts that are less than the major source thresholds in § 49.167 (federal preconstruction permit program for major sources in nonattainment areas in Indian country) or § 52.21 (federal preconstruction permit program for major sources in attainment/unclassifiable areas), as applicable, but equal to or greater than the minor NSR thresholds in § 49.153 (federal preconstruction permit program for minor sources in Indian country), without the need to take an enforceable restriction to reduce its potential to emit to such levels.

[16] *See* 40 CFR 49.105. The National O&NG FIP specifies that sources must comply with, as applicable, the following standards: NESHAP 40 CFR Part 63, Subpart DDDDD; NESHAP 40 CFR Part 63, Subpart ZZZZ; NSPS IIII 40 CFR Part 60, Subpart IIII; NSPS 40 CFR Part 60, Subpart JJJJ; NSPS 40 CFR Part 60,

for new and modified sources, as applicable. The existing source emissions reductions achieved under the proposed FIP, once implemented, would allow the EPA to demonstrate that both permitting the construction of new and modified synthetic minor oil and natural gas sources and registration of new and modified true minor oil and natural gas sources under the National O&NG FIP would be protective of the NAAQS on the U&O Reservation. This will be described in greater detail in Sections IV.C. and V.E.

In this action we are proposing to continue the streamlined construction authorization mechanism permanently for true minor oil and natural gas sources on the Indian country portions of the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area through a different regulatory mechanism than the one we employed in our recent final action (i.e., amending the National O&NG FIP). Instead, in this action we are proposing to apply the requirements of the National O&NG FIP (through 40 CFR part 49, Subpart K) to the portions of the U&O Reservation that are included in the Uinta Basin Nonattainment Area. The effect of this proposal, if finalized as proposed, will be the permanent continuation of uninterrupted streamlined construction authorizations on the U&O Reservation; the advantage of using the different regulatory mechanism that we are proposing here is that the requirements (or at least reference to them) for the Indian country portions of the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area relative to oil and natural gas will be located in one place in the

Subpart Kb; NSPS 40 CFR Part 60, Subpart OOOOa; NESHAP 40 CFR Part 63, Subpart HH; and NSPS 40 CFR Part 60, Subpart KKKK.

Code of Federal Regulations, which we believe provides a more efficient and user-friendly approach.[17] This will be described in greater detail in Sections IV.C. and V.E.

In the preamble to the final National O&NG FIP published on June 3, 2016, we indicated that the most appropriate means for addressing air quality concerns on specific reservations due to impacts from oil and natural gas activity is through area- or reservation-specific FIPs and not through the National O&NG FIP. Further, we stated that such FIPs may need to include requirements for existing, new and modified sources beyond those in the National O&NG FIP.[18] Consistent with that approach, this action would impose some requirements for new and modified sources that are in addition to what is required by the eight federal oil and natural gas sector emissions standards incorporated in the National O&NG FIP. Therefore, new and modified true minor oil and natural gas sources on the U&O Reservation that would use the National O&NG FIP for construction authorization may have to comply with other requirements for certain equipment or activities not covered by the eight federal standards, as applicable under this action, in addition to the requirements in the National O&NG FIP.[19] We are relying on the VOC emissions reductions in this action to support the limited extension of the

[17] If this action as proposed is finalized, then the EPA's intent would be to propose to withdraw its other action in which it amended the National O&NG FIP to provide streamlined construction authorizations as it would be redundant and no longer needed.
[18] *See* 81 FR 35964 and 35968.
[19] As described in detail later, this action proposes to exempt certain equipment and activities that are subject to the emissions control requirements of certain federal standards, a subset of the eight federal standards in the National O&NG FIP, from having to comply the emissions control requirements in this action for those same equipment and activities, but there are other equipment, such as small and remote glycol dehydrators, that are not regulated by those federal standards, but are proposed to be regulated in this action.

National O&NG FIP to the Indian country portion of the Uinta Basin Ozone Nonattainment Area.

Emissions from existing oil and natural gas sources have been shown to be the largest contributor to VOC emissions on the U&O Reservation and in the Uinta Basin, and therefore, the largest contributor to elevated winter ozone levels in the area. Implementing this proposed U&O FIP at existing oil and natural gas sources on the U&O Reservation will result in significant annual VOC reductions, thus improving air quality within the Basin.

The combination of this proposed U&O FIP (when finalized) and the National O&NG FIP amendments is intended to: (1) improve air quality on the U&O Reservation; (2) promote a more consistent regulatory environment across the Basin; and (3) ensure that the emissions reductions achieved from this proposed U&O FIP can be the basis for new development and a streamlined construction authorization mechanism for new or modified true minor oil and natural gas sources wishing to locate or expand on the Indian country portions of the ozone nonattainment area through the National O&NG FIP amendments.

III. Background

A. Uintah and Ouray Indian Reservation

The Uintah and Ouray Indian Reservation was formed from the Uintah Valley and Uncompahgre Reservations, which were established by executive order in 1861 and

1882, respectively.[20] In 1886 the Department of the Interior merged the two reservations to create the U&O Reservation, and in 1948 Congress expanded the Reservation with the Hill Creek Extension.[21] The U&O Reservation's boundaries have been further addressed and explained in a series of federal court decisions.[22]

B. Tribal Authority Rule

Section 301(d) of the Clean Air Act (CAA) authorizes the EPA to treat Indian tribes in the same manner as states for purposes of implementing the CAA over their entire reservations and over any other areas within their jurisdiction, and directs the EPA to promulgate regulations specifying those provisions of the CAA for which such treatment is appropriate.[23] It also authorizes the EPA, when the EPA determines that the treatment of Indian tribes as identical to states is inappropriate or administratively infeasible, to provide by regulation other means by which the EPA will directly administer the CAA.[24] Acting principally under that authority, on February 12, 1998, the

[20] *See* Exec. Order of Oct. 3, 1861, reprinted in 1 Charles J. Kappler, Indian Affairs: Laws and Treaties 900 (1904); confirmed by Congress in the Act of May 5, 1864, ch. 77, 13 Stat. 63; Exec. Order of Jan. 5, 1882, reprinted in Indian Affairs: Laws and Treaties at 901.
[21] U.S. Office of Indian Affairs, Dept. of the Interior, Annual Report of the Commissioner of Indian Affairs, at 226 (1886); 62 Stat. 72 (1948).
[22] *See Ute Indian Tribe v. Utah*, 521 F. Supp. 1072 (D. Utah 1981); *Ute Indian Tribe v. Utah*, 716 F.2d 1298 (10th Cir. 1983); *Ute Indian Tribe v. Utah*, 773 F.2d 1087 (10th Cir. 1985) (en banc), *cert. denied*, 479 U.S. 994 (1986); *Hagen v. Utah*, 510 U.S. 399 (1994); *Ute Indian Tribe v. Utah*, 935 F. Supp. 1473 (D. Utah 1996); *Ute Indian Tribe v. Utah*, 114 F.3d 1513 (10th Cir. 1997), *cert. denied*, 522 U.S. 1107 (1998); *Ute Indian Tribe v. Utah*, 790 F.3d 1000 (10th Cir. 2015), *cert. denied*, 136 S. Ct. 1451 (2016); and *Ute Indian Tribe v. Myton*, 835 F.3d 1255 (10th Cir. 2016), *cert. dismissed*, 137 S. Ct. 2328 (2017).
[23] 42 U.S.C. 7601(d)(1) and (2); *See* 63 FR 7254-57 (February 12, 1998) (explaining that CAA section 301(d) includes a delegation of authority from Congress to eligible Indian tribes to implement CAA programs over all air resources within the exterior boundaries of their Reservations).
[24] 42 U.S.C. 7601(d)(4).

EPA promulgated the Tribal Authority Rule (TAR).[25] In the TAR, we determined that it was appropriate to treat eligible tribes in the same manner as states for all CAA statutory and regulatory purposes, except a list of specified CAA provisions and implementing regulations thereunder.[26] That list of excluded provisions includes specific plan submittal and implementation deadlines for NAAQS-related requirements, among them the CAA section 110(a)(2)(C) requirement to submit a program (including a permit program as required in parts C and D of the CAA) to regulate the modification and construction of any stationary source as necessary to assure that the NAAQS are achieved. Other provisions for which we determined that we would not treat tribes in the same manner as states include CAA section 110(a)(1) (SIP submittal) and CAA section 110(c)(1) (directing the EPA to promulgate a FIP "within 2 years" after we find that a state has failed to submit a required plan or has submitted an incomplete plan, or within 2 years after we disapprove all or a portion of a plan).

The TAR preamble clarified that by including CAA section 110(c)(1) on the list at 40 CFR 49.4, the "EPA is not relieved of its general obligation under the CAA to ensure the protection of air quality throughout the nation, including throughout Indian

[25] "Indian Tribes: Air Quality Planning and Management." *see* 63 FR 7254 (February 12, 1998); 40 CFR 49.1 – 49.11.

[26] 40 CFR 49.3-.4. To be eligible for treatment in a similar manner as a state (TAS) under the Tribal Authority Rule, a tribe must meet four requirements: (1) be a federally recognized tribe; (2) have a governing body carrying out substantial governmental duties and functions; (3) propose to carry out functions pertaining to the management and protection of air resources of the tribe's reservation or other areas within the tribe's jurisdiction; and (4) be reasonably expected to be capable of carrying out the functions. 40 CFR 49.6. A tribe interested in administering a particular CAA program or function may apply to the appropriate regional administrator for a determination of whether it meets these TAS eligibility criteria with respect to that program or function. 40 CFR 49.7.

country."[27] The preamble confirmed that the "EPA will continue to be subject to the basic requirement to issue a FIP for affected tribal areas within some reasonable time."[28] Consistent with those statements, the TAR includes a provision requiring the EPA to "promulgate without unreasonable delay such Federal implementation plan provisions as are necessary or appropriate to protect air quality," unless a complete tribal implementation plan is submitted or approved.[29]

The Ute Indian Tribe has not applied for TAS for the purpose of administering a Tribal Implementation Plan (TIP) under the CAA; nor has it submitted a TIP for review and approval. Thus, with respect to the U&O Reservation, there is currently no submitted or EPA-approved tribal plan that would address the air quality purposes described earlier. The FIP the EPA is proposing provides such a plan and applies to all Indian country lands within the exterior boundaries of the U&O Reservation.

C. Federal Indian Country Minor NSR Rule

1. What is the Federal Indian Country Minor NSR rule?

In 2006, acting under the authority provided in CAA section 301(d) and in the TAR, we proposed the FIP regulation: "Review of New Sources and Modifications in Indian Country" (Indian Country NSR rule).[30] As a part of this regulation, the EPA made a finding that it was necessary or appropriate to protect air quality by proposing a FIP to establish a program to regulate the modification and construction of minor stationary

[27] *See* 63 FR at 7265 (February 12, 1998).
[28] *Id.*
[29] 40 CFR 49.11(a).
[30] "Review of New Sources and Modifications in Indian Country," Proposed Rule, *See* 71 FR 48696 (Aug. 21, 2006).

sources consistent with the requirements of section 110(a)(2)(c) of the CAA, where there was no EPA-approved tribal minor NSR permit program in Indian country to regulate construction of new and modified minor sources and minor modifications of major sources. We call this part of the Indian Country NSR rule the Federal Indian Country Minor NSR rule. In developing that FIP, we sought[31] to "establish a flexible preconstruction permitting program for minor sources in Indian country that is comparable to similar programs in neighboring states in order to create a more consistent regulatory environment for owners/operators within and outside of Indian country." The Federal Indian Country Minor NSR rule provides a mechanism for issuing preconstruction permits for the construction of new minor sources and certain modifications of major and minor sources in areas covered by the rule. In developing the rule, the EPA conducted extensive outreach and consultation, along with a 7-month public comment period that ended on March 20, 2007. The comments provided detailed information specific to Indian country and the final Federal Indian Country Minor NSR rule incorporated many of the suggestions we received. We promulgated final rules on July 1, 2011,[32] and the FIP became effective on August 30, 2011.

The Federal Indian Country Minor NSR rule applies to existing, new, and modified minor stationary sources and to minor modifications at existing major stationary

[31] *See* 76 FR 38754 (July 1, 2011).
[32] "Review of New Sources and Modifications in Indian Country," Final Rule, *See* 76 FR 38748 (July 1, 2011).

sources in Indian country[33] where there is no EPA-approved program in place. Tribes can elect to develop and implement their own EPA-approved program under the TAR,[34] but are not required to do so.[35] In the absence of an EPA-authorized program, the EPA implements the program. Tribes can request administrative delegation of the federal program from the EPA and may be authorized by the EPA to implement agreed upon rules or provisions on behalf of the Agency.

Any existing, new, or modified stationary source in the oil and natural gas sector that emits or has the potential to emit (PTE) a regulated NSR pollutant in amounts equal to or greater than the minor NSR thresholds in the Federal Indian Country Minor NSR rule, but less than the amount that would qualify the source as a major source or a major modification for purposes of the PSD or nonattainment major NSR programs, must submit a registration form to the EPA containing information on, among other things, source-wide actual emissions of NSR regulated pollutants, information on the methods used to calculate the emissions, and descriptions of the various emitting activities and equipment operated at the source. Existing, new, and modified oil and natural gas sources that commenced construction before October 3, 2016, complied with the Federal Indian Country Minor NSR Permit Program by registering under the Existing Source

[33] 40 CFR 49.153. Existing sources are only subject to the registration requirements unless they undergo modification.

[34] To be eligible to develop and implement an EPA-approved program, under the Tribal Authority Rule a tribe must meet four requirements: (1) be a federally-recognized tribe; (2) have a functioning government carrying out substantial duties and powers; (3) propose to carry out functions pertaining to air resources of the reservation or other areas within the tribe's jurisdiction; and (4) be reasonably expected to be capable of carrying out the program. *See* 40 CFR 40 CFR 49.1 – 49.11.

[35] Tribes can also establish permit fees under a tribal permitting program pursuant to tribal law, as do most states.

Registration Program at 40 CFR 49.160. Beginning October 3, 2016, the owner/operator of any new true minor oil and natural gas source must comply with the National O&NG FIP or apply for and obtain a site-specific true minor NSR permit before beginning construction. Likewise, the owner/operator of any existing stationary source (minor or major) must comply with the National O&NG FIP or apply for and obtain a minor NSR permit before beginning construction of a physical or operational change that will increase the allowable emissions of the stationary source in amounts equal to or above the specified threshold amounts, if the change does not otherwise trigger PSD or nonattainment major or minor NSR permitting requirements.[36]

2. What are the minor NSR thresholds?

The "minor NSR thresholds" establish cutoff levels for each regulated NSR pollutant. If a source has a PTE in amounts lower than the thresholds,[37] then it is exempt from the Federal Indian Country Minor NSR rule for that pollutant. New or modified sources that have a PTE in amounts that are: (1) equal to or greater than the minor NSR thresholds; and (2) less than the major NSR thresholds (generally 100 or 250 tons per year (tpy)) are "minor sources" of emissions and subject to the Federal Indian Country Minor NSR rule requirements at 40 CFR 49.151 through 49.161. Modifications at existing major sources that have PTE equal to or greater than the minor NSR thresholds, but less than the major NSR significant emission rates (range 10-100 tpy, depending on

[36] A source may, however, be subject to certain monitoring, recordkeeping, and reporting (MRR) requirements under the major NSR program, if the change has a reasonable possibility of resulting in a major modification. A source may be subject to both the Federal Indian Country Minor NSR rule and the reasonable possibility MRR requirements of the major NSR program(s).

[37] *See* 40 CFR 49.153 and Table 1.

the pollutant) are also "minor sources" of emissions and subject to the Federal Indian Country Minor NSR rule requirements.

The minor NSR thresholds for VOC emissions for sources in Indian country are 2 tpy in nonattainment areas and 5 tpy in attainment and unclassifiable areas. Portions of the U&O Reservation are currently designated unclassifiable for the 2008 ozone NAAQS. As discussed previously and further in Section D (Air Quality and Attainment Status), other portions of the U&O Reservation are included in the Uinta Basin Ozone Nonattainment Area, and, therefore, the minor NSR thresholds for VOC are 2 tpy in those portions of the reservation.

D. Air Quality and Attainment Status

With respect to air quality, ozone levels in the Uinta Basin, in which the U&O Reservation is located, have reached unhealthy levels that warrant action. The 2015 8-hour ozone NAAQS is 70 parts per billion (ppb).[38] Compliance with the NAAQS is determined by comparison to a "design value" based on a three-year average of the fourth highest daily maximum 8-hour average ozone levels measured in a year at each monitoring site. The state of Utah, the National Park Service (NPS), and the Ute Indian Tribe operate ozone, $PM_{2.5,}$ and NO_2 monitors in and around the Uinta Basin. The ambient air concentrations measured at some of these stations show that ozone levels in the Uinta Basin have repeatedly violated both the 2008 and 2015 ozone NAAQS. Based on 2012-2017 regulatory air quality monitoring data, ozone design values exceed the

[38] Revised Ozone NAAQS was signed by EPA Administrator Gina McCarthy on October 1, 2015, *See* 80 FR 65292 (October 26, 2015).

2015 ozone NAAQS at five monitoring sites in the Uinta Basin. The highest valid ozone design value in the Uinta Basin for 2012-2017 was from the Ouray monitor at 88 ppb.[39] Additionally, higher single 8-hour average ozone concentrations were observed at some monitoring sites, before the sites were designated as regulatory monitors.[40] For example, 8-hour average ozone concentrations reached values as high as 141 ppb at the Ouray monitor in March 2013. This concentration corresponds to an Air Quality Index value of 211, which is characterized as "Very Unhealthy."[41] As discussed previously, the EPA designated areas in the Uinta Basin as marginal nonattainment for the 2015 ozone standard.[42] The EPA is issuing this notice of proposed rulemaking (NPRM) today because we have concluded that it is necessary and appropriate to take action to protect air quality on the U&O Reservation due to these elevated ozone levels.

Ambient ozone is a secondary pollutant that is formed from the two primary precursor emissions of VOC and NO_x. Ozone is not emitted directly into the air but is created when VOC and NO_x react in the presence of sunlight. Air quality data and studies in the Uinta Basin show that winter ozone levels above the ozone NAAQS are due to a

[39] Valid design values are the regulatory statistic to determine compliance with a NAAQS. They are calculated in accordance with the appropriate NAAQS-specific appendix to 40 CFR Part 50. For the 2008 Ozone NAAQS (75 ppb), the appropriate appendix is 40 CFR Part 50, Appendix P, and for the 2015 Ozone NAAQS (70 ppb) it is 40 CFR Part 50, Appendix U. Regulatory ozone data is available at *https://www.epa.gov/air-trends/ozone-trends*, accessed August 16, 2019.

[40] A "regulatory" monitor is a monitor that meets EPA's air quality monitoring requirements for siting, equipment selection, data sampling protocols, quality assurance and so on under EPA's monitoring regulations at 40 CFR part 58.

[41] The Air Quality Index (AQI) is a normalized system to allow the public to compare health risks of different air pollutants on a common scale. The AQI is divided into six levels of health concern: Good, Moderate, Unhealthy for Sensitive Groups, Unhealthy, Very Unhealthy, and Hazardous.

[42] Affected areas include portions of Uintah and Duchesne counties below 6,250 feet, including portions of the U&O Reservation.

combination of the unique meteorological and topographical features of the Basin, and abundant local ground level emissions of VOC and NO_x. The unique meteorological and topographic features in the Uinta Basin are strong and persistent temperature inversions forming over snow covered ground and elevated terrain completely surrounding a low basin. The stable atmosphere allows the emissions to accumulate and react with sunlight but prevents the emissions from escaping the temperature inversion layer and dispersing. Therefore, ozone continues to form while the unique meteorological conditions persist.[43] The state of Utah conducted special field studies in the Uinta Basin from 2011 to 2014 to understand the emissions sources that contribute to winter ozone. Reports for the winter ozone field studies for each year are available on the UDEQ web page.[44] These studies found that the oil and natural gas production sector is the most significant anthropogenic contributor of VOC and NO_x emissions in the Basin. The studies also concluded that ozone production in the Basin is sensitive to reductions in VOC emissions but relatively less sensitive to reductions in NO_x emissions. Thus, ozone levels in the Uinta Basin are being more significantly influenced by VOC emissions than by NO_x emissions.

The EPA has determined that the proposed action would result in large reductions of VOC emissions, and relatively small increases in NO_x emissions, and that this result is expected to reduce ambient ozone and reduce the severity of exceedances of the 2008 and 2015 ozone NAAQS. As discussed in more detail later, the proposed action includes a requirement for owners/operators to submit emissions inventories on a triennial basis.

[43] The RIA for this proposed rule contains a more detailed discussion of winter ozone and can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).
[44] "Ozone in the Uinta Basin," *https://deq.utah.gov/air-quality/ozone-in-the-uinta-basin*, August 16, 2019.

This information will enable the successful partnership to continue among the EPA, the UDEQ, the Tribe and industry in maintaining an accurate oil and natural gas emissions inventory for the Uinta Basin to be used, in part, as a tool for managing the Basin's air quality.

We have previously informed the public of our intent to undertake action specific to the U&O Reservation; as noted earlier, in the preamble to the National O&NG FIP, we indicated that: "For the Uintah and Ouray Reservation, we have sufficient concerns about the air quality impacts from existing sources that we plan to propose a separate U&O FIP."[45] After further review, the EPA concludes that action is needed to address poor air quality on the U&O Reservation.

E. Emissions Information

In 2017, the EPA, in partnership with the UDEQ and the Ute Indian Tribe, developed the 2014 Uinta Basin Emissions Inventory, an emission inventory of oil and natural gas activity in the Uinta Basin that was populated with data provided by oil and natural gas operators in the Basin.[46] We are also aware of several other available sources of information on air emissions from oil and natural gas activity in the Uinta Basin,

[45] *See* 81 FR at 35963(June 3, 2016).

[46] The inventory and supporting analysis can be viewed in the docket for this rule (Docket ID No. EPA-R08-OAR-2015-0709), Microsoft Excel spreadsheet titled "2014 UB EI summary data U&O FIP NPRM". The complete, detailed dataset for the 2014 Uinta Basin Emission Inventory can also be viewed in the docket in a SQLite database titled "OGEI_v2.2_2014FINAL.db". We are proposing in this proposed U&O FIP to require owners and operators to submit triennial emissions inventories, like a requirement proposed by the UDEQ in October of 2017. These triennial updates will provide information on how emissions are changing in the Basin from the 2014 baseline. See Section V (Summary of FIP Provisions).

including: (1) the 2014 National Emissions Inventory (2014 NEI);[47] (2) a study by the Western Regional Air Partnership (WRAP);[48] (3) existing minor source registration data submitted to the EPA per the Federal Indian Country Minor NSR Program;[49] and (4) the EPA Greenhouse Gas Reporting Program, subpart W Petroleum and Natural Gas Systems.[50] They are discussed in more detail in the Regulatory Impact Analysis (RIA) for this proposed rule.[51]

The 2014 NEI provides a general picture of the relative contribution of oil and natural gas emissions compared to other industry sectors, indicating that emissions from the production segment of the oil and natural gas sector were estimated to be the largest anthropogenic contributor of both VOC and NO_x emissions in the Uinta Basin. The WRAP study provides a general picture of the relative emissions contribution in the Basin from various oil and natural gas equipment and activities on Indian country lands. The existing minor source registration data provide a general picture of the large percentage of unpermitted and likely uncontrolled minor emissions sources on the U&O

[47] 2014 National Emissions Inventory (2014 NEI), available at *https://www.epa.gov/air-emissions-inventories/2014-nei-data*, accessed August 16, 2019. The UDEQ has submitted the 2014 Uinta Basin Emissions Inventory to the 2014 NEI, but the publicly available NEI has not yet been updated to include the Uinta Basin inventory. Analysis of the 2014 NEI for the purposes of this proposed U&O FIP was prepared using the version publicly available before the UDEQ.

[48] Western Regional Air Partnership (WRAP), O&G Emissions Workgroup: Phase III Inventory, Uinta Basin Reports, 2012 Mid-Term Projection Technical Memo, "Development of 2012 Oil and Gas Emissions Projections for the Uinta Basin", March 25, 2009, available at *http://www.wrapair2.org/Phase III.aspx*, accessed August 16, 2019. Some of the 2014 Uinta Basin Emissions Inventory was generated from prorating the 2012 WRAP estimates (which prorated and adjusted their 2006 work) to 2014 activity levels.

[49] Data from existing minor source registration reports submitted under 40 CFR 49.160 of the Federal Indian Country Minor NSR Program by operators of sources on the Indian country lands within the U&O Reservation.

[50] EPA Greenhouse Gas Reporting Program (GHGRP) Petroleum and Natural Gas Systems, available at *https://www.epa.gov/ghgreporting/ghgrp-petroleum-and-natural-gas-systems*, accessed August 16, 2019.

[51] The RIA can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

Reservation. The EPA Greenhouse Gas Reporting Program, subpart W, provides annual reports by operators of activity levels and methane emissions from oil and natural gas operations in the Uinta Basin. The 2014 Uinta Basin Emissions Inventory is a comprehensive source of oil and natural gas source VOC emissions data for the Uinta Basin that provided information for the cost and benefit analysis supporting this rulemaking.

The 2014 Uinta Basin Emissions Inventory indicates that the majority of existing oil and natural gas sources in the region are on the U&O Reservation. Most of these existing oil and natural gas sources on the U&O Reservation are minor sources and are uncontrolled. The 2014 NEI indicates that, compared to other industry sector sources, existing oil and natural gas sources are cumulatively the largest contributor of VOC and NO_x to measured exceedances of the ozone NAAQS in the Uinta Basin. Existing oil and natural gas sources on the portions of the Basin regulated by the UDEQ are subject to emission reduction requirements, while existing sources on the U&O Reservation are either subject to less stringent regulation or no regulation at all.

Specifically, the inventory shows that 79 percent of all existing oil and natural gas facilities in the Uinta Basin are located on Indian country lands within the U&O Reservation, producing oil and natural gas (and processing natural gas) from 76 percent of all producing wells in the Basin. According to the inventory, over 71,000 tons of VOC and almost 9,500 tons of NO_x emissions were emitted in 2014 from existing oil and natural gas sources on the U&O Reservation. That is approximately 81 percent of the total oil and natural gas-related VOC emissions in the Uinta Basin and approximately 70

percent of the total oil and natural gas-related NO_x emissions in the Uinta Basin. These data confirm that the bulk of the ozone-related emissions in the Uinta Basin are released from sources on the Indian country lands within the U&O Reservation.

Many of the oil and natural gas sources on the U&O Reservation are uncontrolled. According to the 2014 Uinta Basin Emissions Inventory, on the Indian country lands within the U&O Reservation, 85 percent of the total number of existing storage tanks, 97 percent of the total number of existing glycol dehydrators and 99 percent of existing pneumatic pumps are uncontrolled emitters of VOC. By contrast, on state-regulated land within the Basin, 67 percent of the total number of existing storage tanks and 14 percent of the total number of existing glycol dehydrators are uncontrolled (uncontrolled pneumatic pump numbers are relatively equivalent to Indian country at 98 percent). The UDEQ has adopted revisions to existing oil and natural gas source requirements and existing minor source permitting requirements, and has adopted new requirements, including a Permit by Rule that replaces the requirement for minor oil and natural gas sources to obtain a site-specific permit.[52] Now that the revised and new requirements are effective, we expect the percentage of uncontrolled existing storage tanks and glycol dehydrators in the UDEQ's jurisdiction will decrease from what was reported in the 2014 inventory. The UDEQ's rule revisions and new rules are discussed in more detail in Section IV.D (Developing the Proposed Control Requirements). In addition, the 2014

[52] Utah State Bulletin, Official Notices of Utah State Government, Filed January 03, 2018, 12:00a.m. through January 16, 2018, 11:59 p.m., 11:59 p.m., Number 2018-3, February 01, 2018, Nancy L. Lancaster, Managing Editor, pages 46-68, available at *https://rules.utah.gov/publicat/bull_pdf/2018/b20180201.pdf*, accessed August 16, 2019.

inventory shows that emissions from oil and natural gas wastewater disposal facilities on the Indian country lands within the U&O Reservation comprise approximately 33 percent of the total VOC emissions from oil and natural gas activity on the U&O Reservation. As explained in Section IV. D. (Developing the Proposed Control Requirements), these facilities may not be controlled under the CAA, because they do not meet the applicability criteria of preconstruction permitting programs or federal emissions standards regulating them.

Based on this collection of emissions information (and other information about meteorological conditions and local geography), the EPA has concluded that winter ozone levels in the Uinta Basin are most significantly influenced by VOC emissions from the presence of numerous minor, unpermitted and largely uncontrolled oil and natural gas production operations on the U&O Reservation.

F. What is a FIP?

Under section 302(y) of the CAA, the term "Federal implementation plan" means "a plan (or portion thereof) promulgated by the Administrator to fill all or a portion of a gap or otherwise correct all or a portion of an inadequacy in a State implementation plan, and which includes enforceable emission limitations or other control measures, means or techniques (including economic incentives, such as marketable permits or auctions of emissions allowances), and provides for attainment of the relevant national ambient air quality standard." As discussed previously in section III.B., CAA sections 301(a) and 301(d)(4) and 40 CFR 49.11(a) authorize the EPA to promulgate such FIPs as are necessary or appropriate to protect air quality if a Tribe does not submit or receive EPA

approval of a TIP.

The Federal Indian Country Minor NSR rule is an example of a FIP, as discussed in section III.C. Another example of the EPA's use of its FIP authority is to protect air quality in areas of Indian country with no EPA-approved program, while at the same time seeking to provide a consistent regulatory environment where appropriate, is the "FIP for Oil and Natural Gas Well Production Facilities; Fort Berthold Indian Reservation (FBIR; Mandan, Hidatsa, and Arikara Nation), North Dakota."[53] In that rule, we took an important initial step to control volatile organic compound (VOC) emissions from existing, new and modified oil and natural gas operations on the FBIR. We drafted requirements that were consistent to the greatest extent practicable with the most relevant aspects of neighboring state and local rules concerning the air pollutant emitting activities on the FBIR. We did not intend at the time, nor did we expect, the regulation to impose significantly different regulatory burdens upon industry or the residents of the FBIR than those imposed by the rules of state and local air agencies in the surrounding areas.

This proposed U&O FIP specific to the U&O Reservation would reduce VOC emissions related to the formation of ozone, and it is needed to protect air quality on the U&O Reservation because exceedances of both the 2008 and the 2015 ozone NAAQS have occurred at air quality monitors on and around the Reservation. Portions of the Uinta Basin, including portions of the U&O Reservation, were designated by the EPA in 2018 as nonattainment for the 2015 ozone NAAQS. Further, there are no currently

[53] *See* 78 FR 17836 (March 22, 2013).

approved TIPs that apply to existing oil and natural gas sources on the U&O Reservation. Finally, the majority of these sources are not currently subject to federally required emissions controls, which is discussed further in Section IV.A.

G. Oil and Natural Gas Sector in the Uinta Basin

The oil and natural gas sector in the Uinta Basin includes the extraction and production of oil and natural gas, as well as the processing, transmission, and distribution of natural gas. Specifically, for oil, the sector in the Uinta Basin includes all operations from the well to the transfer to an oil transmission pipeline or other means of transportation to a petroleum refinery. The petroleum refinery is not considered part of the oil and natural gas sector. Thus, with respect to crude oil, the oil and natural gas sector ends where crude oil enters an oil transmission pipeline or other means of transportation to a petroleum refinery. For natural gas, the sector includes all operations from the well to the final end user.

The oil and natural gas sector in the Uinta Basin can generally be separated into four segments: (1) oil and natural gas production; (2) natural gas processing; (3) natural gas transmission and storage; and (4) natural gas distribution. This proposed U&O FIP for oil and natural gas sources on the U&O Reservation focuses on existing, new, and modified sources in the first and second segments, oil and natural gas production and natural gas processing, because the existing minor sources in those segments cumulatively contribute the largest portion of VOC emissions from the oil and natural gas sector on the U&O Reservation. There are more than 6,700 individual oil and natural gas sources on the U&O Reservation operated by 28 distinct entities, the majority of which

are well sites in the oil and natural gas production segment.[54] As discussed earlier, the 2014 NEI shows that emissions from the production segment of the oil and natural gas sector were estimated to be the largest anthropogenic contributor of both VOC and NO_x emissions in the Uinta Basin. Comparatively, the categories that include oil and natural gas storage and transfer and bulk gasoline terminals (segments 3 and 4), are reported in the 2014 NEI as contributing less than one percent each of the total VOC and NO_X emissions in the Uinta Basin[55]. Of the approximately 10,400 individual active oil and natural gas wells in the Uinta Basin, over 7,900 wells, or about 76 percent, are on Indian country lands within the U&O Reservation.

The oil and natural gas production segment in the Uinta Basin includes wells and all related processes used in the extraction, production, recovery, lifting, stabilization, and separation or treatment of oil and/or natural gas (including condensate). Production components in the Uinta Basin may include wells and related casing head, tubing head, and "Christmas tree" piping, as well as pumps, compressors, heater treaters, separators, storage vessels, pneumatic devices, pneumatic pumps, and natural gas dehydrators. Production operations in the Uinta Basin also include the well drilling, completion, and workover processes, and include all the portable non-self-propelled apparatuses associated with those operations. Production sites in the Uinta Basin include not only the sites where the wells themselves are located, but also centralized gas and liquid gathering

[54] 2014 Uinta Basin Emissions Inventory. The inventory and supporting analysis of the data can be viewed in the docket for this NPRM (Docket ID No. EPA-R08-OAR-2015-0709), including a spreadsheet titled "2014 UB EI summary data U&O FIP NPRM.xlsx."

[55] Based on the NEI Source Type to Sector Crosswalk in the 2014 NEI at *https://gispub.epa.gov/neireport/2014/*, accessed August 16, 2019.

sources where oil, condensate, produced water, and natural gas from several wells may be separated, stored, and treated. Production components in the Uinta Basin also include the smaller diameter, low-to-medium-pressure gathering pipelines and related components that collect and transport the oil, natural gas, and other materials and wastes from the wells or well pads.

The natural gas production segment in the Uinta Basin ends where the natural gas enters a natural gas processing plant. Where there is no processing plant, the natural gas production segment ends at the point where the natural gas enters the transmission segment for long-line transport. The crude oil production segment in the Uinta Basin ends at the storage and load-out terminal, which is the point of custody transfer to an oil pipeline or for transport of the crude oil to a petroleum refinery via trucks or railcars.

Each producing crude oil and natural gas field has its own unique properties. The composition of the crude oil and the natural gas as well as the reservoir characteristics are likely to be different across all reservoirs. The RIA for this rule provides a more detailed overview of the products and components of the oil and natural gas industry that are relevant to the activities in the Uinta Basin.[56]

IV. Development of the Proposed Rule

This proposed U&O FIP contains a common set of VOC emissions controls at new, modified and existing oil and natural gas sources on the U&O Reservation. We consulted existing federal CAA oil and natural gas sector standards to develop the VOC emissions control requirements of this proposed U&O FIP. To make VOC emissions

[56] The RIA can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

control requirements across the Basin consistent, this proposed U&O FIP would go beyond the federal standards, in some cases, to regulate equipment and activities that are not regulated by those standards, but are regulated by the UDEQ, such as small, remote glycol dehydrators; low throughput storage tanks; tanker truck loading and unloading; and certain voluntarily operated control devices. Applicability of the proposed requirements, including for equipment and activities that are regulated by the federal standards, is also consistent with the applicability for equivalent equipment and activities regulated by the UDEQ.

The streamlined construction authorization mechanism in the National O&NG FIP applies on the Indian country portions of the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area, as a result of our recent action amending the National O&NG FIP, as previously mentioned. Such true minor sources are required to register and comply with the eight federal standards in the National O&NG FIP, as applicable, to meet the preconstruction permitting requirements of the Federal Indian Country Minor NSR Program. Compliance with the eight federal standards in the National O&NG FIP, as applicable, would not relieve the owners/operators from the other applicable VOC control requirements of this proposed U&O FIP, except that this proposed U&O FIP would exempt certain equipment and activities from it that are in compliance with the applicable federal standards for those equipment and activities that constitute the requirements of the National O&NG FIP.

A detailed discussion of this proposed U&O FIP requirements is found in Section V. Summary of FIP Provisions.

A. Rationale for the Proposed Rule

As discussed earlier, available information indicates that: (1) winter ozone levels in the Uinta Basin are above the 2008 and 2015 ozone NAAQS, posing a threat to human health, which has led to the designation of portions of the Uinta Basin, including portions of the U&O Reservation, as marginal nonattainment for the 2015 ozone NAAQS; (2) ozone production in the area is driven by a combination of unique meteorological conditions, the geography of the Basin, and significant local emissions of ozone precursors, primarily VOC emissions from existing oil and natural gas activity in the Basin, the majority of which occurs on the U&O Reservation; and (3) reductions in ozone levels in the Basin is most sensitive to reductions in VOC emissions, and relatively insensitive to reductions in NO_x emissions. Further, the majority of those oil and natural gas sources are operating without any federally required emissions controls.[57]

To address these facts, in this proposed action we are determining that it is necessary and appropriate to promulgate this proposed U&O FIP to protect air quality on the U&O Reservation, under the authority provided at 40 CFR 49.11 and CAA sections 301(a) and 301(d)(4). This action includes: (1) proposed federally enforceable VOC emissions control requirements for new, modified and existing oil and natural gas sources and (2) a proposed requirement to apply the requirements of the National O&NG FIP to new and modified true minor oil and natural gas sources seeking to locate or expand on the Indian country portions of the U&O Reservation that are part of the Uinta Basin

[57] *See* Sections III.D. and III.E. for more detailed discussion of air quality problems and emissions information, respectively.

Ozone Nonattainment Area, including its streamlined construction authorization mechanism. If the second part of today's action is finalized as proposed, the EPA in a separate rulemaking plans to propose withdrawing its recent rulemaking[58] amending the National O&NG FIP to extend its construction authorization mechanism for new and modified true minor oil and natural gas sources to the Indian country lands within the U&O Reservation that are included in the Uinta Basin Ozone Nonattainment Area because it will no longer be necessary.

Together, the oil and natural gas source controls of this proposed U&O FIP, the construction authorization mechanism of this proposed U&O FIP and the amended National O&NG FIP will:

1. Improve air quality by reducing VOC emissions, thereby reducing ozone, HAP, and $PM_{2.5}$ levels and protecting public health;
2. Ensure a consistent regulatory environment across the basin, thereby providing certainty to industry and avoiding the imposition of economic burdens on the Ute Indian Tribe or residents of the Reservation; and
3. Support permanent, continued development of the Basin's oil and natural gas resources through a streamlined construction authorization mechanism.

[58] *See* 84 FR 21240 (May 14, 2019).

This proposed U&O FIP's VOC emission control requirements will apply to existing, new, and modified oil and natural gas production and natural gas processing sources on the U&O Reservation, whether major or minor.[59]

We have previously informed the public of our intent to undertake this action, as noted earlier, in the preamble to the National O&NG FIP: "For the Uintah and Ouray Reservation, we have sufficient concerns about the air quality impacts from existing sources that we plan to propose a separate reservation-specific FIP."[60] The EPA remains concerned that there is a need for air quality protection on the U&O Reservation. Implementation of the proposed rule is intended to improve air quality, on the U&O Reservation specifically and the Uinta Basin generally, and thereby to protect public health and help return the area to attainment.

B. Uinta Basin Air Quality Solutions: Stakeholder Feedback

Consistent with the federal government's trust responsibility and to improve our understanding of the potential environmental implications of oil and natural gas production operations, the EPA has consulted (and will continue to consult) with the Ute Indian Tribe on this proposed U&O FIP. We appreciate the importance of oil and natural gas activity for the economic vitality of the U&O Reservation, as expressed to us by the Tribe during our government-to-government consultations.

[59] The control requirements could apply to major oil and natural gas sources because they may include uncontrolled emissions units identical to those at minor sources. And while the major sources have presumably been, or would be, at least partly subject to controls through existing EPA standards and permitting requirements, they could still include individual emissions units for which control requirements are not applicable. Therefore, we have determined that it is appropriate to apply the proposed VOC control requirements of this rule to major oil and natural gas sources as well as minor oil and natural gas sources.
[60] *See* 81 FR 35944, 35963 (June 3, 2016).

We have held numerous consultations with the Ute Indian Tribe and participated in numerous tribally-convened stakeholder and other meetings, in 2015, 2016, 2017, 2018 and 2019. We have also reached out to stakeholders in 2015 and will continue to do so as follows: (1) oil and natural gas operators and representatives; (2) environmental groups; (3) Federal Land Managers; and (4) local county officials. These consultations and meetings addressed, at least in part, the issue that has prompted this rulemaking, i.e., the need expressed by the Ute Indian Tribe and others for continued streamlined authorizations to construct to continue to be available on the U&O Reservation as part of the Uinta Basin Ozone Nonattainment Area. For a complete list of these consultations and meetings, including dates, locations and attendees, please consult the docket to this rulemaking.[61]

The purpose of the government-to-government consultations were to receive tribal comments and concerns. The purposes of the EPA, Tribe, and UDEQ meetings were to discuss our intent to address ozone issues in the Uinta Basin and to solicit input on potential solutions to the region's air quality problem, while ensuring continued resource development. We strive to provide greater regulatory certainty and consistency across the Uinta Basin in the regulation of these operations through enhanced data collection and analysis, improved information sharing and partnerships, and focused

[61] "Meetings and Consultations Held with the Ute Indian Tribe Concerning at Least Partly the Uintah and Ouray Indian Reservation Federal Implementation Plan and the National Oil and Natural Gas Federal Implementation Plan for Indian Country," March 1, 2019, Docket No. EPA-R08-OAR-2015-0709, available at https://www.regulations.gov.

compliance assistance and enforcement. The EPA is committed to working closely with the Tribe and the state of Utah during this process.

C. Ensuring Streamlined Construction Authorizations on the U&O Reservation

The EPA is committed to achieving our primary objective of improving air quality on the U&O Reservation in a manner that also ensures that streamlined construction authorizations on the U&O Reservation may proceed effectively and efficiently. Accordingly, we have separately amended the National O&NG FIP to extend its construction authorization mechanism to apply to new or modified true minor oil and natural gas sources on the Indian country portions of the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area, because the National O&NG FIP ceased to apply upon the effective date of the nonattainment designation (August 3, 2018). The National O&NG FIP, as originally promulgated, covered attainment, unclassifiable and attainment/unclassifiable areas. New and modified true minor oil and natural gas sources constructing in such areas are eligible for coverage under the National O&NG FIP. Since the National O&NG FIP did not apply in nonattainment areas, the streamlined construction authorization mechanism for new and modified true minor oil and natural gas sources was not available after August 3, 1018 for sources locating on Indian country portions of the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area. Our recent action amending the National O&NG FIP addressed the issue by permanently re-instating the streamlined construction authorizations. However, we are also in this action proposing to apply the National O&NG FIP (without alteration) to new and modified true minor sources in the oil and natural gas production and natural gas

processing segments of the oil and natural gas sector that propose to locate or expand on Indian country lands within the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment area. While it may seem unnecessary to propose a streamlined construction authorization mechanism in this action when one is already in place permanently, we are doing so to ensure that the requirements (or at least reference to them) for oil and natural gas sources on the Indian country portions of the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area are in one place in the CFR. We intend to follow up this rule when final with a proposal to withdraw the amendments to the National O&NG FIP. In Section V.E. below, we explain specifically what parts of the CFR will be affected by today's proposed rule and the subsequent proposed rule withdrawal.

Upon the effective date of the nonattainment designation (August 3, 2018), the EPA was required to issue site-specific permits to true minor oil and natural gas sources. The Ute Indian Tribe and various industry representatives expressed concern that the EPA might not be able to keep pace with the demand for site-specific oil and natural gas-related permits on the U&O Reservation given all that is involved with approving and issuing a site-specific permit. There was concern that a lag in permit issuance could place sources in Indian country at a competitive disadvantage compared to similar sources located in UDEQ-regulated areas, where minor sources have expedited permitting options available. Extending the National O&NG FIP's permitting approach to the portions of the U&O Reservation designated nonattainment, among other benefits, avoided any such inequity.

There is, however, an important consideration to extending the National O&NG FIP to the U&O Reservation portion of the Uinta Basin Ozone Nonattainment Area. Specifically, this proposed U&O FIP would reduce ozone-forming emissions from existing, new, and modified oil and natural gas sources, in order to ensure that new and modified true minor source growth can occur in the area while protecting air quality. To accomplish those reductions, we are proposing the control requirements described later in Section V.

D. Developing the Proposed Control Requirements

Our objectives in developing proposed requirements to control VOC emissions from existing, new, and modified oil and natural gas sources on the U&O Reservation are to address the Basin's degraded air quality, to provide regulatory consistency across the Uinta Basin, and to allow for continued growth of oil and natural gas resources on the U&O Reservation. To ensure that the regulatory requirements would be the same as or comparable on balance across the Uinta Basin, we focused on using UDEQ regulations and preconstruction permitting requirements being implemented by the UDEQ for new, modified and existing oil and natural gas sources within the Uinta Basin to identify appropriate requirements for controlling VOC emissions from the prominent oil and natural gas emissions sources in the Basin. We consulted existing federal preconstruction permitting and oil and natural gas sector regulations for common emissions sources and determined that to meet our objectives for this rulemaking, it is necessary to propose requirements that are additional to what is required of new and modified sources in existing federal requirements. Extending the National O&NG FIP to the U&O

Reservation will ensure an efficient and protective construction authorization mechanism for new and modified true minor sources. The combination of extending the National O&NG FIP to the U&O reservation and promulgating the control requirements in this proposed U&O FIP will reduce ozone-forming emissions from new, and modified and existing oil and natural gas sources. To accomplish those reductions, we are proposing the control requirements described in Section V.

1. *Determination of VOC-Producing Equipment/Activities to Regulate*

To develop these requirements, we analyzed data submitted by the owners/operators of existing sources under the 2014 Uinta Basin Emissions Inventory. We used this information to determine the equipment and operations that generate the largest portion of VOC emissions from these sources. The inventory shows that 81 percent of VOC emissions from existing oil and natural gas sources in the Uinta Basin occur on Indian country lands within the U&O Reservation. The highest VOC emissions from existing oil and natural gas sources in the Uinta Basin come from (top 6 in order of highest to lowest):[62] (1) wastewater ponds; (2) fugitive emissions; (3) pneumatic pumps; (4) crude oil and condensate storage tanks; (5) pneumatic controllers; and (6) glycol dehydrators. As noted earlier in Section III.D., we conclude that winter ozone formation in the Basin is more sensitive to changes in VOC emissions than changes in NO_x emissions. Therefore, we expect that reducing VOC emissions from these emissions sources will result in lower ozone levels in the Uinta Basin.

2. *Evaluation of Federal Oil and Natural Gas and Permitting-Related*

[62] These six sources represent 93 percent of oil and natural VOC emissions on the U&O Reservation.

Requirements

We do not expect that many of the existing oil and natural gas sources on the U&O Reservation, most of which are minor sources, are currently subject to federal VOC emissions control requirements under the CAA, including the New Source Performance Standards (NSPS) for the Oil and Natural Gas Sector at 40 CFR Part 60, subpart OOOO (NSPS OOOO), and subpart OOOOa (NSPS OOOOa),[63] the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Oil and Production Facilities at 40 CFR Part 63, subpart HH (NESHAP HH),[64] the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR part 52, and the Federal Indian Country Minor NSR Permit Program at 40 CFR Part 49,[65] because they do not meet the respective applicability criteria. As we assembled a set of requirements for this proposed U&O FIP, we considered CAA regulatory requirements in place for oil and natural gas sources

[63] NSPS OOOO was originally published in the Federal Register on August 16, 2012 at 77 FR 49490, with revisions on September 23, 2013, July 17, 2014, December 31, 2014, and July 31, 2015. Additional revisions, including the addition of subpart OOOOa, were signed final by the Administrator on April 28, 2016. Information on these rulemakings is available at *https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry*, accessed August 19, 2019.

[64] National Emission Standards for Hazardous Air Pollutants: Oil and Natural Gas Production and Natural Gas Transmission and Storage, originally published in the Federal Register on June 17, 1999 at 64 FR 32609, and revised on June 29, 2001 (66 FR 34548), January 3, 2007 (72 FR 26), and August 16, 2012 (77 FR 49490). Information on these rulemakings is available at: *https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry* and *https://www.epa.gov/stationary-sources-air-pollution/clean-air-act-standards-and-guidelines-oil-and-natural-gas-industry*, accessed August 16, 2019.

[65] Review of New Sources and Modifications in Indian Country, published in the Federal Register on July 1, 2011 (76 FR 38748), available at *http://www.gpo.gov/fdsys/pkg/FR-2011-07-01/pdf/2011-14981.pdf*, accessed August 19, 2019 (Federal Indian Country Minor NSR Program). Program includes the "Federal Implementation Plan for True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector; Amendments to the Federal Minor New Source Review Program in Indian Country to Address Requirements for True Minor Sources in the Oil and Natural Gas Sector," Final Rule, U.S. Environmental Protection Agency, Signed April 28, 2016 and available at *https://www.epa.gov/tribal-air/oil-and-natural-gas-sources-federal-implementation-plan-rule-indian-country*, accessed August 16, 2019 (Indian Country Oil and Natural Gas True Minor Source FIP).

nationwide, in the Uinta Basin on the Indian country lands within the U&O Reservation and on lands regulated by the UDEQ.

VOC emissions at existing major oil and natural gas sources on the U&O Reservation (far fewer in number than minor sources) should be controlled through federal emissions control requirements under the CAA, including the EPA's major source preconstruction permitting program in Indian country; the synthetic minor permit provisions of the Federal Indian Country Minor NSR rule; the NSPS OOOO or OOOOa; and other EPA emissions standards in place for the oil and natural gas sector.

We do acknowledge, however, that there may be individual emissions units or processes at such major sources that are uncontrolled because they are not subject to any emissions control requirements in a major source permit and/or are not otherwise subject to a federal emissions standard. For example, such units or processes may not be subject to the EPA regulation because they do not meet the applicability criteria in any NSPS or NESHAP.[66] Another example concerns oil and natural gas wastewater disposal facilities that rely on evaporation from ponds. The 2014 Uinta Basin Emissions Inventory shows that these types of wastewater disposal facilities are the largest source of VOC emissions at existing oil and natural gas operations on Indian country lands within the U&O Reservation, emitting approximately 33 percent of the VOC emissions for these areas.[67] The majority of the VOC emissions from these types of wastewater disposal facilities

[66] EPA has several NESHAP and NSPS in place that regulate equipment and processes at oil and natural gas sources.

[67] 2014 Uinta Basin Emissions Inventory. The inventory and supporting analysis can be viewed in the docket for this NPRM (Docket ID No. EPA-R08-OAR-2015-0709), Microsoft Excel spreadsheet titled "2014 UB EI summary data_U&O FIP NPRM."

occur upstream of the evaporation ponds, where wastewater is received and handled before being discharged to the evaporation ponds – namely from vaults and skim ponds, and to a lesser extent, from onsite storage tanks. The inventory also indicates that certain individual wastewater disposal facilities on Indian country lands within the U&O Reservation are estimated to emit VOC emissions at major source levels (*i.e.*, greater than 100 tpy). While emissions from storage tanks at certain wastewater disposal facilities may be considered point sources, the evaporation emissions from vaults, skim ponds and evaporation ponds could be considered fugitive and the oil and natural gas sector is not one of the industry source categories listed in major source preconstruction permitting programs that are required to include fugitive emissions when determining whether or not the source is major.[68] Fugitive emissions may, however, be considered when determining whether or not a source is major for HAP, which requires compliance with the Title V Operating Permit Program requirements and may require compliance with NESHAP requirements. The NESHAP for Offsite Waste and Recovery Operations at 40 CFR part 63, subpart DD, imposes control requirements on certain wastewater disposal facilities, but these existing facilities on the Indian country lands within the U&O Reservation may not meet any of the very specific applicability criteria in subpart DD.[69]

In contrast to existing major sources, most existing minor oil and natural gas

[68] *See* 40 CFR 52.21(b)(1)(iii).
[69] See the NESHAP for Offsite Waste and Recovery Operations at 40 CFR part 63, subpart DD. The NESHAP applies to sources that meet ALL of the following criteria: 1) meet the definition of a "centralized waste treatment" facility (CWT); 2) are a major HAP source; 3) discharge effluent subject to CWA section 402 or 307(b) permitting; AND 4) treatment of wastewater is the predominant activity at the CWT.

sources on the U&O Reservation are uncontrolled, although some may be subject to NSPS OOOO or OOOOa. For example, the 2014 Uinta Basin Emissions Inventory indicates that only 15 percent of the oil and natural gas sources present in 2014 on Indian country lands within the U&O Reservation were reported to be operating VOC emissions control devices on their storage tanks, a significant source of oil and natural gas VOC emissions. NSPS OOOO and OOOOa only apply to sources constructed after the relative applicability dates and that meet the other applicability criteria. Storage tanks at sources associated with oil and natural gas production wells that began production after the effective dates of NSPS OOOO or OOOOa may have low enough VOC emissions that owners/operators are not required to control VOC emissions from storage vessels.

In addition, some VOC emissions that are also HAP from certain emissions units at existing minor sources, such as glycol dehydrators and storage tanks with the potential for flash emissions, may be regulated under the NESHAP for Oil and Natural Gas Production Facilities at 40 CFR Part 63, subpart HH (NESHAP HH).[70] However, the NESHAP does not require emission controls for lower-emitting glycol dehydrators or storage tanks with throughputs below a certain level on rural and remote Indian country lands within the U&O Reservation because the units would not meet subpart HH's urban-based glycol dehydrator applicability criteria or tank throughput applicability threshold.

[70] National Emission Standards for Hazardous Air Pollutants: Oil and Natural Gas Production and Natural Gas Transmission and Storage, originally published at *See* 64 FR 32609 (June 17, 1999), and revised at *See* 66 FR 34548 (June 29, 2001), *See* 72 FR 26 (January 3, 2007), and *See* 77 FR 49490 (August 16, 2012). Information on these rulemakings is available at: *https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry* and *https://www.epa.gov/stationary-sources-air-pollution/clean-air-act-standards-and-guidelines-oil-and-natural-gas-industry*, accessed August 16, 2019.

The 2014 inventory, which indicates that 99 percent of the glycol dehydrators operated at oil and natural gas sources on the Indian country lands within the U&O Reservation are reported as uncontrolled,[71] supports the conclusion that most glycol dehydrators on the U&O Reservation may not be subject to NESHAP HH. Therefore, using the applicability criteria of relevant EPA regulations and analyzing available emissions and other data, allows the EPA to conclude that the majority of existing oil and natural gas minor sources on the U&O Reservation have not been controlled under the CAA's programs.

Further, the federal preconstruction minor source permitting requirements in the Federal Indian Country Minor NSR rule did not start to impose requirements on new and modified true minor oil and natural gas sources until after October 3, 2016. Through application of the Federal Indian Country Minor NSR rule, new and modified true minor oil and natural gas sources constructed before October 3, 2016, were required only to register as existing sources, with no additional emissions limits or operational requirements. As of December 2014,[72] operators of 5,169 existing minor oil and natural gas sources on the U&O Reservation had registered under the rule as existing sources.[73]

[71] 2014 Uinta Basin Emissions Inventory. The inventory and supporting analysis can be viewed in the docket for this rule (Docket ID No. EPA-R08-OAR-2015-0709), Microsoft Excel spreadsheet titled "2014 UB EI summary data_U&O FIP NPRM".

[72] The Minor Source Registration Data used was a snapshot in time for the purposes of consistent analyses, though we note that we have continued to receive new registrations for existing, new, and modified true minor sources since that date, the overwhelming majority of which have been for oil and natural gas sources.

[73] New and modified true minor oil and natural gas sources constructed on or after October 3, 2016,[73] must meet the requirements of the Federal Indian Country Minor NSR rule (unless the source obtains a site-specific permit) by registering under the Indian Country True Minor Oil and Natural Gas Source FIP, which contains requirements to comply with a set of NSPS and NESHAP requirements, as applicable, for various oil and natural gas activities.

This number is 77 percent of the 6,739 total existing oil and natural gas sources on the Indian country lands within the U&O Reservation), according to the 2014 Uinta Basin Emissions Inventory. The 6,739 oil and natural gas sources are in turn 79% of the total number of reported oil and natural gas sources in the Uinta Basin.[74] Therefore, the majority of the existing minor sources are not controlled under existing CAA requirements.

3. Evaluation of State Oil and Natural Gas and Permitting-Related Requirements

The federal CAA regulation of existing oil and natural gas operations on the Indian country lands within the U&O Reservation contrasts with UDEQ's regulation of existing oil and natural gas operations on non-Indian-country lands in the Uinta Basin. As discussed in Section III.E., higher percentages of existing tanks and glycol dehydrators are controlled in UDEQ-regulated areas than on the U&O Reservation. In areas within the Uinta Basin that are under the UDEQ's CAA jurisdiction, owners/operators of new and modified minor oil and natural gas operations are subject to the preconstruction permitting requirements in Utah's federally enforceable rules for permitting of new and modified sources (Utah Permit Requirements).[75] These requirements are triggered whenever uncontrolled actual emissions are greater than or equal to the minor source preconstruction permitting thresholds of five tpy per pollutant regulated under the

[74] 2014 Uinta Basin Emissions Inventory. The inventory and supporting analysis can be viewed in the docket for this NPRM (Docket ID No. EPA-R08-OAR-2015-0709), Microsoft Excel spreadsheet titled "2014 UB EI summary data_U&O FIP NPRM".

[75] Utah Administrative Code Chapter R307-401 (*Permits: New and Modified Sources*), available at *https://rules.utah.gov/publicat/code/r307/r307-401.htm*, accessed August 21, 2019; *See* 40 CFR part 52, subpart TT.

Federal Indian Country Minor NSR rule (NSR-regulated pollutant). Utah has had a minor new source review program (preconstruction permits) in place since November 1969. The five tpy VOC threshold was implemented in 1997 to clarify which minor sources should be permitted. Before 1997, there was no size threshold, and any minor source was required to obtain a permit. The permits are called Approval Orders, which identify site-specific requirements, or General Approval Orders (GAO), which identify a standard set of requirements for similar sources. There is a GAO available for new and modified crude oil and natural gas well sites and tank batteries. These two types of orders require installation, operation, and maintenance of the best available control technologies for minor sources. What constitutes best available control technologies for oil and natural gas sources changes over time as new technologies and practices are introduced and become readily available and economically feasible. Based on the requirements in issued site-specific approval orders, the UDEQ most recently considered minor source Best Available Control Technology (BACT) for controlling VOC emissions from oil and natural gas operations to include: (1) capture of emissions from crude oil, condensate and produced water storage tanks (working, standing, breathing, and flashing losses), glycol dehydrator still vents, and pneumatic pumps, if combined source-wide VOC emissions from that equipment are greater than or equal to 4 tpy; and (2) routing all of those emissions either (1) to a process unit where the emissions are recycled or incorporated into a product (*e.g.*, a sales gathering line); or (2) to an operational combustor with a minimum VOC control efficiency of 98.0 percent and operated with no visible emissions. For sources required to control emissions from crude oil, condensate and produced water

storage tanks, glycol dehydrator still vents, and pneumatic pumps, the UDEQ issued approval orders also require: (1) at least annual onsite inspections of fugitive emission components using either EPA Method 21[76] or an optical gas imaging instrument, and (2) repair of all identified leaking components.

As mentioned earlier, the UDEQ has adopted and made effective revisions to the existing Utah Permit Requirements that include a permit by rule. The permit by rule replaces the requirement for certain minor oil and natural gas sources[77] to obtain an approval order. Those minor oil and natural gas sources are required to register with the UDEQ and to comply with a suite of existing revised and additional new oil and natural gas requirements source requirements (Utah Oil and Gas Rules)[78] in lieu of obtaining a site-specific approval order or approval under the GAO. The Utah Oil and Gas Rules are consistent with the minor source BACT that was previously required under the site-specific Approval Orders and GAO, with some exceptions. The adopted new requirements include: (1) at well sites and centralized tank batteries with site-wide throughput greater than or equal to 8,000 barrels (bbl) of crude oil or 2,000 bbl of

[76] The docket for this NPRM (Docket ID No. EPA-R08-OAR-2015-0709) contains several examples of UDEQ site-specific minor source NSR permits (aka approval orders) for Crude Oil and Natural Gas Well Sites and/or Tank Batteries (DAQE-AN151010001-15, DAQE-AN149250001-14, and DAQE-AN143640003-15), as well as an approval for coverage under the GAO for a Crude Oil and Natural Gas Well Site and/or Tank Battery (DAQE-MN149250001-14). LDAR inspection frequency ranges from annual to quarterly.

[77] The permit by rule applies to well sites, as defined in 40 CFR 60.5430a, including centralized tank batteries, and exempts sources that have already been issued approval orders. New and modified minor compressor stations are still required to obtain an approval order.

[78] Utah Administrative Code Chapter R307-500 Series (Oil and Gas), available at *https://rules.utah.gov/publicat/code/r307/r307.htm*, accessed August 21, 2019. These rules are state-only rules and the UDEQ has not submitted them to the EPA for approval in the Utah SIP.

condensate on a 12-month rolling basis from the collection of storage vessels, a requirement to either route all VOC emissions to a process unit to be recycled, incorporated into a product and/or recovered, or to a VOC control device (including associated monitoring and recordkeeping);[79] (2) at well sites and centralized tank batteries where storage vessel controls are required, a requirement to capture and control VOC emissions during truck loading and unloading operations; (3) at well sites and centralized tank batteries with combined VOC emissions from dehydrators and the collection of storage vessels greater than or equal to 4 tpy, a requirement to either route all VOC emissions from dehydrators to a process unit to be recycled, incorporated into a product, and/or recovered, or to a VOC control device (including associated monitoring and recordkeeping); (4) at each well site or centralized tank battery that is required to control storage vessel and/or dehydrator VOC emissions, a requirement to implement a leak detection and repair (LDAR) program that includes semiannual onsite monitoring of each fugitive emissions component (with exceptions for difficult or unsafe to monitor components) using optical gas imaging (OGI) or EPA Method 21 at 40 CFR part 60, Appendix A; (5) at oil well sites, a requirement to manage associated gas from a completed oil well by either routing it to a process unit for combustion, routing it to a sales pipeline, or routing it to a VOC control device, except for emergency release

[79] The EPA submitted comments on the UDEQ's proposed action on November 14, 2017, in which we questioned the use of 8,000 barrels of crude oil per year as a surrogate for four tpy of VOC. The UDEQ responded to those comments in the package it submitted to the Air Quality Board for recommended adoption of the proposal. The UDEQ revised the proposal to add the applicability threshold of 2,000 bbl of condensate. The comments and UDEQ's responses are available in the docket for this proposed rule (Docket ID No. EPA-R08-OAR-2015-0709).

situations; [80] and (6) for natural gas-fired engines at new or modified well sites or centralized tank batteries after January 1, 2016, requirement compliance upon installation or modification with the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines at 40 CFR part 60, subpart JJJJ. All storage vessels and dehydrators located at a well site are exempt from the control requirements, if combined VOC emissions are demonstrated to be less than four tpy of uncontrolled emissions on a rolling 12-month basis. Additionally, sources that are subject to issued site-specific approval orders or approval for coverage under the GAO are exempt from the permit by rule and new Utah Oil and Gas Rules. The UDEQ also adopted a new requirement that oil and natural gas sources with emissions of NSR-regulated pollutants greater than or equal to 1 tpy are to submit an emissions inventory every 3rd year, beginning with calendar year 2017.

Additionally, owners/operators of all existing, new, and modified oil and natural gas sources are subject to certain requirements in the Utah Oil and Gas Rules that apply regardless of emissions levels. These regulations impose: (1) basic operational requirements for all existing pneumatic controllers (must be low or no bleed), existing flares (must be equipped with an automatic ignition device), and tanker truck loading and unloading (must use bottom filling or submerged fill pipe), regardless of source-wide

[80] This is a requirement the EPA recently became aware is specified in individual Approval Orders for oil well sites, which was not previously apparent in the example approval orders we reviewed. On January 3, 2019, the Utah Air Quality Board approved an additional rule in the Utah Administrative Code Chapter R307-500 Series (Oil and Gas) at R307-511 to manage associated gas from a completed oil well by either routing it to a process unit for combustion, routing it to a sales pipeline, or routing it to a VOC control device, except for emergency release situations.

emissions; and (2) general duty provisions to operate all process and control equipment in a manner consistent with good air pollution control practices.

As a result of Utah's oil and natural gas regulations and permitting programs, the UDEQ has mechanisms available through which it requires owners/operators of existing, new, and modified oil and natural gas sources in its jurisdiction to implement legally and practicably enforceable control requirements that reduce VOC emissions beyond what is required by applicable federal standards and permit programs, protecting air quality and providing regulatory certainty to owners/operators of oil and natural gas operations. As discussed earlier in this section, no equivalent federal regulatory counterpart to these requirements is currently available that applies to the existing minor oil and natural gas sources on the U&O Reservation.

As discussed earlier, oil and natural gas wastewater disposal facilities that reply on evaporation constitute approximately 33 percent of the VOC emissions in the Uinta Basin. The UDEQ is permitting new and modified wastewater disposal facilities that rely on evaporation through site-specific Approval Orders[81] that: require monthly water sampling from the first discharge point of wastewater to open air used to estimate emissions; (2) place limits on VOC and HAP concentrations in that discharge point; and (3) require that limits on wastewater throughput, or controls on the pretreatment, be in place before the discharge. The permits for such wastewater disposal facilities have been

[81]The UDEQ issues these site-specific permits to establish synthetic minor sources of HAP emissions using the authority in Rule R307-401. Permit: New and Modified Sources. R307-401-8 (1) The director will issue an approval order if the following conditions have been met: (a) The degree of pollution control for emissions, to include fugitive emissions and fugitive dust, is at least best available control technology.

requested by the operators and issued by the UDEQ to establish the sources as synthetic minor HAP sources to avoid major HAP source status, which would require the sources to obtain an operating permit under Title V of the CAA. Other oil and natural gas-producing states regulate wastewater disposal facilities that rely on evaporation through minor NSR permits as well. All of the wastewater disposal facilities the EPA has identified that are within Indian country on the U&O Reservation existed before the requirement to obtain a preconstruction permit under the Federal Indian Country Minor NSR Rule was effective. The federal NSR regulations at 40 CFR 52.21 (major sources) and 40 CFR 49.153 specify that sources in the oil and natural gas sector are not required to account for fugitive emissions when determining applicability to permitting requirements.[82] Such wastewater disposal facilities rarely have non-fugitive emissions units, which means they are typically considered true minor sources with respect to NSR. However, fugitive HAP emissions must be considered when determining whether a source is a major HAP source under the NESHAP at 40 CFR part 60, and, therefore, subject to the permitting requirements of the Title V Operating Permit Program at 40 CFR part 71.[83] We are looking into whether the existing wastewater disposal sources on the U&O Reservation may be subject to operating permit requirements and whether the operators may be interested in obtaining permits to establish synthetic minor sources with respect to Title V. Such a path would currently be the only authority for the EPA to control emissions from these sources on the U&O Reservation.

[82] *See* definition of *major stationary source* at 40 CFR 52.21(b)(1)(i)(c)(iii), definition of *true minor source* at 40 CFR 49.152, and Applicability at 49.153(a)(1)(i)(B).
[83] *See* 40 CFR 63.2 definition of *fugitive emissions*.

The EPA is not proposing to require emissions reductions at such wastewater disposal facilities on Indian country in this action. We are interested in information from operators of existing wastewater disposal facilities on the U&O Reservation that rely on evaporation to better understand and characterize emissions from such sources, and the particular processes being used, in order to determine the CAA permitting requirements that may apply.[84] However, we currently lack sufficient information on the efficacy and cost-effectiveness of the various wastewater management and control technologies to determine cost-effective emission control requirements that could be applied broadly on the U&O Reservation. We are seeking comment on whether to regulate wastewater disposal facility emissions in a possible future amendment to a U&O FIP. We are also soliciting input regarding feasible and cost-effective options for reducing emissions from the handling of wastewater generated in the course of oil and gas production, including information on technologies for treatment and reuse in oil and natural gas production operations or other applications.

Regarding the UDEQ's recently adopted requirements for management of associated gas from oil well sites in their permit-by-rule, the rule was approved after we drafted and evaluated the emissions reductions and costs of this proposed U&O FIP proposed provisions; therefore, we are not proposing equivalent requirements for associated gas at this time. We intend to evaluate and consider incorporating equivalent

[84] Information we are interested in obtaining, so as to improve our understanding of these existing facilities on the U&O Reservation, includes quarterly sampling and analysis of oilfield wastewater processed through facilities over a one-year period at specific locations in the process at each facility and following specific sampling protocols and analysis methods.

associated gas requirements in a final U&O FIP.

4. Developing a Consistent Set of VOC Emissions Requirements

As discussed earlier, to avoid disproportionately burdening sources seeking to develop oil and natural gas resources on the U&O Reservation, in this proposed U&O FIP we seek to establish VOC emissions control requirements consistent with those applicable to sources off the U&O Reservation. We determined that UDEQ requirements for oil and natural gas sources in the Uinta Basin are the most relevant requirements with which to seek consistency for new, modified and existing oil and natural gas equipment and activities. We also reviewed other state oil and natural gas-related regulations for areas in the region that are like the Uinta Basin in terms of industrial operations, characteristic meteorology, and air quality concerns. Specifically, we reviewed state-only rules and guidance from the Wyoming Department of Environmental Quality (WDEQ)[85] that apply statewide to oil and natural gas sources, and those that apply in the Upper Green River Basin ozone nonattainment area and the requirements of the Colorado Department of Public Health and Environment (CDPHE)[86] that apply statewide to oil and natural gas sources, and those that apply in the Denver Metro and North Front Range ozone nonattainment area. The Upper Green River Basin ozone nonattainment area and the Denver Metro and North Front Range ozone nonattainment area are two areas that

[85] "Oil and Gas Production Facilities, Chapter 6, Section 2 Permitting Guidance," WDEQ (available at *http://deq.wyoming.gov/aqd/new-source-review/resources/guidance-documents*, accessed August 19, 2019); Wyoming Nonattainment Area Regulations, Chapter 8, section 6; 020-020-008 Wyo. Code R. § 6 (2016).

[86] Statewide Controls for Oil and Gas Operations and Natural Gas-Fired Reciprocating Internal Combustion Engines, 5 Code Colo. Regs. § 1001-9 (2016).

have experienced ozone issues like those in the Uinta Basin where oil and natural gas activities have contributed to ozone nonattainment and have been addressed through state and local rules that apply to the same emission units covered by this proposed rule.

In reviewing these other state regulations, we considered whether the technologies are being commonly used and required at oil and natural gas sources in other states, so as to ensure that this proposed U&O FIP requirements are legally and practicably enforceable, as well as reasonably achievable. Based on this review, we developed requirements in this proposed U&O FIP reflecting the most relevant aspects of Utah-implemented rules and permit requirements applicable to new, modified and existing oil and natural gas sources in the Uinta Basin. However, the proposed rule's requirements are also like Colorado's and Wyoming's requirements for crude oil, condensate, and produced water storage tanks; glycol dehydrators; pneumatic pumps; closed-vent systems; enclosed combustors and utility flares; pneumatic controllers; tank truck loading and unloading; and fugitive emissions detection and repair.

In summary, a primary objective of this proposed U&O FIP is to protect air quality on the U&O Reservation. We are seeking to do so in a manner that achieves the same or consistent proposed requirements with the UDEQ's requirements for new, modified and existing sources, including for certain equipment or activities that the EPA does not regulate under its standards but which the UDEQ does regulate at existing sources. These are equipment and activities that we have identified as significant sources of VOC emissions on the U&O Reservation. For those equipment or activities, we are proposing requirements for existing sources that are the same as or consistent with the

UDEQ's established requirements for existing sources. In addition, as needed, we have consulted the EPA's standards for new and modified oil and natural gas sources, where we are proposing to regulate the same equipment at existing sources that is regulated nationally at new and modified sources. Overall, this approach, for many requirements in this proposed U&O FIP, meets our goal of regulatory consistency across the Uinta Basin. In addition, we must follow the minimum criteria in 40 CFR part 51, the CAA, and the TAR for approval of rules in either a SIP or a TIP,[87] which include adequate monitoring, recordkeeping and reporting requirements to ensure the requirements are federally enforceable as a practical matter. The RIA for this proposal contains a detailed comparison of the proposed rule requirements to the relevant state requirements reviewed.

Included in the docket for this rulemaking are copies of the UDEQ rules and other state and federal rules that we considered in this process, as well as an RIA containing a discussion comparing the requirements of those rules to the requirements in this proposed U&O FIP.

5. Consideration of Non-CAA Oil and Natural Gas Requirements

During development of this proposed U&O FIP requirements, we were mindful that some oil and natural gas sources that will be subject to the requirements of this proposed U&O FIP, if finalized as proposed, may also be subject to requirements of the Department of Interior's Bureau of Land Management (BLM) recent rule covering

[87] EPA has used the planning requirements applicable to states as a guide in developing this proposed U&O FIP.

production of oil and natural gas on federal and Indian lands.[88] The final rule, hereinafter referred to as the "2018 BLM Venting and Flaring Rule," revised a 2016 rule[89], hereinafter referred to as the "2016 BLM Venting and Flaring Rule," in a manner that reduced compliance burdens, reinstated interpretations of existing statutory authorities, and re-established longstanding requirements that had been replaced by the 2016 BLM Venting and Flaring Rule. We have reviewed the 2018 BLM Venting and Flaring Rule[90] and considered potentially overlapping requirements in development of this proposed U&O FIP. The final 2018 BLM Venting and Flaring Rule contains a general requirement that operators flare, rather than vent, gas that is not captured, requires persons conducting manual well purging to remain onsite in order to end the venting event as soon as practical, and clarifies what does and does not constitute an emergency for the purposes of royalty assessment. The 2018 BLM Venting and Flaring Rule removed in their entirety the following requirements from the 2016 BLM Venting and Flaring Rule: waste minimization plans; well drilling and completion requirements; pneumatic controller and diaphragm pump requirements; storage vessel requirements; and LDAR requirements. The 2018 BLM Venting and Flaring Rule modified and/or replaced the following requirements from the 2016 BLM Venting and Flaring Rule: gas-capture requirement – the BLM now defers to State or Tribal regulations in determining when the flaring of

[88] *See* 83 FR 49184 (September 28, 2018). Department of the Interior, BLM, Final Rule, "Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements," (hereinafter "2018 BLM Venting and Flaring Rule").
[89] *See* 81 FR 83008 (November 18, 2016). Department of the Interior, BLM, Final Rule, "Waste Prevention, Production Subject to Royalties, and Resource Conservation" (hereinafter, "2016 BLM Venting and Flaring Rule").
[90] The RIA contains additional details on our review of BLM's rules and is available in the docket for this rule (Docket ID No. EPA-R08-OAR-2015-0709).

associated gas from oil wells will be royalty-free; downhole well maintenance and liquids unloading requirements; and measuring and reporting volumes of gas vented and flared.

Since the 2018 BLM Venting and Flaring Rule removed requirements on existing activities and equipment, such as storage tanks, pneumatic pumps, pneumatic controllers, and LDAR, we do not expect the proposed FIP will overlap with the BLM rule. However, we note that if a final U&O FIP is promulgated that includes requirements for managing associated gas, as intended, we would expect that final FIP would overlap with the 2018 BLM Venting and Flaring Rule. Specifically, we would expect that oil and natural gas sources on the U&O Reservation would face some overlapping requirements if the sources are also subject to federal or Indian onshore oil and natural gas leases, or to leases and business agreements entered into by the Tribe. There would be no overlap for oil and natural gas sources on the U&O Reservation that are not subject to federal or Indian onshore oil and gas leases or tribal leases and business agreements — EPA's proposed FIP would apply and BLM's rule would not. Because some facilities that will be subject to a final U&O FIP may also be subject to this BLM rule, we will consider the requirements of the BLM rule in developing the final FIP. While our goal will be to avoid conflicts between the EPA requirements and BLM requirements, it is important to recognize that the EPA and the BLM are each operating under different statutory authorities and mandates in developing their rules. We expect sources subject to and in compliance with the control requirements in this proposed U&O FIP, that are also subject to the BLM Venting and Flaring Rule, will be able to demonstrate compliance with BLM's rule by demonstrating compliance with this proposed U&O FIP, as both were

developed by consulting other applicable federal requirements.

E. Effect on Determining Site-specific Permitting Requirements

As explained in Section IV.C., this rule is being proposed in combination with a separate action amending the National O&NG FIP to extend its construction authorization mechanism to apply on Indian country lands within the U&O Reservation that are included in the Uinta Basin Ozone Nonattainment Area until such time that this proposed U&O FIP is finalized. The National O&NG FIP provides an alternative compliance option for the requirement in the Federal Indian Country Minor NSR rule for new and modified true minor oil and natural gas sources to obtain a site-specific nonattainment permit before construction. Sources covered by the streamlined construction authorizations in the amended National O&NG FIP would not be subject to, or exempt from, other federal CAA permitting requirements, such as the Title V Operating Permit Program at 40 CFR part 71 or this proposed U&O FIP. Sources complying with the amended O&NG FIP will be able to take into account any VOC emission reductions from any required controls under this proposed U&O FIP when calculating their PTE for determining applicability of the particular permitting requirements to new, modified and existing sources. Some sources' PTE for VOC, or any other regulated NSR and/or Title V pollutant, may exceed the applicability thresholds for PSD, Federal Indian Country Minor NSR rule, or Title V permitting requirements even after complying with this proposed rule (when finalized). In such cases, the owners or operators of these sources will be required to apply for and obtain appropriate permits before construction.

F. Evaluation of Emissions Impacts of the Proposed Rule

The EPA has reviewed and quantified the estimated emissions impacts from the emissions control measures proposed in this proposed U&O FIP using the 2014 Uinta Basin Emission Inventory. We expect that the VOC reductions achieved by this proposed U&O FIP will be beneficial for reducing ambient ozone and HAP levels and the severity of any exceedances of the 8-hour ozone NAAQS that may occur at any time of the year. We are proposing a requirement for owners/operators to submit emissions inventories on a triennial basis and will monitor changes in the inventory along with monitoring ozone concentrations. Supporting air quality information is discussed in the RIA for this rule.[91]

In our existing source emissions data review, we have determined that a proposed requirement to at least a 95.0 percent VOC control efficiency continuously for emissions from existing storage tanks, glycol dehydrators and pneumatic pumps, and a proposed fugitive emissions monitoring program at existing oil and natural gas sources, will result in a reduction of VOC emissions of approximately 20,000 tpy. This number represents a 28 percent reduction of oil and natural gas-related VOC emissions on the U&O Reservation (relative to the total oil and natural gas-related VOC emissions for the Uinta Basin of more than 71,000 tpy per the 2014 Uinta Basin Emissions Inventory). In addition, this proposed U&O FIP represents an overall 26 percent reduction in total oil and natural gas sector VOC emissions relative to the inventory for the entire Uinta Basin. Relative to the 2014 NEI, the proposed VOC reductions represent a 15 percent reduction

[91] The RIA includes a more detailed explanation of the air quality impacts of the proposed rule. It can be found in the docket for this rule (Docket ID No. EPA-R08-OAR-2015-0709).

in total VOC emissions for all source sectors for the Basin, but a 25 percent reduction during winter (excluding biogenic sources — *see* Section III.E) for the Basin.

The EPA estimates that the proposed rule will result in a reduction of approximately 2,200 tpy of HAP and 59,000 tpy of methane as "co-benefits,"[92] as the emission reduction requirements to reduce VOC emissions also reduce HAP and methane concentrations in the gases routed to them at proportional rates, and in some cases conserve that gas stream for market rather than burn it in a control device. Estimates of how much gas would be conserved are discussed later in Section IV.G. and in the RIA.

The use of combustors or flares to control VOC emissions generates associated, unintended emissions of NO_x and CO as part of the combustion process. The EPA estimates that there would be an associated increase of 93 tpy of NO_x and 427 tpy of CO from the use of combustion devices.[93] When these emissions are distributed across the sources that would be required to install a combustion device, the emissions per source are very low. The estimated emissions per source for both pollutants are substantially lower than the 10 tpy threshold that triggers the requirement for minor sources to obtain a permit under the Federal Indian Country Minor NSR rule.[94] Therefore, we are not concerned that the increases in NO_x and CO emissions would adversely impact the NO_2 or CO NAAQS.

[92] The RIA includes a more detailed explanation of the air quality and climate benefits of the proposed rule. It can be found in the docket for this rule (Docket ID No. EPA-R08-OAR-2015-0709)
[93] The RIA includes a more detailed explanation of the air quality impacts of the proposed rule. It can be found in the docket for this rule (Docket ID No. EPA-R08-OAR-2015-0709).
[94] The RIA, accessible in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709), contains additional discussion regarding NO_x and CO emissions resulting from combustion in relation to the NO_2 and CO NAAQS.

G. Costs and Benefits of the Proposed Rule

To estimate the total cost of the proposed rule, as well as dollar-per-ton VOC control cost effectiveness, the EPA relied on existing cost analyses completed to support the 2015 NSPS OOOO revisions and NSPS OOOOa,[95] and the 2012 Colorado Regulation 7.[96] To estimate the number of sources and equipment impacted by this proposed U&O FIP, the EPA relied on the 2014 Uinta Basin Emissions Inventory. An operator's existing fleet of sources, site-specific conditions, and existing control equipment will affect the annual cost impact on a given operator and is expected to be variable. Additionally, the strategies and controls required by this proposed U&O FIP will result in the recovery and sale of gas that would otherwise be vented to the atmosphere. These savings are included in the cost analysis and will increase the cost effectiveness of the rule. The complete cost analysis by the EPA to support this proposed U&O FIP is included in the RIA for this rule.[97]

Based on the 2014 Uinta Basin Emissions Inventory, 2,524 of the estimated 6,739 total existing sources on Indian country lands within the U&O Reservation are likely to be impacted at least in part by the requirements in this rulemaking for existing sources. A breakdown of the estimated number of sources impacted by this proposed U&O FIP and how they are affected is presented in Table 2.

[95] RIA of the Proposed Emission Standards for New and Modified Sources in the Oil and Natural Gas Sector, Docket ID No. EPA-HQ-OAR-2010-0505, accessible at *http://www.regulations.gov* or *https://www3.epa.gov/ttnecas1/regdata/RIAs/egughgnspsproposalria0326.pdf*, accessed August 19, 2019.
[96] Final Economic Impact Analysis per § 25-7-110.5(4), C.R.S. For Proposed revisions to Colorado Air Quality Control Commission Regulation Number 7 (5 CCR 1001-9), January 30, 2014, available in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).
[97] The RIA, accessible in the docket for this rulemaking includes a more detailed explanation of costs and benefits (Docket ID No. EPA-R08-OAR-2015-0709).

Table 2. Existing Sources Affected by Proposed Rule

Proposed Rule Requirement:	Estimated Sources Affected
Add a combustor to comply with FIP	2,064
Retrofit existing flare with auto igniter to comply with FIP	460
Conduct LDAR at well sites to comply with FIP	2,079
Conduct LDAR at compressor stations to comply	8
Retrofit existing high-bleed pneumatic controllers to low-bleed (1,503 units) to comply with FIP	1,503 units[98]
Comply with one or more requirements of the rule	2,524

Using the EPA and Colorado control cost estimates, the EPA estimates the total capital cost of this proposed U&O FIP will be $280 million (incurred during the first three years of compliance, 2019-2021) and the total annualized engineering costs of implementing all of the controls outlined in this proposed U&O FIP is estimated to be $68 million in 2021[99] when using a 7 percent discount rate and $60 million when using a 3 percent discount rate.[100] All costs and benefits are in 2016 US dollars unless stated

[98] This is the count of the total number of high-bleed pneumatic controllers in the 2014 Uinta Basin Emissions Inventory, which is what the total annualized cost to retrofit to low-bleed controllers is based on. We elected to not determine how the controllers are distributed across the sources on the U&O Reservation, because it was not necessary for calculating costs.

[99] This estimate includes the costs of necessary recordkeeping and reporting for compliance with the proposed requirements. It is expected that maximum cost impacts to industry will occur during the first calendar year of full compliance following the effective date of the rule and will decrease in future years. Assuming the final rule is promulgated and effective by the end of 2018, full compliance under this proposed U&O FIP would be required by 2021 in the worst-case scenario, taking into account the maximum extension of the compliance deadline that the EPA anticipates might be granted with sufficient justification from an operator. Therefore, the cost year analyzed was 2021 for this proposed U&O FIP. The RIA, accessible in the docket for this rulemaking includes a more detailed explanation of benefits and costs (Docket ID No. EPA-R08-OAR-2015-0709).

[100] Estimated costs are for retrofitting existing sources only. We did not calculate costs for new or modified sources, because we presumed those sources would be required to implement the proposed controls if they were required to obtain a site-specific permit, rather than the streamlined construction authorization mechanism of the amended National O&NG FIP that is being extended to the portions of the Uinta Basin Ozone Nonattainment Area that include Indian country within the U&O Reservation.

otherwise. Revenues from additional recovered natural gas are estimated at $3.5 million in 2021, assuming a wellhead natural gas price of $4.00 per thousand cubic feet, as the EPA estimates that approximately 885 million cubic feet of natural gas will be recovered in 2021 by implementing this proposed U&O FIP. When estimated revenues from additional natural gas recovery are included, the annualized engineering costs of this proposed U&O FIP are estimated to be $64 million in 2021 when using a 7 percent discount rate and $56 million when using a 3 percent discount rate.

As mentioned earlier, the total emissions reductions expected under the proposed control requirements for existing sources are estimated to be approximately 20,000 tpy[101] of VOC: about 6,100 tpy from controlling emissions from storage tanks, about 3,400 tpy from controlling emissions from glycol dehydrators, and about 6,700 tpy from controlling emissions from pneumatic pumps. We assume that all emissions will be routed to a combustor that will be designed and operated to continuously to meet at least a 95.0 percent VOC control efficiency. For the remainder of the emission reductions, approximately 1,400 tpy of VOC emissions are achieved by implementing an LDAR program and about 2,000 tpy of VOC emissions by retrofitting or replacing high-bleed pneumatic controllers with low-bleed. It should be noted that the 2014 Uinta Basin Emissions Inventory has not included a methodology to account for the phenomenon of "super-emitters" or fat-tail emission distribution that is typically a result of abnormal process conditions. Emissions resulting from this phenomenon are discussed in more

[101] The numbers do not sum to exactly 20,000 due to rounding. All values have been individually rounded to two significant figures.

detail later in Section V.F. Implementing an LDAR program would result in emissions reductions that include these emissions.

Using the total annualized cost of $68 million and applying a 7 percent discount rate, the cost of control is estimated to be $3,400 per ton of VOC reduced without accounting for product recovery savings. Using $64 million at a 7 percent discount rate, the control cost is estimated to be $3,300 per ton of VOC reduced when additional revenue from product recovery is included. Using the total annualized cost of $60 million at 3 percent discount rate, the cost of control is estimated to be $3,000 per ton of VOC reduced without accounting for product recovery savings; using $56 million at a 3 percent discount rate, it is estimated to be $2,900 per ton of VOC reduced.

We predict that there will be ozone and $PM_{2.5}$ health benefits from VOC reductions, as well as co-benefits for climate from methane reductions and co-benefits for human health and ozone from HAP reductions. These "co-benefits" would occur because the control techniques to meet the standards simultaneously reduce VOC, methane, and HAP emissions at proportional rates. As mentioned earlier, this proposed U&O FIP is anticipated to reduce 59,000 tons of methane and 2,200 tons of HAP per year starting in the first year of full compliance (2021). The annual CO_2-equivalent (CO_2 Eq.) methane emission reductions are estimated to be 1.3 million metric tons by 2021. These pollutants are associated with substantial health, welfare, and climate effects, which these emissions reductions will help mitigate. Climate-related benefits from methane emission reductions are monetized using an interim estimate of the domestic social cost of methane,

developed under Executive Order 13783.[102] By 2021, the annual domestic climate-related benefits of the proposed action are estimated to be $10 million using a 3 percent discount rate and $2.9 million using a 7 percent discount rate.[103] The HAP reduced as a result of reducing VOC emissions come primarily from the reductions in glycol dehydrator emissions. Reduction of these HAP are particularly effective for two reasons: (1) reduced exposure will result in air toxics-related health benefits; and (2) those HAP are highly reactive VOC that more readily form ozone, so reductions of those HAP are expected to proportionately have a greater influence on reducing ozone than reductions in other VOC. The specific control techniques for this proposed U&O FIP are anticipated to have minor emissions disbenefits (*e.g.*, increases in emissions of NO_x and CO related to combustion of VOC).

The RIA[104] for the recently revised ozone NAAQS contains a detailed discussion of the current state of knowledge on the health benefits associated with reducing ambient levels of ozone air pollution. When we describe ozone health benefits, we generally group them in two categories: (1) reduced incidence of premature mortality from exposure to ozone; and (2) reduced incidence of morbidity from exposure to ozone. Reductions in premature mortality can occur either as a result of reductions in short term exposures to ozone, which can benefit people of all ages, or as a result of reductions in

[102] See the RIA for more detailed information.
[103] The RIA, accessible in the docket for this rulemaking includes a more detailed explanation of the climate-related benefits (Docket ID No. EPA-R08-OAR-2015-0709)
[104] "Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone," U.S. Environmental Protection Agency, EPA-452/R-15-007, September 2015, *https://www.regulations.gov/document?D=EPA-HQ-OAR-2013-0169-0057*, accessed August 16, 2019.

lifetime exposures to ozone (age 30 to 99). Reduced morbidity from reduced exposure can occur through reduced: (1) hospital admissions for respiratory reasons (age > 65); (2) emergency department visits for asthma (all ages); (3) asthma exacerbation (age 6-18); (4) minor restricted-activity days (age 18–65); and (5) school absence days (age 5–17).

We have not quantified the monetary benefits of the VOC emissions reductions in the proposed rule and are including only a qualitative discussion of the benefits of the expected reductions in ozone and $PM_{2.5}$ levels, for the reasons in the following discussion. In other ozone-related rulemakings, when adequate data have been available, the EPA has quantified several health effects and monetized benefits of VOC reductions associated with exposure to ozone and $PM_{2.5}$. Including only a qualitative discussion of benefits does not imply that these benefits do not exist, but merely that the agency does not have enough data to quantitatively support such a discussion. However, we expect that significant reductions in VOC emissions will result in corresponding reductions in ozone formation and the health and welfare effects associated with exposure to ozone.

As explained previously, research studies have shown that ozone levels in the Uinta Basin are most significantly influenced by VOC emissions from the accumulation of existing minor oil and natural gas production operations. However, although we expect significant VOC emissions reductions, which will result in improvements in air quality and will reduce the health and welfare effects that are associated with exposure to ozone, fine particulate matter ($PM_{2.5}$), and HAP, we have determined that the VOC-related health benefits cannot be quantified (and thus, monetized) for the elevated winter ozone observed in the Uinta Basin, because current modeling tools using the NEI are not

sufficient to properly characterize ozone and $PM_{2.5}$ formation for these winter ozone episodes due to uncertainties in quantifying the local emissions from oil and gas operations. Existing air quality modeling and measurement studies specific to the Uinta Basin indicate that air quality models that use the 2011 NEI underestimate the monitored elevated winter VOC and ozone concentrations. Air quality model sensitivity simulations for the Uinta Basin have shown that models can reproduce monitored ozone levels when oil and gas emissions are increased to match monitored VOC levels; thus, it is believed that models using the 2011 NEI fail to simulate observed VOC and ozone levels because of ongoing uncertainties in quantifying the local emissions from oil and natural gas operations.[105] But regardless of the quantitative uncertainties, we expect that reductions in ambient VOC emissions will result in reductions in winter ozone.[106] Any reductions in ambient ozone levels in the Uinta Basin are expected to lead to reductions in related adverse public health and welfare effects associated with exposure to ozone and is

[105] Matichuk, R., Tonnesen, G., Luecken, D., Gilliam, R., Napelenok, S. L., Baker, K. R., Schwede, D., Murphy, B., Helmig, D., Lyman, S.N., Roselle, S. (2017). Evaluation of the Community Multiscale Air Quality Model for simulating winter ozone formation in the Uinta Basin. Journal of Geophysical Research: Atmospheres, *122,* available in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709) . Like the Uinta Basin Ozone Studies discussed earlier, the EPA study found that modeled ozone was strongly sensitive to changes in VOC emissions, and that when oil and gas VOC emissions were increased sufficiently such that the model matched the measured VOC concentrations, the model also reproduced the observed peak ozone concentrations. For oil and natural gas sources in the Uinta Basin we are confident that the 2011 NEI underestimates VOC and HAP emissions. We are also confident that the 2014 NEI, though it was not used in the EPA study, underestimates VOC and HAP emissions. For this and other reasons that are discussed in more detail in the RIA, we are unable to conduct photochemical modeling to quantify the impacts of this rule's proposed VOC emissions reductions on winter ozone air quality in the Uinta Basin.

[106] The RIA includes a more detailed discussion of the expected air quality benefits and impacts (Docket ID No. EPA-R08-OAR-2015-0709).

expected to meaningfully aid in compliance with the ozone NAAQS for the Uinta Basin.[107]

To improve our ability to quantify these benefits in the future, work is in progress to enhance emissions inventories in the Basin using improved activity data, additional sources such as wastewater evaporation ponds, and updated estimates of speciation from storage tank emissions. Most recently, inventories were developed from operator supplied activity and emissions information for 2014 and 2017. Additionally, the EPA will continue to work with the Utah DAQ, the Ute Tribe, and industry to collect comprehensive oil and natural gas emissions inventories for the Uinta Basin. Future EPA work will focus on improving the emissions factors and speciation profiles used in the development of emissions inventories – efforts that will help improve air quality model performance.

Considering all the quantified costs and benefits of this rule, including the revenues from recovered natural gas that would otherwise be vented, the quantified equivalent annualized costs (the difference between the monetized benefits and compliance costs) are estimated to be negative $39 million in 2021 using a 3 percent interest rate and negative $46 million in 2021 using a 7 percent interest rate.[108] In light of the many unquantified but real and meaningful benefits noted above, the actual

[107] The EPA discussed this position in detail when promulgating the NSPS OOOO revisions and NSPS OOOOa, as well as when promulgating the final revised ozone NAAQS, concluding that the available VOC benefit-per-ton estimates are not appropriate to calculate monetized benefits of those rules, even as a bounding exercise. The dockets for both proposed rulemakings are available at *http://www.regulations.gov*, Docket ID No. EPA-HQ-OAR-2010-0505-4776 and Docket ID No. EPA-HQ-OAR-2008-0699-4458.
[108] The RIA in the docket for this rulemaking discusses this calculation in detail.

equivalent annualized costs are expected to be much less. We cannot estimate these costs with any confidence.

We are soliciting comment on all assumptions used to calculate costs and effectiveness of proposed control requirements, and benefits of the emissions reductions, all of which are detailed in the RIA and other supporting documentation available in the docket for this proposed U&O FIP.

V. Summary of FIP Provisions

This proposed rule would apply to owners or operators of oil and natural gas sources that either produce oil and natural gas or process natural gas and that are located on Indian country lands within the U&O Reservation that meet the applicability criteria specified for each set of requirements.

This proposed U&O FIP includes the following provisions:

49.4169 Introduction

49.4170 Delegation of authority of administration to the tribe

49.4171 General provisions

49.4172 Emissions Inventory

49.4173 Nonattainment Requirements for New or Modified True Minor Oil and Natural Gas Sources

49.4174 VOC emission control requirements for storage tanks

49.4175 VOC emission control requirements for dehydrators

49.4176 VOC emission control requirements for pneumatic pumps

49.4177 VOC emission control requirements for covers and closed-vent systems

49.4178 VOC emission control devices

49.4179 VOC emission control requirements for fugitive emissions

49.4180 VOC emission control requirements for Tank Truck Loading

49.4181 VOC emission control requirements for pneumatic controllers

49.4182 Other combustion devices

49.4183 Monitoring requirements

49.4184 Recordkeeping requirements

49.4185 Notification and reporting requirements

We do not expect a substantial number of oil and natural gas sources subject to this proposed U&O FIP's requirements to also be subject to NSPS OOOO or OOOOa, or NESHAP HH. However, to alleviate some of the regulatory burden of this proposed U&O FIP, we are proposing that any equipment or activities affected by any requirement in this proposed U&O FIP that are subject to the substantive emissions control requirements in the EPA standards, as appropriate, will not be subject to this proposed U&O FIP's substantive emissions control requirements for such equipment and activities. As an example, given the proposed exemptions, as a practical matter, a new or modified oil and natural gas source on the U&O Reservation that has storage tanks, glycol dehydrators, pneumatic pumps and fugitive emissions components and the storage tanks, pneumatic pumps and fugitive emissions components are subject to the emissions control requirements of NSPS OOOOa, then that source would be subject to the substantive emissions control requirements for glycol dehydrators in the FIP, but not to the FIP's substantive emissions control requirements for storage tanks, pneumatic pumps or

fugitive emissions components.

A. Introduction

We are proposing in § 49.4169 (Introduction) to specify: (1) the purpose of this proposed U&O FIP; (2) the general applicability to the provisions of this proposed U&O FIP; and (3) the compliance schedule for this proposed U&O FIP.

We are proposing text that: (1) establishes provisions for delegation of authority to allow the Ute Indian Tribe to assist the EPA with administration of this proposed U&O FIP in § 49.4170; (2) establishes general provisions and definitions applicable to oil and natural gas sources in § 49.4171; (3) establishes a requirement for oil and natural gas sources to submit emissions inventories on a triennial basis, beginning with an inventory for calendar year 2017 in § 49.4172; (4) establishes in § 49.4173 enforceable requirements to control emissions of VOC and other pollutants from new and modified true minor oil and natural gas sources in the oil and natural gas production and natural gas processing segments of the oil and natural gas sector that commence construction on or after the effective date of this proposed U&O FIP, unless the source obtains a site-specific construction permit, or is otherwise required to obtain a site-specific permit by the Reviewing Authority, in accordance with 40 CFR 49.151 through 49.161; and (5) establishes in §§ 49.4174 through 49.4185, enforceable requirements to control and reduce VOC emissions from oil and natural gas well production and storage operations, natural gas processing, and gathering and boosting operations at oil and natural gas sources that are located on Indian country lands within the U&O Reservation.

We may issue a final action based on this proposal as soon as the date of

publication of a final U&O FIP. We believe that there may be "good cause," within the meaning of 5 U.S.C. 553(d)(3), to make the final rule effective as soon as it is published, if that is needed to ensure that this rule begins to provide emission reductions before the next winter ozone season. As discussed above in section II.D., winter ozone in the Uinta Basin is a serious public health problem, which this proposed rule is intended to help address.

In addition, the reductions provided by this rule are an integral part of the Agency's strategy to address the air quality problem on the U&O Reservation while maintaining a permitting mechanism that allows appropriate continued oil and natural gas production. The primary other component of that strategy is a separate action to amend the National O&NG FIP to extend its geographic coverage to the Indian country portions of the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area. Over the long term, we are relying on the VOC emissions reductions in this action to support this extension of the scope of the National O&NG FIP. Accordingly, if making this rule effective on publication is necessary to begin effecting VOC emission reductions before the next winter ozone season, then doing so will help ensure that the amendment to the National O&NG FIP is compatible with air quality improvement on the U&O Reservation.

Accordingly, the EPA proposes to find that there is good cause to make the final action based on this proposal effective on the date of publication of the final rule. We invite comment on this proposed approach.

We are proposing that compliance with the rule for oil and natural gas sources

that commence construction on or after the effective date of the final rule would be required upon startup. Compliance for sources that are existing as of the effective date of the final rule would be required no later than 18 months after the effective date of the final rule. We concluded that it is important to allow owners/operators of existing sources a reasonable period of time to conduct any necessary retrofit-related activities, such as (1) acquiring control devices, (2) conducting manufacturer-recommended testing to be compliant with the proposed requirements, and (3) securing the necessary trained personnel to install compliant devices and associated piping and instrumentation. We expect that there will be about 2,100 existing oil and natural gas sources that may require equipment retrofit and installation of VOC emission control equipment (combustor controls) under the proposed rule. Additionally, we estimate that a total of approximately 1,500 high-bleed pneumatic controllers will need to be retrofitted to low- or no-bleed. We have determined that providing 18 months from the effective date of the final rule to install retrofits at existing sources is a reasonable amount of time for efficient, cost-effective project planning that accounts for a level, sustained equipment and labor resource demand that can be supported by the vendor community.[109]

This assessment is supported by what we have learned about the time needed for sources in Utah-regulated areas to comply with Utah's requirements for oil and natural gas sources. In particular, we have been informed by UDEQ compliance staff that the

[109] We recognize that 18 months is a tighter compliance timeframe than is required in NESHAP regulations, which is typically 3 years. The purpose of this proposed U&O FIP, though, is to address air quality in a timely fashion. Moreover, the proposal allows sources to request extensions of the compliance date beyond the 18 months as needed.

majority of existing oil and natural gas sources that have been required to install VOC emission control retrofits in State of Utah jurisdictions have completed the required retrofits within 9 months of the effective dates of their minor source approval orders, ahead of the 18-month deadline in UDEQ approval orders for operators to notify the UDEQ of the status of retrofit construction.[110] However, there are many more existing oil and natural gas sources on the U&O Reservation that would be required to install retrofits to control emissions from storage tanks, glycol dehydrators, and pneumatic pumps under this proposed U&O FIP than are estimated to be subject to equivalent requirements in UDEQ jurisdiction. The UDEQ estimates that approximately 1,600 existing sources have been required to control emissions from storage tanks, glycol dehydrator, and/or pneumatic pumps on non-Indian country lands in the Uinta Basin, while we estimate there are approximately 2,100 sources on Indian country lands within the U&O Reservation that would be subject to such requirements in this proposed U&O FIP. Therefore, it is likely owners/operators may need longer than 9 months to complete the necessary retrofits to the greater number of Indian country sources. The 18-month compliance schedule in this proposed U&O FIP will allow time for operators to conduct the necessary retrofits, while at the same time starting to achieve VOC emissions

[110] Email correspondence with UDEQ staff regarding their source inventory and experiences regulating existing oil and natural gas sources in State of Utah jurisdiction is included in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709). UDEQ compliance staff target each new approval order for inspection within 18 months of the date it is issued. They document the status of construction at the time of inspection and note whether the permitted source has provided a notification of construction status, which is required within 18 months of the date the approval order is issued. UDEQ compliance staff have inspected hundreds of such existing oil and natural gas sources without observing any compliance issues with the 18-month notification requirement. While UDEQ compliance staff do not compile this information into any readily available summary format, details about the status of construction are included in the inspection report for each source.

reductions as soon as practicable, so that the reductions will have a timely, beneficial impact on air quality and human health and progress toward attaining the ozone NAAQS.

We are also proposing to allow an owner or operator to submit a written request to the EPA for an extension of the compliance deadline for existing sources, which must include a detailed explanation of the reason for the request. Any approval or denial of an extension request, including the length of any approved extension, will be based upon the merits of each case. Factors that the EPA will consider in deciding whether to grant an extension request under the proposed provision include the economic and technical feasibility of meeting this proposed U&O FIP's control requirements in the timeframe prescribed in it. We are seeking comment on the proposed compliance schedules, or alternative compliance schedules that may be more appropriate, including information that supports the proposed time period or a different time period, such as data on average times to acquire, install, and test or obtain manufacturer certification of compliant control devices.

B. Provisions for Delegation of Administration to the Tribe

We are proposing in § 49.4170 (Delegation of Authority of Administration to the Tribe) to establish the steps by which the Ute Indian Tribe may request delegation to assist us with the administration of this rule and the process by which the Regional Administrator of EPA Region 8 may delegate to the Ute Indian Tribe the authority to assist with such administration. As described in the regulatory provisions, any such delegation will be accomplished through a delegation of authority agreement between the Regional Administrator and the Tribe. This section would provide for administrative

delegation of this federal rule and does not affect the eligibility criteria under CAA section 301(d) and 40 CFR 49.6 for TAS should the Ute Indian Tribe decide to seek such treatment for the purpose of administering their own EPA-approved TIP under tribal law. Administrative delegation is a separate process from TAS under the TAR. Under the TAR, Indian tribes seek the EPA's approval of their eligibility to implement CAA programs under their own laws. The Ute Indian Tribe will not need to seek TAS under the TAR for purposes of requesting to assist us with administration of this rule through a delegation of authority agreement. If delegation does occur, the rule would continue to operate under federal authority on Indian country lands within the U&O Reservation, and the Ute Indian Tribe would assist us with administration of the rule to the extent specified in the agreement.

C. General Provisions

We are proposing in § 49.4171 (General Provisions): (1) a requirement to design, operate, and maintain all equipment used for hydrocarbon liquid and gas collection, storage, processing, and handling operations covered under this rule, in a manner consistent with good air pollution control practices and that minimizes leakage of VOC emissions to the atmosphere; (2) definitions; (3) assurances that, in order to ensure compliance, we will maintain our authority to require testing, monitoring, recordkeeping, and reporting in addition to that already required by an applicable requirement in a permit to construct or permit to operate; and (4) assurance that nothing in the rule will preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the

appropriate performance or compliance test had been performed.

D. Emissions Inventory Requirements

We are proposing in § 49.4172 a requirement for owners/operators of oil and natural gas sources with the potential to emit one or more NSR-regulated pollutants at levels greater than one tpy to submit an annual emissions inventory once every three years, that covers emissions from the previous calendar year, beginning with calendar year 2017. This requirement will suffice for the purpose of continued updates to the comprehensive Uinta Basin oil and natural gas emissions inventory effort by the UDEQ, Ute Indian Tribe and the EPA. Owners/operators will be required to submit actual emissions for each emissions unit at each oil and natural gas source covered by the requirement in a standard format specified by the Regional Office and available on our website by the effective date of the final rule. The format will be consistent with the format used by the UDEQ to collect information from sources outside of Indian country lands within the U&O Reservation.

E. Compliance with the National Indian Country Oil and Natural Gas Federal Implementation Plan for New and Modified True Minor Oil and Natural Gas Sources in the Uinta Basin Ozone Nonattainment Area

From a regulatory standpoint, the effect of this action is to shift the requirement for compliance with the National O&NG FIP from one part of the CFR to another. Currently, new and modified true minor oil and natural gas sources proposing to locate or expand on Indian country lands within the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area must comply with the National O&NG FIP, as a result

of the recent action we took amending that FIP. The provisions of the National O&NG FIP that the recent action requires compliance with concern 40 CFR 49.101 through 49.105. This proposed action merely shifts these requirements located at 40 CFR part 49, subpart C, to 40 CFR part 49, subpart K, as part of this proposed U&O FIP, for the reasons stated previously. Additionally, these sources are also subject to applicable requirements in the Federal Indian Country Minor NSR Rule also found in subpart C at 40 CFR 49.151 through 49.161, including the 2-part registration requirement.

In § 49.4173 (Compliance with the National Indian Country Oil and Natural Gas Federal Implementation Plan for New and Modified True Minor Oil and Natural Gas Sources in the Uinta Basin Ozone Nonattainment Area), we are proposing that new and modified true minor oil and natural gas sources proposing to locate or expand on Indian country lands within the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area continue to permanently comply with the National O&NG FIP (excluding § 49.101(d), which indicates that the National O&NG FIP does not apply in nonattainment areas), unless the owner or operator of a source opts out of the National O&NG FIP's permitting approach or is otherwise required by the EPA to obtain a site-specific minor source permit according to the Federal Indian Country Minor NSR Program at 40 CFR part 49. For the purposes of this proposed rule, a new or modified true minor oil and natural gas source is one constructed or modified on or after the effective date of this proposed U&O FIP. This continued permanent application of the National O&NG FIP to the Indian country lands within the U&O Reservation that are included in the Uinta Basin Ozone Nonattainment Area covers only new and modified

true minor oil and natural gas sources in the oil and natural gas production and natural gas processing segments of the oil and natural gas sector.

Applying the requirements of the National O&NG FIP to the Uinta Basin Ozone Nonattainment Area fulfills the EPA's obligation under the Federal Indian Country Minor NSR rule to issue minor source NSR pre-construction permits when combined with the existing source emissions reductions that would be required by this proposed U&O FIP. The EPA is seeking comment only on the proposal to continue to permanently apply the National O&NG FIP to sources on Indian country lands within the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area; we are not re-proposing for comment the requirements of the National O&NG FIP.

The National O&NG FIP provides an efficient and effective, alternative approach that fulfills the minor NSR permitting requirement, while also ensuring air quality protection through requirements that are unambiguous and legally and practicably enforceable. The National O&NG FIP approach is also transparent to the public; it is clear to the public what requirements apply. The National O&NG FIP reduces burden for sources and the Reviewing Authority and minimizes potential delays in new construction due to compliance with the minor NSR permitting obligation.

Upon application of the National O&NG FIP to the Indian country lands within the U&O Reservation that are part of the Uinta Basin Ozone Nonattainment Area, new and modified true minor sources will have to address three sets of requirements.

First, under the National O&NG FIP that applies to new and modified true minor sources on the Indian country portions of the U&O Reservation that are part of the Uinta

Basin Ozone Nonattainment Area, compliance with eight federal standards is required for the following equipment in the oil and natural gas production and natural gas processing segments of the oil and natural gas sector: compression ignition and spark ignition engines; process heaters; combustion turbines; fuel storage tanks; glycol dehydrators; completion of hydraulically fractured oil and natural gas wells; reciprocating and centrifugal compressors (except those at well sites); pneumatic controllers; pneumatic pumps; storage vessels; and fugitive emissions from well sites, compressor stations, and natural gas processing plants.

Sources must comply with all of the provisions of the eight federal standards (unless a provision is specifically excluded), as applicable to oil and natural gas sources under each standard: (1) 40 CFR part 63, subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; (2) 40 CFR part 63, subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines; (3) 40 CFR part 60, subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines; (4) 40 CFR part 60, subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines; (5) 40 CFR part 60, subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984; (6) 40 CFR part 60, subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18,

2015; (7) 40 CFR part 63, subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities; and (8) 40 CFR part 60, subpart KKKK, Standards of Performance for New Stationary Combustion Turbines.

Under the National O&NG FIP, true minor sources must comply with these standards, as they currently exist or as amended in the future, except for those provisions specifically excluded under the National O&NG FIP (and unless the source opts out of the FIP and obtains a site-specific permit or is otherwise required to obtain a site-specific permit by the Reviewing Authority). New and modified sources subject to the National O&NG FIP would be subject to any future changes to the eight underlying EPA standards only if they undergo a future minor modification as a true minor source and would otherwise be subject to those future changes. To help understand the requirements of the National O&NG FIP, you may wish to review the provisions for each of the eight federal rules (*i.e.,* five NSPS and three NESHAP) identified in the National O&NG FIP. (The National O&NG FIP does not change the applicability of the specified standards, nor does it relieve sources subject to the standards from complying with them, independently of that FIP.)

It is important to note that compliance with these eight standards in the National O&NG FIP would not relieve the owners/operators of oil and natural gas sources from the obligation to comply with the proposed requirements of §§ 49.4169 through 49.4171 and 49.4174 through 49.4185, as applicable. Those proposed U&O Reservation-specific requirements would apply to sources regardless of whether they are existing, new or modified. Because the proposed U&O Reservation-specific requirements would exempt

affected emissions units or activities that are subject to and controlled according to equivalent NSPS requirements, we expect that duplicative requirements will be avoided. Further we expect that the emissions reductions achieved from existing sources complying with those proposed U&O Reservation-specific requirements will provide justification for the proposed approval of new or modified true minor oil and natural gas sources on the U&O Reservation through the National O&NG FIP.

Second, under the Indian Country Minor NSR rule (§ 49.160(c)), new and modified sources subject to the National O&NG FIP must satisfy the requirement for two-part registration by using the two registration forms provided by the EPA[111] rather than a permit application (as mentioned earlier in Section IV.C). The registration forms contain the information required in § 49.160(c)(2). True minor sources complying with the National O&NG FIP must submit the Part 1 Registration Form, with the information required by § 49.160(c)(2), at least 30 days before beginning construction. The Part 2 Registration Form must be submitted within 60 days after the "startup of production" as defined in § 49.152(d). The source must determine the potential for emissions within 30 days after startup of production. The combination of the Part 1 and Part 2 Registration Forms submittal satisfies the requirements in § 49.160(c)(2). The forms are submitted instead of the application form otherwise required in § 49.160(c)(1)(iii). After being reviewed by the permitting authority, completed registration forms will be available online on the appropriate EPA Regional Office website.

[111] The registration forms are available at: https://www.epa.gov/tribal-air/tribal-minor-new-source-review (accessed August 16, 2019) or from the EPA Regional Offices.

Finally, under the National O&NG FIP, before beginning construction new and modified sources must document that potential impacts on threatened and endangered species and historic properties (collectively referred to as "protected resources") have been assessed. 40 CFR 49.104. The section provides two options for documenting this assessment: (1) submittal of documentation to the EPA Regional Office (and to the relevant tribe for the area where the source is located or locating) that a site-specific assessment conducted by another federal agency has been completed for the specific oil and natural gas activity, and that the owner/operator meets all air quality-related requirements as specified within all documents/approvals obtained through that assessment (these requirements are typically implemented and enforced as conditions of an approved Surface Use Plan of Operations and/or Application for Permit to Drill);[112] or (2) submittal of documentation to the EPA Regional Office (and to the relevant tribe for the area where the source is located or locating) demonstrating that the source has completed the screening processes specified by the EPA for consideration of threatened and endangered species and historic properties and received a written determination from the EPA stating that it has satisfactorily completed these processes.[113]

We are taking comment on this approach of shifting compliance with the

[112] This assessment will typically be conducted through the National Environmental Policy Act process and result in either a Record of Decision or a Finding of No Significant Impact document.

[113] This process of source documentation submittal and the EPA's confirmation that it has satisfactorily completed the procedures must occur before the source submits its Part 1 Registration Form pursuant to § 49.160(c)(1)(iv). These processes are contained in "Procedures to Address Threatened and Endangered Species and Historic Properties for the Federal Implementation Plan for Managing Air Emissions from True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector," available at https://www.epa.gov/tribal-air/tribal-minor-new-source-review.

National O&NG FIP for new and modified true minor oil and natural gas sources on the U&O Reservation portions of the Uinta Basin Ozone Nonattainment Area from 40 CFR part 49, subpart C to 40 CFR part 49, subpart K as part of this proposed U&O FIP, in addition to the proposed VOC emissions reduction requirements in the proposed U&O FIP.

F. VOC Emissions Control Requirements

The discussion in this subsection details the proposed VOC emissions control requirements and how they compare to existing state and federal requirements for the equipment and activities listed in Table 3. The most notable difference between the proposed VOC emissions control requirements for this FIP and the Utah Oil and Gas Rules and Utah Permit Requirements is that the 4 tpy combined VOC emissions threshold requiring controls in the Utah permit by rule does not include pneumatic pump emissions. The reason for this difference is that we have identified that emissions from pneumatic pumps are a large source of VOC emissions on the U&O Reservation, but a negligible source of VOC emissions in the Utah jurisdiction in the Basin, because the majority of natural gas production occurs on the Reservation. This difference is explained in more detail later in this section.

Table 3 – Proposed VOC Emissions Control Requirements for New, Modified and Existing Oil and Natural Gas Sources versus UDEQ and Federal[114] Control

[114] The National O&NG FIP incorporates the requirements of the eight standards, as they apply to a source. To make emissions control requirements across the Basin consistent, this proposed U&O FIP goes beyond the eight federal standards to regulate certain equipment and activities that are not regulated by established EPA standards (or are regulated differently) but are regulated in UDEQ standards. The EPA is in the process of reviewing certain provisions of NSPS OOOOa. The requirements summarized in this table are the requirements effective at the time of publication of this NPRM.

Requirements

Proposed VOC Emissions Controls			Utah Oil and Gas Rules and Utah Permit Requirements	NSPS OOOO	NSPS OOOOa	NESHAP HH
Proposed Requirements (Section)	**TPY Threshold**	**Control Efficiency (percent)**				
Storage Tank VOC Emission Control Requirements (49.4174)	Source-wide uncontrolled VOC emissions from storage tanks, dehydrators and pneumatic pumps ≥4 tpy Or for storage tanks-only sources, throughput of 8,000 barrels (bbl) of crude oil or 2,000 bbl condensate on rolling 12-month basis – unless ≤4 tpy source-wide VOC from storage tanks	See VOC emission control devices later in this table (49.4178)	Issued Utah Permit Requirements (BACT for site-specific & general approval orders) - Same as proposed FIP Utah Oil and Gas Rules – Control storage tanks if source throughput ≥ 8,000 bbl crude oil or 2,000 bbl condensate, on rolling 12-month basis – unless ≤4 tpy source-wide VOC from storage tanks (does not include pneumatic pump emissions)	Control individual tanks with PTE ≥ 6 tpy per tank constructed after August 23, 2011 (alternatively no control required if uncontrolled VOC emissions maintained < 4 tpy)	Control individual tanks with PTE ≥ 6 tpy per tank constructed after September 18, 2015 (alternatively no control required if uncontrolled VOC emissions maintained < 4tpy)	Control individual tanks with potential for flash emissions and actual annual average hydrocarbon liquid throughput ≥79,500 liters/day
Dehydrators VOC Emission Control Requirements (49.4175)		See VOC emission control devices later in this table (49.4178)	Issued Utah Permit Requirements (BACT for site-specific & general approval orders) - Same as proposed FIP Utah Oil and Gas Rules – Control	Not covered	Not covered	Units at non-urban area sources with actual annual average flowrate of natural gas < 85,000 standard m^3/day not covered – this is majority of units on U&O Reservation

Proposed VOC Emissions Controls			Utah Oil and Gas Rules and Utah Permit Requirements	NSPS OOOO	NSPS OOOOa	NESHAP HH
Proposed Requirements (Section)	**TPY Threshold**	**Control Efficiency (percent)**				
			dehydrators if combined emissions from dehydrators and storage tanks ≥4 tpy VOC (does not include pneumatic pump emissions)			
Pneumatic Pumps VOC Emission Control Requirements (49.4176)		See VOC emission control devices later in this table (49.4178)	Issued Utah Permit Requirements (BACT for site-specific & general approval orders) - Same as proposed FIP – Utah Oil and Gas Rules does not require control of pneumatic pump emissions	Not covered	For well sites, hook up to control device if already on site and constructed after September 18, 2015 For natural gas processing plants, zero natural gas emissions.	Not covered
Covers and Closed-Vent System VOC Emission Control Requirements (49.4177)	Source-wide uncontrolled VOC emissions from storage tanks, dehydrators and pneumatic pumps ≥ 4 tpy Or	100 %	100 % in issued Utah Permit Requirements and Rules (BACT for site-specific & general approval orders) Utah Oil and Gas Rules - Like proposed FIP (except Utah Oil and Gas	100 percent of storage tank emissions, if constructed after August 23, 2011	100 percent of storage tank emissions, if constructed after September 18, 2015	100 percent If required to control glycol dehydrators and/or storage vessel HAP emissions

Proposed VOC Emissions Controls			Utah Oil and Gas Rules and Utah Permit Requirements	NSPS OOOO	NSPS OOOOa	NESHAP HH
Proposed Requirements (Section)	TPY Threshold	Control Efficiency (percent)				
	for storage tanks-only sources, throughput of 8,000 bbl of crude oil or 2,000 bbl condensate on rolling 12-month basis – unless ≤4 tpy source-wide VOC from storage tanks		Rules do not include pneumatic pump emissions)			
VOC Emission Control Devices (49.4178)	Source-wide uncontrolled VOC emissions from storage tanks, dehydrators and pneumatic pumps ≥ 4 tpy Or for	95.0 percent continuously	98.0 percent continuous VOC control efficiency for Issued Utah Permit Requirements (BACT for site-specific & general approval orders) Same as proposed FIP for Utah Oil and Gas Rules	95.0 percent continuous VOC control efficiency, for use on tanks with PTE ≥ 6 tpy per tank if constructed after August 23, 2011	95.0 percent continuous VOC control efficiency, for use on tanks with PTE ≥ 6 tpy per tank, if constructed after September 18, 2015	If required to control glycol dehydrator or storage vessel HAP emissions, must reduce HAP by 95.0 percent, or maintain < 20 ppmv or 1 tpy benzene

Proposed VOC Emissions Controls			Utah Oil and Gas Rules and Utah Permit Requirements	NSPS OOOO	NSPS OOOOa	NESHAP HH
Proposed Requirements (Section)	**TPY Threshold**	**Control Efficiency (percent)**				
	storage tanks-only sources, throughput of 8,000 bbl of crude oil or 2,000 bbl condensate on rolling 12-month basis – unless ≤4 tpy source-wide VOC from storage tanks					
Fugitive Emissions VOC Emission Control Requirements (49.4179)	Sources required to control storage vessel, dehydrator and/or pneumatic pump emissions (per 49.4174 through 49.4178)	NA – Semi-annual surveys	Utah Oil and Gas Rules – Same as Proposed FIP for well sites Issued Utah Permit Requirements (sources exempt from Utah Oil and Gas Rules) require LDAR, ranging from annual to quarterly for oil and natural gas sources, including compressor	Only for natural gas processing plants – At least annual surveys	At least quarterly surveys for natural gas processing plants, quarterly surveys for compressor stations and semi-annual surveys for well sites, if constructed or modified after September 18, 2015	Ensure closed-vent system operates with no detectable emissions if required to control glycol dehydrator or storage vessel HAP emissions

Proposed VOC Emissions Controls			Utah Oil and Gas Rules and Utah Permit Requirements	NSPS OOOO	NSPS OOOOa	NESHAP HH
Proposed Requirements (Section)	TPY Threshold	Control Efficiency (percent)				
			stations			
Tank Truck Loading VOC Emission Control Requirements (49.4180)	None – applies to all existing sources	NA – Bottom filling or submerged fill pipe	Utah Oil and Gas Rules - more stringent, as capture and control of VOC emissions required at sources required to control storage vessel and glycol dehydrator emissions	Not covered	Not covered	Not covered
Pneumatic Controllers VOC Emission Control Requirements (49.4181)		NA – meet the standards of NSPS OOOO	Utah Oil and Gas Rules - Same as Proposed FIP –	Zero-bleed for processing plants and low-bleed (<6 scfh) elsewhere, if constructed after October 15, 2013	Zero-bleed for processing plants and low-bleed (<6 scfh) elsewhere, if constructed after September 18, 2015	Not covered
Other combustion devices (49.4182)		NA - must have automatic ignition device	Utah Oil and Gas Rules - Same as proposed FIP	Not covered	Not covered	Not covered

1. Storage Tanks, Glycol Dehydrators, and Pneumatic Pumps

For new, modified and existing sources, we are proposing in §§ 49.4174 (Storage Tank VOC Emission Control Requirements), 49.4175 (Dehydrators VOC Emission Control Requirements), and 49.4176 (Pneumatic Pumps VOC Emission Control Requirements) to require that owners and operators of affected storage tanks, glycol

dehydrators and natural gas-driven pneumatic pumps either: (1) reduce VOC emissions from working, standing, breathing, and flashing losses from crude oil, condensate, and produced water storage tanks, glycol dehydrator process vents (glycol dehydrator regenerator or still vent and the vent from the dehydrator flash tank, if present), and pneumatic pumps, by at least 95.0 percent on a continuous basis; or (2) maintain the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at a rate of less than 4 tpy, or at a source that contains only storage tanks and does not contain glycol dehydrators or pneumatic pumps, maintain the source-wide throughput at less than 8,000 barrels (bbl) of crude oil or 2,000 bbl of condensate in any consecutive 12-month period. We are proposing that applicability for the VOC emissions control requirements be determined specifically according to the following criteria. For oil and natural gas sources that began operation before the effective date of the final rule, we are proposing that applicability be determined using uncontrolled actual emissions or actual throughput based on 12 consecutive months of data. For oil and natural gas sources that begin operation or modification after the effective date of the final rule, we are proposing that applicability for glycol dehydrators and pneumatic pumps be determined using potential to emit and we are proposing that emissions from all storage tanks be controlled upon startup for a minimum of 12 consecutive months. This requirement for new and modified storage tanks is being proposed because of the uncertainty of well production levels before operation begins. After a minimum of 12 consecutive months of operation, controls may be removed if source-wide uncontrolled actual VOC emissions from all storage tanks, glycol

dehydrators, and pneumatic pumps are demonstrated to be less than 4 tpy, or, at a source containing only storage tanks, source-wide throughput is demonstrated to be less than 8,000 bbl of crude or 2,000 bbl of condensate.

We are proposing that owners or operators must demonstrate that the source-wide uncontrolled actual VOC emissions from crude oil, condensate, and produced water storage tanks, glycol dehydrator process vents, and pneumatic pumps have been maintained below 4 tpy using records of monthly determinations of uncontrolled actual VOC emission rates for the 12 consecutive months immediately preceding the demonstration. The uncontrolled actual VOC emissions rate must be calculated using a generally accepted model or calculation methodology.

The proposal would require that the owner or operator re-evaluate the source-wide uncontrolled actual VOC emissions or the source-wide throughput of crude oil or condensate on a monthly basis. If the results of the monthly determination show that the uncontrolled actual VOC emission rate is greater than or equal to 4 tpy or the throughput of crude oil or condensate is greater than 8,000 bbl or 2,000 bbl, respectively, the owner or operator will have 30 days to switch to the first option specified and control VOC emissions by at least 95 percent continuously. We are proposing an exemption to the VOC emissions control requirements for each emergency storage tank, provided the tank meets the following requirements: (1) the tank is not used as an active storage tank; (2) the owner or operator empties the tank no later than 15 days after receiving fluids; and (3) the tank is equipped with a liquid level gauge or equivalent device.

The proposed VOC emissions control applicability and requirements are the same

as or comparable on balance with the requirements in the Utah Permitting Requirements and/or Utah Oil and Gas Rules. The proposed methods for determining applicability to the control requirements are the same as those determined to be cost-effective in site-specific minor source BACT analyses in the Utah Permit Requirements. In site-specific approval orders that have been issued, the UDEQ requires VOC emissions controls for source-wide emissions from storage tanks, glycol dehydrators, and pneumatic pumps at oil and natural gas sources[115] when the source-wide uncontrolled actual emissions from that equipment are greater than or equal to 4 tpy. We have also determined that controlling emissions above the 4 tpy VOC level is cost-effective and will achieve meaningful emissions reductions on the U&O Reservation.[116] The proposed methods for determining applicability to the control requirements are comparable on balance with the UDEQ's recently adopted Utah Oil and Gas Rules, with the exception that those rules do not consider emissions from or control of pneumatic pumps[117]. The reason for this

[115] The docket for this rule contains several examples of UDEQ site-specific minor source NSR permits (approval orders) for Crude Oil and Natural Gas Well Sites and/or Tank Batteries (DAQE-AN151010001-15, DAQE-AN149250001-14, and DAQE-AN143640003-15). UDEQ site-specific approval order requirements are based on BACT analyses for oil and natural gas sources concluding that combustion of VOC emissions from crude oil and condensate storage tanks, glycol dehydrators, and pneumatic pumps is economically and technically feasible when the source-wide uncontrolled VOC emissions from those emissions sources is equal to or greater than 4 tpy. The analyses rely in part on the EPA's analysis in the April 12, 2013 NSPS OOOO reconsideration, and the finding that emissions from those three emissions sources at a single source can feasibly be routed to the same combustor. Though the 4 tpy threshold is not specifically stated in the approval orders, if a source applying for a site-specific approval order has source-wide storage tank, glycol dehydrator, and pneumatic pump VOC emissions equal to or greater than 4 tpy, the order contains requirements to control those emissions.

[116] The RIA in the docket for this proposed U&O FIP contains more detailed information on our analyses.

[117] In response to an EPA comment on UDEQ's proposal questioning why issued approval orders and the GAO cover pneumatic pumps, but the new Utah Oil and Gas Rules do not, the UDEQ stated that the 2014 Uinta Basin Emissions Inventory indicated that pneumatic pump emissions constitute an insignificant portion of the total VOC emissions at Utah-regulated sources in the Basin. The comments and UDEQ's responses are available in the docket for this proposed rule (Docket ID No. EPA-R08-OAR-2015-0709).

difference is discussed later when describing requirements for pneumatic pumps. The Utah Oil and Gas Rules require all storage vessels located at a well site that are in operation as of January 1, 2018, with a site-wide throughput of 8,000 bbl or greater of crude oil or 2,000 bbl or greater of condensate per year on a rolling 12-month basis to control emissions unless an exemption applies that combined VOC emissions from storage vessels are demonstrated to be less than 4 tpy of uncontrolled emissions (defined as actual emissions or the potential to emit without considering controls) on a rolling 12-month basis. Emissions to meet the exemption must be calculated using direct site-specific sampling data and any software program or calculation methodology in use by industry that is based on AP-42 Chapter 7. The Utah Oil and Gas Rules require all new and modified storage vessels (that begin operation on or after January 1, 2018) to control emissions upon startup of operation for a minimum of one year. A separate provision allows controls to be removed after a minimum of one year of operation if source-wide throughput is less than 8,000 bbl crude oil or 2,000 bbl condensate on a rolling 12-month basis or uncontrolled VOC emissions are demonstrated to be less than 4 tons per year. For sources that operate only storage tanks and not glycol dehydrators or pneumatic pumps, the 8,000 bbl of crude oil/2,000 bbl of condensate throughput applicability threshold for control of storage tank emissions is the same as the control applicability threshold for storage vessels in the UDEQ's recently adopted Utah Oil and Gas Rules. The proposed requirement to control emissions from all new and modified storage tanks for at least 12 consecutive months, the proposed exemption for emergency storage tanks, and the provision allowing removal of controls from storage tanks, glycol dehydrators

and pneumatic pumps are also the same as the requirements in the recently adopted Utah Oil and Gas Rules, with the exception of pneumatic pump emissions and control mentioned earlier that will be discussed in more detail later.

We are proposing to specify the option that the owner or operator capture and route all subject emissions through a closed-vent system to an enclosed combustor or utility flare that is designed and operated to reduce the mass content of VOC in the emissions vented to it, by at least 95.0 percent. Requirements for closed-vent systems are proposed under conditions specified in § 49.4176 (VOC emission control requirements for covers and closed-vent systems) and requirements for operation and monitoring of control devices are proposed under conditions specified in §§ 49.4177 (VOC Emission Control Devices) and 49.4182 (Monitoring Requirements), all of which are discussed in detail later in the summaries of Covers, Closed-Vent Systems, and VOC Emission Control Devices and Monitoring Requirements.

We are proposing the alternative option that the owner or operator design their operations to recover 100 percent of the emissions and recycle them for use in a process unit or incorporate them into a product. These proposed control options are the same as the Utah Permit Requirements and the Utah Oil and Gas Rules.

This proposed U&O FIP approach for controlling pneumatic pumps by routing emissions to the same control device that controls emissions from storage tanks and glycol dehydrators is the same as the UDEQ's approach for controlling pneumatic pumps in site-specific approval orders issued under Utah Permit Requirements. As described earlier, regulating pneumatic pumps in this proposed U&O FIP is not comparable to the

UDEQ's recently adopted new Utah Oil and Gas Rules because those rules do not include requirements for pneumatic pumps.[118] However, we are confident that this approach will help achieve ozone air quality improvements through this proposed U&O FIP, as the 2014 Uinta Basin Emissions Inventory shows that VOC emissions from pneumatic pumps constitute 15 percent of the total oil and natural gas-related VOC emissions on the U&O Reservation.[119] We are taking comment on whether and how to control emissions from pneumatic pumps at oil and natural gas sources.

We do not expect that a substantial number of oil and natural gas sources that would meet the applicability criteria of this proposed U&O FIP will also be subject to NSPS OOOO or OOOOa, or to NESHAP HH. However, to address any potential regulatory overlap, we are proposing that any affected crude oil, condensate and produced water storage tanks, glycol dehydrators and pneumatic pumps that are subject to the emissions control requirements in the EPA standards, would not be subject to this proposed U&O FIP requirements for such equipment and activities, including monitoring, recordkeeping and reporting requirements associated with such equipment and activities.

We are seeking comment on these proposed requirements, including information

[118] We note that the recently adopted new Utah Oil and Gas Rules do not contain requirements for pneumatic pumps. We are proposing requirements for pneumatic pumps requirements, as we have identified emissions from existing pneumatic pumps as being a significant source of VOC emissions on the Indian country lands within the U&O Reservation.

[119] By contrast, the 2014 Uinta Basin Emissions Inventory shows that there are a very low number of pneumatic pumps installed and operating on lands in the Uinta Basin that are regulated by the UDEQ and the UDEQ has stated that this fact is the reason the Utah Oil and Gas Rules do not have control requirements for pneumatic pumps (see the response to comments on the UDEQ's proposed rules in the docket for this rulemaking).

supporting alternative VOC emission reduction and control efficiency requirements and specific operating condition requirements that would provide equivalent protection of air quality in the Uinta Basin and regulatory consistency across the Uinta Basin. We noted previously that in January 2019, the Utah Air Quality Board approved an additional rule in the Utah Administrative Code Chapter R307-500 Series (Oil and Gas) at R307-511 to manage associated gas from a completed oil well by either routing it to a process unit for combustion, routing it to a sales pipeline, or routing it to a VOC control device, except for emergency release situations. This rule was approved after we drafted and evaluated the emissions reductions and costs of the provisions in this proposed U&O FIP. We intend to evaluate and incorporate equivalent requirements for associated gas from oil wells in a final U&O FIP.

2. Covers, Closed-Vent Systems

For affected new, modified, and existing sources that are required to control emissions from storage tanks, glycol dehydrators and pneumatic pumps, we are proposing in § 49.4177 (VOC emission control requirements for covers and closed-vent systems) to require the use of covers on all crude oil, condensate, and produced water storage tanks and the use of closed-vent systems with all equipment that captures and routes VOC emissions to the respective vapor recovery or VOC emission control devices. Because closed-vent systems would be common to control requirements for storage tanks, glycol dehydrators and pneumatic pumps, we are proposing these requirements in a separate section to avoid redundancy. Proposed § 49.4178 also specifies construction and operational requirements for the covers and closed-vent systems. The construction and

operational requirements for the covers and closed-vent systems are intended to provide legal and practical enforceability to ensure that all captured VOC emissions are routed to the respective vapor recovery or VOC emission control devices. In addition, for affected new, modified, and existing sources that are required to control emissions from storage tanks, glycol dehydrators and pneumatic pumps, § 49.4178 (VOC emission control devices) we are proposing specific legally and practicably enforceable construction and operational requirements for enclosed combustors and utility flares.

We are proposing in § 49.4177 (VOC emission control requirements for covers and closed-vent systems) to require that each owner or operator equip the openings on each subject crude oil, condensate, and produced water storage tank with a cover that ensures that working, standing, breathing, and flashing losses are efficiently routed through a closed-vent system to a vapor recovery system, an enclosed combustor, or a utility flare. We are proposing that each cover and all openings on the cover (*e.g.*, access hatches, sampling ports, and gauge wells) must form a continuous barrier over the entire surface area of the crude oil, condensate, or produced water in the storage tank. Each cover opening must be secured in a closed, sealed position (*i.e.*, covered by a gasketed lid or cap) whenever material is in the tank on which the cover is installed, except when it is necessary to use an opening to: (1) add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit); (2) inspect or sample the material in the unit; or (3) inspect, maintain, repair, or replace equipment inside the unit.

We are proposing to require that each owner or operator subject to this

requirement to control VOC emissions from working, standing, breathing, and flashing losses from crude oil, condensate, and produced water storage tanks, glycol dehydrator still vents, and pneumatic pumps must use closed-vent systems to collect and route the emissions to the respective vapor recovery or VOC emission control devices. We are proposing that all vent lines, connections, fittings, valves, relief valves, and any other appurtenance employed to contain and collect emissions and transport them to the vapor recovery or VOC control equipment, must be maintained and operated properly during any time the control equipment is operating and must be designed to operate with no detectable emissions. If a closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the emissions from entering the vapor recovery or VOC control devices, we are proposing that the owner or operator must meet one of the following options for each bypass device: (1) at the inlet to the bypass device, properly install, calibrate, maintain, and operate a flow indicator capable of taking periodic readings and sounding an alarm when the bypass device is open such that the emissions are being, or could be, diverted away from the control device and into the atmosphere; or (2) secure the bypass device valve in the non-diverting position using a car-seal or a lock-and-key type configuration.

The proposed cover and closed-vent system requirements are comparable on balance with UDEQ requirements for storage vessels in both the issued site-specific approval orders and the Utah Oil and Gas Rules. The site-specific approval orders require storage tank thief hatches to be closed and latched except during tank unloading or other maintenance activities. They also require that thief hatches be inspected once every three

months to ensure thief hatches are closed, latched, and the associated gaskets, if any, are in good working condition. Similarly, the Utah Oil and Gas Rules for storage vessels require thief hatches to be kept closed and latched except during unloading or maintenance. This proposed U&O FIP requirements for covers and closed-vent systems, including the associated monitoring requirements proposed in § 49.4183 and discussed later, were developed by consulting the covers and closed-vent system requirements of EPA standards, such as OOOO and NESHAP HH. For ease of implementation, these requirements provide more detail than the UDEQ requirements in both the issued site-specific approval orders and the Utah Oil and Gas Rules but are comparable on balance with the UDEQ requirements for storage vessels and closed-vent systems.

3. VOC Emission Control Devices

For new, modified and existing sources that are required to control emissions from storage tanks, glycol dehydrators and pneumatic pumps, we are proposing to require in § 49.4178 (VOC emission control devices) that each owner or operator follow the manufacturer's written operating instructions, procedures and maintenance schedules to ensure the use of good air pollution control practices for minimizing emissions from each enclosed combustor and utility flare. Each utility flare must be designed and operated according to the requirements of 40 CFR 60.18(b). Each enclosed combustor must be designed and operated to reduce the mass content of the VOC in the natural gas routed to it by at least 95 percent continuously. The proposed control efficiency required for each VOC emissions control device is the same as the recently adopted Utah Oil and Gas Rules.

We recognize that the site-specific approval orders issued to existing sources under the Utah Permit Requirements require control devices to meet 98 percent VOC control efficiency. But we have concluded that the differences between this proposed U&O FIP and the Utah Oil and Gas Rules and the Utah Permit Requirements are minimal, and all were designed to achieve a consistent result. The UDEQ requires permittees of minor oil and natural gas sources to show compliance with 98.0 percent VOC control device control efficiency by routing all exhaust gas/vapors (from the storage tanks, glycol dehydrators or pneumatic pumps) to the operating combustor, operating the device according to the manufacturer's written instructions when gases/vapors are routed to it, operating the device with no visible emissions, and by performing tests to visually determine smoke emissions according to EPA Method 22 at 40 CFR part 60, appendix A. The recently adopted new Utah Oil and Gas Rules require at least 95.0 percent VOC control efficiency and do not specify methods to ensure no visible emissions but refer to NSPS OOOOa for demonstrating compliance with the control efficiency requirements. We note that combustion devices can be designed to meet 98.0 percent control efficiencies, and can control emissions by 98.0 percent or more, on average, in practice when properly operated.[120] Combustion devices designed to meet 98.0 percent control efficiency may not, however, be able continuously to meet this efficiency in practice, due

[120] The EPA has currently reviewed performance tests submitted for 19 different makes/models of combustor control devices and confirmed they meet the performance requirements in NSPS subpart OOOO and NESHAP subparts HH and HHH. All reported control efficiencies were above 99.9 percent at tested conditions. EPA notes that the control efficiency achieved in the field is likely to be lower than the control efficiency achieved at a bench test site under controlled conditions, but these units should have no problem meeting 95.0 percent control continuously. See Combustion Device Performance Testing Summary Table in the docket for this rule.

to factors such as the variability of field conditions and downtime.

During development of NSPS OOOO and OOOOa, 95.0 percent control efficiency was determined to be the best system of emission reduction (BSER) and able to be continuously achieved by affected facilities (*e.g.*, storage vessels, centrifugal compressors) nationwide, although the EPA is aware that combustors and utility flares may be capable of achieving instantaneous control efficiencies greater than 95.0 percent.[121] In determining BSER, the EPA must be confident that the control efficiency can be achieved continuously by every affected facility nationwide to which it applies. We are confident that combustors and utility flares can meet at least 95.0 percent VOC control efficiency on a continuous basis. While the EPA is aware that combustion devices commonly used to control VOC-containing gas streams are capable of demonstrating greater than 98.0 percent continuous VOC control efficiency in a controlled performance testing environment, under ideal conditions, based on widespread and readily available manufacturer test data,[122] we are not confident that the devices can meet 98.0 percent continuous VOC control efficiency in the field.

We are proposing to require that all utility flares and enclosed combustors installed per this rule are models that: (1) have been tested by the manufacturer in accordance with specific requirements in NSPS OOOO; (2) are devices that are designed

[121] See "Oil and Natural Gas Sector New Source Performance Standards and National Emissions Standards for Hazardous Air Pollutants reviews, Parts 60 and 63, Response to Public Comments on Proposed Rule, *See* 76 FR 52738 (August 23, 2011), available at *http://www.regulations.gov* (Docket ID EPA-HQ-OAR-2010-0505 (Section 2.5.4, pages 127-128; Section 3.4.1, pages 294-295; and Section 3.5.1, pages 302-303)).

[122] See Combustion Device Performance Testing Summary Table in the docket for this rule.

and operated in accordance with applicable requirements in 40 CFR 60.18(b), or (3) are devices for which the owner or operator has conducted performance testing according to the specific requirements in NSPS OOOO. The Utah Oil and Gas Rules require that compliance for VOC control devices be demonstrated by meeting the performance test methods and procedures specified in NSPS OOOO. The Utah Oil and Gas Rules do not distinguish between utility flares and enclosed combustors. We determined it was important to propose specific requirements for the different types of control devices that may be present at oil and natural gas sources on the U&O Reservation, because EPA standards, such as NSPS OOOO and OOOOa and NESHAP HH make such distinctions for legal and practical enforceability. Therefore, although the proposed requirements for VOC control devices to demonstrate compliance with the proposed control efficiency requirements are more detailed for ease implementation, they are comparable on balance with the Utah Oil and Gas Rules that reference such requirements in NSPS OOOO.

We have determined that certain work practice and operational requirements are also necessary for the practical enforceability of the proposed VOC emission reduction requirements for utility flares or enclosed combustors. We are proposing that utility flares and enclosed combustors must be operated within specific parameters to ensure the effective control of VOC emissions. (This necessity was discussed in detail in the preamble and Technical Support Documents to the proposed and final NSPS OOOO).[123] Specifically, we are proposing that each owner or operator must ensure that each

[123] These documents can be found in the docket for the NSPS OOOO rulemaking, Docket ID EPA-HQ-OAR-2010-0505, available at *http://www.regulations.gov*.

enclosed combustor or utility flare is: (1) operated at all times that emissions are routed to it; (2) equipped and operated with a liquid knock-out system to collect any condensable vapors (to prevent liquids from going through the control device); (3) equipped and operated with a flash-back flame arrestor; (4) equipped and operated with a continuous burning pilot flame, or an electronically controlled automatic ignition device; (5) equipped with a monitoring system for continuous recording of the parameters that indicate proper operation of each continuous burning pilot flame or electronically controlled automatic ignition device, such as a chart recorder, data logger or similar device, or connected to a Supervisory Control and Data Acquisition (SCADA) system, to monitor and document proper operation of the enclosed combustor or utility flare; (6) maintained in a leak-free condition; and (7) operated with no visible smoke emissions. These proposed work practice and operational requirements are the same as the Utah Oil and Gas Rules with respect to operation of the control devices with no visible emissions. Other proposed work practice and operational requirements are different or more prescriptive than the Utah Oil and Gas Rules in several areas, to provide legal and practical enforceability. For example, the Utah Oil and Gas Rules require all VOC emissions control devices to simply be equipped and operated with an operational auto igniter. This proposed U&O FIP requires each enclosed combustor or utility flare to be equipped and operated with either: (1) a continuous burning pilot flame; or (2) an electronically controlled automatic ignition device. All enclosed combustors or utility flares must be equipped with a monitoring system for continuous measurement and recording of the parameters that indicate proper operation of each continuous burning

pilot flame or electronically controlled automatic ignition device, such as a chart recorder, data logger or similar device, or connected to a SCADA system to monitor and document proper operation of the device. The work practice and operational requirements for VOC control devices in this proposed U&O FIP were developed by considering the UDEQ requirements for VOC control devices in combination with consulting the work practice and operational requirements for control devices in EPA standards, including NSPS OOOO and OOOOa and NESHAP HH. Specifically regarding the proposed requirement to equip enclosed combustors and utility flares with either a continuous burning pilot flame or an electronically controlled automatic ignition device, provided there is a monitoring system to indicate proper operation of the device, the EPA has maintained our position as recently as 2016 that without a continuous ignition sources, there may be periods of uncontrolled emissions and continuous ignition sources are designed to combust the flammable portion of the gas stream, even if the gas stream has a low BTU content. [124] Therefore, we have maintained that automatic ignition devices may not be reliable in the field to ensure that there is an ignition source at all times gas is flowing to a control device, and EPA standards, such as NSPS OOOO and OOOOa have commonly required that enclosed combustors be equipped with continuous burning pilot flames and continuous parameter monitoring systems to ensure the presence of a flame at all times a gas stream is routed to the control device. Additionally, since § 60.18(b)(2) of

[124] EPA's Response to Public Comments on the EPA's Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources. 40 CFR Part 60, Subpart OOOOa. May 2016. Chapter 11 – Compliance. Comment Excerpt Number: 17. Pages 188-191. Available at *https://www.regulations.gov* (Docket ID EPA-HQ-OAR-2010-0505-7632), Accessed August 16, 2019.

the General Provisions for 40 CFR part 60 is required for design and operation if an operator uses a utility flare under this proposed U&O FIP, a continuous pilot flame is required in that provision, and we believe an equivalent requirement should be applicable to the enclosed combustion control devices typically used for controlling emissions from storage vessels and other equipment at oil and natural gas sources. We recognize that the UDEQ requires auto igniters on all combustion devices. In the interest of establishing regulations on the U&O Reservation that are comparable on balance with the UDEQ requirements, we are proposing a hybrid approach that provides owners and operators required to control of VOC emissions from storage tanks, glycol dehydrators and pneumatic pumps the option to use devices that comply with EPA standards (continuous burning pilot), or to use electronically controlled automatic ignition devices if the control device is also equipped with a system that can indicate to the owner and operator that the automatic ignition device is not operating properly while gas is being routed to the control device. We expect that these proposed requirements for control devices would achieve a comparable result as the requirements for VOC control devices in the Utah Oil and Gas Rules, ensuring the control device is operated properly to achieve the required control efficiency, while providing consistency with EPA policy regarding flares and combustors.

Section 49.4178 proposes to allow owners or operators of oil and natural gas sources, upon receiving written approval, to use control devices other than an enclosed combustor or utility flare, provided they achieve at least 95.0 percent VOC control efficiency continuously. This provision will allow for owners or operators to take

advantage of technological advances in VOC emission control for the oil and natural gas industry and will provide us with valuable information on any new control technologies.

We are seeking comment on the covers, closed-vent systems, and VOC emission control devices provisions in this proposed U&O FIP, including information supporting more or less stringent requirements that would provide legal and practical enforceability of the proposed requirement to reduce VOC emissions from storage tanks, glycol dehydrators, and pneumatic pumps by 95.0 percent continuously.

4. Fugitive Emissions Control

For new, modified and existing sources, we are proposing LDAR requirements in § 49.4179 (Fugitive Emissions VOC Emission Control Requirements) that each owner or operator of an oil and natural gas source that is required to control VOC emissions from storage tanks, glycol dehydrators, and pneumatic pumps per §§ 49.4174 through 49.4178 conduct periodic inspections of the source to detect leaks from fugitive emission components and repair them. We are proposing to define fugitive emissions components in § 49.4171 to include, among other things: valves, connectors, open-ended lines, pressure relief devices, flanges, covers, closed-vent systems, and thief hatches or other openings on controlled tanks. Each affected owner or operator will be required to develop and implement a Reservation-wide fugitive emissions monitoring plan for all of its oil and natural gas sources on the U&O Reservation that must include the following requirements: (1) conduct an initial monitoring of fugitive emissions components at each affected source within 18 months of the effective date of the rule; (2) conduct subsequent monitoring once every 6 months after the initial monitoring for fugitive emissions

components at oil and natural gas sources; (3) describe the fugitive emissions detection monitoring method to be used, which is limited to onsite optical gas imaging instruments, EPA Reference Method 21, with a leak defined as any visible emissions using an optical gas imaging instrument, or an instrument reading of 500 parts per million volume (ppmv) VOC using EPA Reference Method 21, or another method approved by the EPA other than optical gas imaging or EPA Reference Method 21; (4) identification of manufacturer and model number of any leak detection equipment to be used; (5) procedures and timeframes for identifying and repairing components from which leaks are detected, including a requirement to repair any identified leaks from components that are safe to repair and that do not require source shutdown within 30 days of identifying a leak; (6) identification of timeframes to repair leaks that are technically infeasible to repair (*i.e.*, are unsafe to repair[125] or require source shutdown), but no later than 2 years after discovering such a leak; (7) procedures for verifying effective repair of leaking components, no later than 30 days after repairing a leak; (8) specific training and experience needed to perform inspections; (9) description of procedures for calibration and maintenance of monitoring equipment to be used; and (10) standard monitoring protocol for a typical affected source, including a general list of component types that will be inspected and what supporting data will be recorded (*e.g.*, wind speed, detection method device-specific operational parameters, date, time, and duration of inspection).

[125] *Unsafe to repair* is defined in the proposed rule as meaning that operator personnel would be exposed to an imminent or potential danger as a consequence of the attempt to repair the leak during normal operation of the source.

We are proposing in § 49.4179 to exempt source owners/operators from having to monitor certain components for various reasons, such as: (1) the monitoring could not occur without elevating the monitoring personnel which expose the personnel to other immediate danger; or (2) the component to be inspected is buried, insulated, or otherwise obstructed in a manner that prevents access by a monitor probe or optical gas imaging device.

In drafting the proposed LDAR requirements, we reviewed the UDEQ requirements. For new and modified oil and natural gas sources that may have obtained coverage under the UDEQ's GAO, we have concluded that the UDEQ's LDAR inspection frequency requirement is different than the LDAR inspection frequency requirements for oil and natural gas sources under this proposed U&O FIP. For new and modified sources under the GAO, the UDEQ requires an inspection frequency based on production levels and number of leaks detected, which may require monitoring frequencies for only certain sources that are equivalent to this proposed U&O FIP. For existing sources covered under site-specific approval orders, we have concluded that the UDEQ's LDAR frequency requirements (a range of annual to quarterly) to be different than those in proposed FIP. For new, modified and existing sources subject to the recently adopted new Utah Oil and Gas Rules, the LDAR frequency requirements of this proposed U&O FIP are the same. The LDAR requirements in the Utah Oil and Gas Rules were designed procedurally to be consistent with NSPS OOOOa, though the applicability threshold is different. The UDEQ's site-specific approval orders, the GAO, and the recently adopted new Utah Oil and Gas Rules all require implementation of an LDAR

program at facilities that are required to control storage vessel, dehydrator and/or pneumatic pump emissions, which is consistent with this proposed U&O FIP. We determined that, particularly for existing sources, in order to provide consistent requirements across the Uinta Basin, the LDAR requirements in this proposed U&O FIP should be consistent with the LDAR requirements for new, modified and existing sources in the Utah Oil and Gas Rules, as those rules apply prospectively to all oil and natural gas well sites on non-reservation Indian country lands in the Uinta Basin that are not already subject to site-specific approval orders. If the sources in the Uinta Basin that are regulated by the UDEQ are also subject to the LDAR requirements of the NSPS OOOOa, the NSPS requirements supersede the UDEQ requirements. Similarly, if the sources in the Uinta Basin that would be regulated by the EPA on the U&O Reservation are subject to the LDAR requirements of the NSPS OOOOa, those sources would be exempt from complying with the LDAR requirements in this proposed U&O FIP. The fugitive emissions LDAR procedural requirements proposed in this proposed U&O FIP are consistent with the Utah Oil and Gas Rules. We are proposing applicability criteria for implementing an LDAR program, and LDAR inspection frequency requirements, that are consistent with requirements in the Utah Oil and Gas Rules, which meets our goal of regulatory consistency across the Uinta Basin. We expect that the proposed LDAR requirements will result in meaningful reductions in VOC emissions and ground-level ozone production, significantly furthering our main objective for this proposed U&O FIP. We are seeking comment on the fugitive emissions control requirements in this proposed U&O FIP, including information supporting more or less stringent inspection

requirements.

We are proposing a provision allowing for the use of alternative methods of leak detection, other than EPA Reference Method 21 or optical gas imaging instrument, to demonstrate compliance with the fugitive emissions monitoring requirements, provided the method is approved by the EPA. The Uinta Basin generally encompasses an area of over 6,800 square miles with hundreds of miles of dirt roads connecting over 10,000 oil and natural gas wells. According to the 2014 Uinta Basin Emissions Inventory[126], the average number of wells per well pad is 1.3. The inventory shows that fugitive emissions are the second highest VOC emissions source on the U&O Reservation, at about 13,900 tpy. The total does not account for emissions due to abnormal process operations, which is discussed in the following paragraphs. Recognizing that technology used to detect, measure, and mitigate emissions is rapidly developing, on July 18, 2016, the EPA issued a request for information, (RFI)[127] inviting all parties to provide information on innovative technologies to accurately detect, measure, and mitigate emissions from the oil and natural gas industry. The intent of this notice was to solicit data supporting alternative approaches to limit emissions from this sector.

Studies have been conducted specific to the Uinta Basin that investigated the viability of leak detection from an aerial platform. One study[128] employed a helicopter-

[126] The complete, detailed dataset for the 2014 Uinta Basin Emission Inventory, including location data of every facility, can be viewed in the docket for this rule (Docket ID No. EPA-R08-OAR-2015-0709), SQLite database titled OGEI_v2.2_2014FINAL.db".
[127] *See* 81 FR 46670 (July 18, 2016).
[128]"Aerial Surveys of Elevated Hydrocarbon Emissions from Oil and Gas Production Sites," Environmental Science and Technology, 2016, 50 (9), pp 4877-4886, publication date April 5, 2016, available at *http://pubs.acs.org/doi/abs/10.1021/acs.est.6b00705*, accessed August 16, 2019.

based infrared camera, at an elevation of approximately 50 meters above ground level, to survey more than 8,000 oil and natural gas well pads in seven U.S. basins to assess the prevalence and distribution of hydrocarbon sources whose fugitive emissions were high enough to be labeled high-emitters. At each site with detected emissions, the survey team reported the site's location and the number and equipment type of each observed emission source. Survey results indicated the prevalence of high-emitting sites was four percent of all the sites surveyed across the seven basins examined. In the Uinta Basin, 1,389 well pad facilities were flown over, and high emissions were observed at 6.6 percent of those well pads.

The high emitting sources, or "super-emitters," are likely due to abnormal process conditions.[129] Examples of abnormal process conditions, which could be persistent or episodic, include: failures of tank control systems, malfunctions upstream of the point of emissions (for example, stuck separator dump valve resulting in produced gas venting from tanks), design failures (for example, vortexing or gas entrainment during separator liquid dumps) and equipment or process issues (for example, over-pressured separators, malfunctioning or improperly operated dehydrators or compressors).[130]

We are seeking information on alternative methods of leak detection (*e.g.* aerial) that could potentially achieve meaningful and more cost-effective reductions in fugitive VOC emissions that contribute to ozone formation. We are seeking input on how these

[129] Zavala-Araiza, D., Alvarez, R. A., Lyon, D. R., Allen, D. T., Marchese, A. J., Zimmerle, D. J., & Hamburg, S. P. (2017). Super-emitters in natural gas infrastructure are caused by abnormal process conditions. Nature communications, 8, 14012.

[130] The 2014 Uinta Basin Emissions Inventory has not accounted for the phenomenon of "super-emitters."

advanced monitoring technologies and platforms could be broadly applied to new, modified and existing sources in the Uinta Basin and whether any of these advanced monitoring technologies would be effective in the Uinta Basin and should be approvable as an alternative leak detection compliance method under a final U&O FIP. We are also seeking input on the criteria that EPA should consider in approving alternative leak detection compliance methods, including appropriate accuracy and quality assurance standards that alternative methods would need to meet to demonstrate equivalency to onsite optical gas imaging instruments or onsite EPA Reference Method 21. Specific descriptions of the approach, frequency of monitoring, detection thresholds, limiting factors in detection, costs and availability for alternative leak detection methods would be helpful.

5. VOC Emissions Control Requirements for All Sources

Sections 49.4180 (VOC emission control requirements for Tank Truck Loading), 49.4180 (VOC emission control requirements for pneumatic controllers) and 49.4184 (Other combustion devices) contain proposed requirements for all new, modified and existing oil and natural gas sources, regardless of source-wide or emission unit specific emissions. Like the requirements in Utah's Oil and Gas Rules for oil and natural gas sources in UDEQ's jurisdiction, this proposed U&O FIP's requirements are as follows: (1) tank trucks used for transporting intermediate crude oil, condensate, or produced water must be loaded using bottom filling or submerged fill pipes; (2) all existing pneumatic controllers must meet the pneumatic controller standards in NSPS OOOO at 40 CFR 60.5390(b)(2) and (c)(2) and NSPS OOOOa at 40 CFR 60.5390a(b)(2) and

(c)(2); and (3) all existing enclosed combustors, utility flares, or other open flares present at sources on a voluntary basis that are not required to control storage tank, glycol and dehydrator and pneumatic pump emissions (per §§ 49.4174 through 49.4178), and are voluntarily operated, must be equipped with an electronically controlled automatic ignition device.

Our proposed requirements for truck loading/unloading diverge in one respect from what the UDEQ is requiring in their recently adopted rulemaking. The UDEQ requires that VOC emissions from tank truck loading and unloading at sources required to control storage tank emissions be captured using a vapor capture line and routed to the onsite combustor or a separate combustor for VOC control. We are not proposing an equivalent requirement, as we have determined that it may not be cost effective presently given limited estimated emissions for truck loading/unloading on the U&O Reservation, based on the 2014 Uinta Basin Emissions Inventory. Assuming that the annualized cost to install a vapor capture line to an existing combustor is similar to that of routing pneumatic pumps to a combustor (approximately $1,627 per source) and assuming there are approximately 2,100 sources that would be required to add a combustor, such a requirement would result in high costs relative to the VOC emissions reductions that would be achieved.

Concerning pneumatic controllers, this proposed U&O FIP requirements for pneumatic controllers require owners/operators of affected pneumatic controllers to meet the standards established for pneumatic controllers in NSPS OOOO and OOOOa. We are proposing that owners/operators of affected controllers meet the tagging requirements in

40 CFR 60.5390(b)(2), 60.5390(c)(2) and 60.5390a(b)(2) and (c)(2), except that the month and year of installation, reconstruction or modification is not required. This exception is consistent with the Utah Oil and Gas Rules.

Lastly, for existing enclosed combustors, utility flares, or other open flares present at sources that would not be required to comply with the substantive VOC emissions control requirements of proposed sections §§ 49.4174 through 49.4178, we are proposing to require that those voluntarily operated control devices be equipped with an electronically controlled automatic ignition device. This approach is the same as the requirements of the Utah Oil and Gas Rules, which require automatic igniters on all existing combustion devices. Contrary to the proposed requirements in Section 49.4179 (VOC Emission Control Devices) for devices used to comply with the substantive VOC emissions control requirements of this proposed U&O FIP, we determined that requiring a system to monitor proper operation of devices used to ensure the presence of a flame at all times a gas stream is routed to the device was unreasonable for voluntarily operated devices and would result in requirements for such sources on the U&O Reservation that are not comparable to requirements for such sources on lands regulated by the UDEQ.

G. Monitoring Requirements

For new, modified, and existing sources, we are proposing in § 49.4183 (Monitoring Requirements) to require each owner or operator to conduct source monitoring necessary for the practical enforceability of all of this proposed U&O FIP's VOC emission reduction requirements, including: (1) monthly inspections of each closed-vent system, including storage tank openings, thief hatches, and bypass devices,

for defects that can result in air emissions according to the procedures in 40 CFR 60.5416(c) [NSPS OOOO]; (2) monthly auditory, visual, olfactory (AVO) inspections of each VOC emissions control device, tank thief hatch, cover, seal, pressure relief valve, and closed-vent system to ensure proper condition and functioning, performed while the storage tanks are being filled, and corrective action within 5 days of discovering the device is not operational; and (3) monitoring of each enclosed combustor or utility flare to confirm proper operation as follows: by checking the system for proper operation whenever an operator is onsite and responding to any indication of pilot flame failure and to ensure the pilot flame is relit as soon as practically and safely possible; and (4) monitoring of visible emissions according to the requirements in 40 CFR 60.5412(d)(i)(iii) [NSPS OOOO, which requires EPA Method 22 visual emissions testing].

These proposed monitoring requirements are comparable on balance with those in the Utah Permit Requirements and Utah Oil and Gas Rules, with some exceptions made to ensure legally and practicably enforceable control of VOC emissions.

For example, the Utah Permit Requirements and Utah Oil and Gas Rules require installation and operation of an automatic ignition device and operations with no visible emissions for all VOC control devices, but there are no corresponding monitoring requirements to demonstrate compliance with those requirements. We expect that the proposed monitoring requirements for ensuring there is a constant ignition source when gas is flowing to the control device and for visible emissions testing will provide legal and practical enforceability.

We are seeking comment on the monitoring requirements in this proposed U&O

FIP, including information supporting more or less stringent monitoring requirements that would provide legal and practical enforceability of the proposed VOC emission control requirements.

H. Recordkeeping Requirements

For new, modified and existing sources, we are proposing in § 49.4184 (Recordkeeping Requirements) to require that each owner or operator of an affected oil and natural gas source keep specific records to be made available upon request, in lieu of voluminous reporting requirements. The records that must be kept include all required measurements, monitoring results, emissions calculations, and deviations or exceedances of rule requirements and corrective actions taken, as well as any manufacturer specifications and guarantees or engineering analyses. These recordkeeping requirements provide legal and practical enforceability for the control and emission reduction requirements of this rule.

We are seeking comment on the recordkeeping requirements in this proposed U&O FIP, including information supporting more or less stringent recordkeeping requirements that would provide legal and practical enforceability of the proposed VOC emission control requirements.

I. Notification and Reporting Requirements

For new, modified, and existing sources, we are proposing in § 49.4185 (Reporting Requirements) to require that each owner or operator of an affected oil and natural gas source prepare and submit an annual compliance report, beginning 90 days after the end of the first compliance reporting period, which is one year after this rule

becomes effective and covers the period for the previous calendar year. The report must include a summary of required records and a summary of deviations or exceedances of any requirements of the final FIP and the corrective measures taken. Additionally, a report of results must be submitted for any performance test we require. These reporting requirements provide legal and practical enforceability for the control and emission reduction requirements of this rule. We are seeking comments on the reporting frequency in this proposed U&O FIP, including information supporting a more or less frequent reporting schedule.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This proposed action is an economically significant regulatory action and was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to the OMB recommendations have been documented in the docket. The EPA prepared an analysis of the potential costs and benefits associated with this proposed action. This analysis, "Regulatory Impact Analysis of for the Proposed Federal Implementation Plan for Managing Emissions from Oil and Natural Gas Sources on Indian Country Lands Within the Uintah and Ouray Indian Reservation in Utah" (Ref. EPA-908/Z-16-001), is available in the docket, and is summarized in *Section IV.I. Benefits and Costs of the Proposed Rule*.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is expected to be an Executive Order 13771 regulatory action. Details

on the estimated costs of this proposed rule can be found in the EPA's analysis of the potential costs and benefits associated with this action.

C. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted to the Office of Management and Budget (OMB) for approval under the PRA. The Information Collection Request (ICR) document that the EPA is preparing for this proposed U&O FIP has been assigned EPA ICR number 2539.01. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

This proposed action imposes a new information collection burden under the PRA. The ICR covers information collection necessary to meet the requirements in this proposed U&O FIP. In general, owners or operators are required to maintain records of all required monitoring and other rule compliance. This proposed U&O FIP also requires annual reports containing information for each oil and natural gas source, including a summary of all required records during the reporting period, and a summary of all instances where operation was not performed in compliance with the requirements of this proposed U&O FIP during the reporting period. Additionally, a summary emissions inventory is required for each source covered under this rulemaking once every three years. These reports and records are essential in determining compliance and are required of all sources subject to this proposed U&O FIP. The information collected will be used by the EPA or the Ute Indian Tribe to determine the compliance status of sources subject to the rule.

Respondents/affected entities: The potential respondents are owners or operators

of existing, new, and modified oil and natural gas sources on Indian country lands within the U&O Reservation.

Respondent's obligation to respond: Mandatory. The EPA is charged under sections 301(a) and 301(d)(4) of the CAA to promulgate regulations as necessary to protect tribal air resources. Promulgating this proposed U&O FIP would address winter ozone air quality concentrations that exceed the NAAQS, and given the recent ozone NAAQS nonattainment designation, when combined with the National O&NG FIP amendments, would provide justification to allow continued streamlined construction authorization of new or modified true minor oil and natural gas sources, all in a manner that seeks to provide regulatory consistency between state and federal requirements with regard to controlling VOC emissions from existing, new, and modified oil and natural gas operations on the U&O Reservation. There is no other federal rule, including the recently finalized NSPS and NESHAP for the Oil and Natural Gas Sector (NSPS OOOO, NSPS OOOOa, and NESHAP HH), that establishes air pollution control regulations for the particular oil and natural gas operations that exist on the U&O Reservation that are appropriate to address the issues identified for this area. This is in contrast to oil and natural gas operations on non-Indian-country lands under the State of Utah's jurisdiction, which are governed by the UDEQ regulations and Utah Division of Oil, Gas, and Mining regulations. Consistent with the regulatory structure that exists on non-Indian country lands, this proposed U&O FIP has requirements for VOC emissions control and reductions, monitoring, recordkeeping, and reporting.

In addition, section 114(a) states that the Administrator may require any owner or

operator subject to any requirement of this Act to:

- Establish and maintain such records;
- Make such reports;
- Install, use, and maintain such monitoring equipment, and use such audit procedures, or methods;
- Sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe);
- Keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical;
- Submit compliance certifications in accordance with section 114(a)(3); and
- Provide such other information as the Administrator may reasonably require.

Estimated number of respondents: We estimate that 4,894 oil and natural gas sources will be subject to one or more requirements in this proposed U&O FIP over the next three years.

Frequency of response: Annual reports are required. Respondents must monitor all specified criteria at each affected source and maintain these records for five years.

Total estimated burden: 123,000 hours per year (3-year average), for all operators subject to this proposed U&O FIP.

Total estimated cost: $21.6 million per year; includes labor cost of $6.4 million, annualized capital cost of $6.4 million, and $8.7 million in operation and maintenance costs for all of the operators that would subject to this proposed U&O FIP.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments to the EPA on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden, using the docket identified at the beginning of this proposed rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to *oria_submissions@omb.eop.gov*, Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than 30 days after publication of the ICR in the Federal Register. The EPA will respond to any ICR-related comments in the final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action are owners/operators of oil and natural gas sources on the U&O Reservation. They were identified through a review of existing minor source registrations submitted by owners/operators on the U&O Reservation under the Federal Indian Country Minor NSR rule. The Agency has determined that two out of eleven total small entities, or 18%, may experience an impact of 0% to 3% of revenues.[131]

[131] The RIA includes a more detailed analysis of the impact of the proposed rule to small entities. It can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

E. Unfunded Mandates Reform Act (UMRA)

This proposed action does not contain an unfunded mandate of $100 million of more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local or tribal governments, and the action contains a federal private sector mandate that may result in the expenditures of less than $100 million for the private sector in any one year.

1. Statutory authority

The legal authority for this rule stems from sections 301(a) and 301(d)(4) of the CAA and 40 CFR 49.11(a). See section III.B of this preamble for more information.

2. Costs and Benefits

As discussed in *Section IV.I. Benefits and Costs of the Proposed Rule*, the estimated total annualized engineering costs of this proposed rule in 2021, accounting for the recovered natural gas, are $64 million in 2016 dollars using a 7 percent discount rate and $56 million in 2021 in 2016 dollars using a 3 percent discount rate.[132] The EPA estimates that the proposed rule will lead to annual monetized benefits of about $10 million in 2021 using a 3 percent discount rate and $2.9 million at a 7 percent discount rate. Including the resources from recovered natural gas that would otherwise be vented, the quantified annualized net benefits of the regulation (the difference between the monetized benefits and total annualized compliance costs) are estimated to be -$39 million in 2021 in 2016 dollars using a 3 percent interest rate and -$46 million using a 7

[132] The recordkeeping and reporting costs calculated for the ICR analysis, discussed earlier, are imbedded in the total annualized engineering costs included here.

percent interest rate.[133] More in-depth information on costs and benefits, including non-monetized or quantified benefits, of the final regulation can be found in the RIA.[134] We are seeking comment on the cost assumptions used in our RIA, including comments and information supporting higher or lower cost estimates. Specifically, the EPA is requesting comment on the capital costs of routing a glycol dehydrator and/or pneumatic pump to an existing combustor.

3. Effects on National Economy

The EPA estimated the labor impacts due to compliance with the proposed rule for affected entities within the oil and natural gas sector, including the installation, operation, and maintenance of control equipment and control activities, as well as the labor associated with new reporting and recordkeeping requirements. We did not estimate any potential changes in labor outside of the affected sector, and due to data and methodology limitations we did not estimate net employment impacts for the affected sector, apart from the partial estimate of the labor requirements related to control strategies. The labor requirements analysis used a bottom-up engineering-based methodology to estimate employment impacts. The engineering cost analysis of the RIA includes estimates of the labor requirement costs associated with implementing the regulations. Each of these labor changes may be required as part of an initial effort to comply with the new regulation.

4. Regulatory Alternatives

[133] The RIA in the docket for this rulemaking discusses this calculation in detail.
[134] The RIA includes a more detailed discussion of the potential costs and benefits associated with this rule. It can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

Alternate regulatory options examined in the RIA include a low-impact option (Option 1) and a high-impact option (Option 3). The Option 1 requirements would be like Option 2; however, they would not include control of emissions from glycol dehydrators. Additionally, Option 1 would require implementation of LDAR at sources with a gas-to-oil ratio (GOR) of greater than or equal to 300, that produce on average, greater than 15-barrel equivalents per well per day. This is in contrast to proposed Option 2, which would require implementation of an LDAR program at sources that are required to control storage tank, glycol dehydrator, and pneumatic pump VOC emissions per proposed §§ 49.4173 through 49.4177. The EPA could have considered a range of even less stringent regulatory options than Option 1 to evaluate and propose, including an option that would not require retrofit of existing storage tanks with controls or requires controls less broadly. Retrofitting existing tanks with controls is one of the higher costs evaluated in this proposed rulemaking. Such an option, however, would lead to even greater disparity with the requirements for similar sources in Utah jurisdiction in the Basin than the current Option 1. However, we are seeking comment on whether it is appropriate to consider a less stringent option that does not include retrofitting existing storage tanks for controls, recognizing that if comments support it as a viable regulatory option and if the agency proposes to adopt that option, the EPA may be required to hold an additional public comment period on this rulemaking. Option 3 (high impact) would require implementation of an LDAR program at all existing oil and natural gas sources, regardless of throughput, or tank, dehydrator, and pneumatic pump annual VOC emissions.

This proposed U&O FIP results in estimated annualized costs of $60 million in 2021 using a 3 percent interest rate, resulting in a cost of control of $3,000 per ton of the estimated 20,000 tons of VOC reduced, and -annualized costs of $68 million using a 7 percent interest rate, resulting in a cost of control of $3,400 per ton of the estimated 20,000 tons of VOC reduced.

The annualized costs of the first option (Option 1) would be $43 million in 2021 using a 7 percent discount rate, resulting in a cost of control of $3,300 per ton of the estimated 13,000 tons of VOC reduced, and $38 million in 2021 using a 3 percent discount rate, resulting in a cost of control of $2,900 per ton of VOC reduced. Option 1 was analyzed to reduce burden on small entities, while still achieving VOC emissions reductions. Although this option would cost less overall than proposed Option 2, it would achieve significantly less benefits in the form of VOC emissions reductions (13,000 tons versus 20,000 tons for proposed Option 2), because emissions from glycol dehydrators would not be controlled and a smaller number of storage tanks would be controlled, because the VOC emissions threshold triggering control would be different than Option 2.[135] Additionally, by not controlling glycol dehydrator emissions in Option 1, there would also be significantly less benefits from the associated reductions in HAP emissions that are more reactive in forming ozone than the lighter-end VOC emissions resulting from storage tanks, pneumatic pumps and fugitive emissions. Implementation of Option 1 would also lead to regulatory requirements that are inconsistent with the requirements for

[135] Under Option 1, the EPA would determine the four tpy threshold triggering control with combined source-wide VOC emissions from storage tanks and pneumatic pumps only.

equivalent sources in UDEQ jurisdiction, thus not meeting our goal of regulatory consistency across the Uinta Basin.

The annualized costs of Option 3 would be $79 million in 2021 using a 7 percent discount rate, resulting in a cost of control of $3,500 per ton of the estimated 23,000 tons of VOC reduced, and $71 million in 2021 using a 3 percent discount rate, resulting in a cost of control of $3,100 per ton of VOC reduced. Option 3 was analyzed to achieve a greater level of VOC emissions reductions. Although this option would achieve about 3,000 more tons of VOC emissions reductions than proposed Option 2, it would also result in increases in costs. Additionally, Option 3 would lead to regulatory requirements that are inconsistent with the requirements for equivalent sources in UDEQ jurisdiction, thus not meeting our goal of regulatory consistency across the Uinta Basin.

For a more in-depth analysis of these options, see the RIA for this proposed U&O FIP.

F. Executive Order 13132: Federalism

This proposed action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This proposed action has tribal implications. However, it will neither impose substantial direct compliance costs on federally recognized tribal governments, nor

preempt tribal law. The EPA has conducted outreach on this proposed rule consistent with the *EPA Policy on Consultation and Coordination with Indian Tribes* (May 4, 2011) via ongoing monthly meetings with tribal environmental professionals[136] before and during the development of this proposed action, and further as follows: 1) via Tribal consultation with the Ute Indian Tribe Business Committee regarding options that the EPA could consider to address the Uinta Basin air quality concerns; 2) via stakeholder meetings where the Tribe was included and participated in emissions contributions discussions specific to the EPA's strategy for addressing the Uinta Basin air quality concerns; and 3) via ongoing stakeholder working group meetings convened by the Ute Indian Tribe Business Committee where the EPA participated in discussions with the Tribe and industrial operators on strategies to reduce existing ozone-related emissions and provide a streamlined construction authorization mechanism for new and modified minor oil and natural gas sources given the recent nonattainment designation for the 2015 ozone NAAQS.

The EPA held consultations with elected officials of the Ute Indian Tribe Business Committee on the following dates: July 22, 2015; December 17, 2016; November 13, 2017; March 22, 2018, August 17, 2018; November 14, 2018; and February 28, 2019. The EPA has also participated in tribally convened stakeholder meetings on March 22, 2017 and June 1-2, 2017.

During the consultation discussions on this proposed U&O FIP, the Tribe

[136] These monthly meetings are general in nature, dealing with many air-related topics, and are not specific to this proposed U&O FIP.

expressed concerns regarding their economic needs to develop and generate revenue from Tribal oil and natural gas resources; to consider air quality effects on the health, safety, and welfare concerns of their tribal membership living within the exterior boundaries of the U&O Reservation and the Uinta Basin; and to balance regulatory requirements for an even economic and regulatory playing field.[137] We addressed questions the Tribe had regarding the controls being considered, the ability for owners or operators to take credit for the controls for purposes such as permitting and NAAQS attainment, the estimated costs of proposed controls, the characterization of Indian country, and the breadth of oil and natural gas source category types proposed to be regulated. The Ute-Tribe-convened stakeholder meetings involved discussions on appropriate ways to expedite nonattainment permitting for new and modified minor oil and natural gas sources on the U&O Reservation. Ute Indian Tribe and industry participants recognized that existing source emissions reductions would likely be necessary in order for the EPA to demonstrate that construction authorization for new and modified sources would not cause or contribute to NAAQS violations in the nonattainment area.

Enacting a FIP for the U&O Reservation is directly responsive to the Ute Indian Tribe's air quality concerns in that we are proposing to implement our CAA authority to protect air quality on and surrounding Indian country lands within the U&O Reservation in a manner that provides regulatory consistency with respect to requirements for oil and natural gas sources on adjacent lands regulated by the state in the Basin. We are

[137] The records of communication for all consultations and preliminary discussions with the Ute Indian Tribe are included in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

committed to supporting tribes' right to self-governance and to protecting their inherent sovereignty. We will continue to provide outreach to tribal environmental professionals and continue consultation with tribal leadership on this proposed action.

H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is subject to Executive Order 13045 because it is an economically significant regulatory action as defined by Executive Order 12866 and the EPA has concluded that the environmental health or safety risks addressed by this proposed action have a disproportionate effect on children. This action's health and risk assessments are contained in the Purpose, Air Quality Review, Benefits and Costs, and Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations sections in this preamble (sections II., IV.G., IV.I., and VI.J., respectively), with more detailed information contained in the RIA for this rulemaking.[138] In fact, this proposed U&O FIP should have a positive effect on the health of the residents of the U&O Reservation, including children, as it is expected to result in a reduction in ambient ozone concentrations, which disproportionately impact children, elderly, and those with respiratory ailments.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" as defined in Executive Order

[138] The RIA includes more detailed discussions of the health and risk assessments for this rule and can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

13211,[139] because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The basis for these determinations follows.

This proposed action was determined to be a significant regulatory action that was submitted to the OMB for review under Executive Order 12866. Any changes made in response to the OMB recommendations have been documented in the docket. The EPA prepared an analysis of the potential costs and benefits associated with this proposed action, which is included in the RIA[140], and is summarized in *Section IV.I. Benefits and Costs of the Proposed Rule*.

We have concluded that, while this action may have some effects on the supply, distribution, or use of energy, it is not likely to have significant adverse energy effects. Most owners/operators of existing oil and natural gas production sources on the U&O Reservation also operate sources on non-Indian country lands within and outside of the U&O Reservation, where they are already required to employ the emissions control technologies required by this proposed U&O FIP. Additionally, we expect that these owners/operators will also operate new and modified sources in the Uinta Basin that are subject to similar NSPS OOOO and OOOOa, NESHAP HH, and other oil and natural gas sector-related control requirements within the Uinta Basin. Therefore, it is expected that the owners/operators will continue to procure necessary control equipment and supplies from the same suppliers they currently use for non-Indian country existing, new or modified sources. Further, only the higher-producing sources are expected to be subject

[139] *See* 66 FR 28355 (May 22, 2001).
[140] The RIA includes a more detailed discussion of the potential costs and benefits associated with this rule. It can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

to the more substantive emission control requirements in this proposed U&O FIP, and those sources are more likely to be able to accommodate the additional costs, so it is not expected that the new requirements alone would factor significantly into decisions to slow or halt production and thereby cause a shortfall in supply. Rather, the prices of oil and natural gas are likely to be a more significant factor in decisions on reducing production from existing sources, and prices are not expected to change appreciably over from 2020 to 2025.[141]

Additionally, this proposed U&O FIP establishes several emissions control standards that give regulated entities flexibility in determining how to best comply with the regulation. Even within the geographically and economically homogeneous affected area within the Uinta Basin, this flexibility is an important factor in reducing regulatory burden. For more information on the estimated energy effects of the proposed rule, please see the RIA, which is in the docket for this proposed rule.

J. National Technology Transfer and Advancement Act (NTTAA)

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), 15 U.S.C. 272 note, directs the EPA to use voluntary consensus standards (VCS) in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards, which include materials specifications, test methods, sampling protocols, business practices and management systems developed or adopted by voluntary consensus standards bodies (VCSB), both

[141] The RIA includes more detailed information on oil and natural gas prices. It can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

domestic and international. These bodies plan, develop, establish or coordinate voluntary consensus standards using agreed-upon procedures.

This action involves technical standards. Therefore, the EPA conducted a search to identify potentially applicable VCS. However, the Agency identified no such standards. [142] Therefore, the EPA has decided to use EPA Methods 21 and 22 of 40 CFR part 60, appendix A-7 and part 63, appendix A.[143]

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA concludes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898.[144]

The documentation for this decision is contained in the RIA[145] for this proposed rule. Our objective in developing this proposed rule is to protect the communities in and near Indian country lands within the U&O Reservation, where existing oil and natural gas operations have been shown to contribute to exceedances of the ozone NAAQS. The impacts of this proposed rule are expected to be beneficial, rather than adverse, and its benefits are expected to accrue to communities in and near Indian country lands within

[142] "Voluntary Consensus Standard Results for Federal Implementation Plan for Managing Emissions from Oil and Natural Gas Sources on the Uintah and Ouray Indian Reservation in Utah," Memorandum from Steffan Johnson, Group Leader, U.S. EPA, Measurement Technology Group, to Deirdre Rothery, Unit Chief Air Permitting and Monitoring Unit, U.S. EPA Region 8 Air Program, dated December 22, 2017, available in the Docket for this proposed rule (Docket ID No. EPA-R08-OAR-2015-0709).
[143] The EPA Reference Methods 21 and 22 can be accessed at *https://www.ecfr.gov/cgi-bin/ECFR?page=browse* (Search Title 40, Part 60 and Part 63, accessed August 21, 2019.
[144] *See* 59 FR 7629 (February 16, 1994).
[145] The RIA includes a more detailed discussion of the environmental justice analysis for this rule. It can be viewed in the docket for this rulemaking (Docket ID No. EPA-R08-OAR-2015-0709).

the U&O Reservation. As explained in Section IV.F., the EPA has quantified the expected emissions impacts from this proposed action and found that the proposed action will result in large reductions of VOC emissions.

This proposed action will also provide regulatory certainty to owners/operators, by imposing, to the extent appropriate, requirements that are the same as or consistent with those applicable to such existing sources that are regulated by the UDEQ in the Uinta Basin because they are not on Indian country lands within the Reservation. This will ensure that air quality is protected consistently across the Uinta Basin and our Environmental Justice (EJ) analysis that can be found in the RIA for this rulemaking supports the conclusion that this action will not result in disproportionate impacts.

List of Subjects in 40 CFR Part 49

Environmental protection, Administrative practice and procedure, Air pollution control, Indians, Indians-law, Indians-tribal government, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: December 16, 2019

Gregory Sopkin,
Regional Administrator,
Region 8.

For reasons set forth in the preamble, part 49 of title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 49--INDIAN COUNTRY: AIR QUALITY PLANNING AND MANAGEMENT

1. The authority citation for part 49 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq*.

Subpart K–Implementation Plans for Tribes–Region VIII

2. Add the undesignated center heading "Federal Implementation Plan for Managing Emissions from Oil and Natural Gas Sources on the Indian Country Lands Within the Uintah and Ouray Indian Reservation in Utah" and §§ 49.4169 through 49.4185 to read as follows:

Federal Implementation Plan for Managing Emissions from Oil and Natural Gas Sources on the Indian Country Lands Within the Uintah and Ouray Indian Reservation in Utah

§ 49.4169 Introduction.

(a) *What is the purpose of §§ 49.4169 through 49.4185?* Sections 49.4169 through 49.4185 establish legally and practicably enforceable requirements for oil and natural gas sources to address ozone air quality. Section 49.4170 establishes provisions for delegation of authority to allow the Ute Indian Tribe to assist the EPA with administration of this proposed U&O FIP. Section 49.4171 contains general provisions and definitions applicable to oil and natural gas sources. Section 49.4173 establishes legally and practicably enforceable requirements to control and reduce emissions of volatile organic compounds (VOC), nitrogen oxides, sulfur dioxide, particulate matter (PM, PM_{10} and $PM_{2.5}$), hydrogen sulfide, carbon monoxide and various sulfur compounds from new and modified true minor oil and natural gas sources in the oil and natural gas

production and natural gas processing segments of the oil and natural gas sector that are located on portions of the U&O Reservation that are included in the Uinta Basin ozone nonattainment area and commence construction on or after **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**, unless the source obtains a site-specific construction permit, or is otherwise required to obtain a site-specific permit by the Reviewing Authority, in accordance with 40 CFR 49.151 through 49.161. Sections 49.4174 through 49.4185 establish legally and practicably enforceable requirements to control and reduce VOC emissions from oil and natural gas well production and storage operations, natural gas processing, and gathering and boosting operations at oil and natural gas sources (as defined in § 49.4171(b)) that are located on Indian country lands within the U&O Reservation.

(b) *Am I subject to §§ 49.4169 through 49.4185?* Sections 49.4169 through 49.4185, as appropriate, apply to each owner or operator of an oil and natural gas source located on Indian country lands within the U&O Reservation that has equipment or activities that meet the applicability thresholds specified in each section. Generally, the equipment and activities at oil and natural gas sources that are already subject to and in compliance with VOC emission control requirements under another EPA standard or other federally enforceable requirement, as specified in each appropriate subsection later, are considered to be in compliance with the requirements to control VOC emissions from that same equipment under this proposed U&O FIP.

(c) *When must I comply with §§ 49.4169 through 49.4185?* Compliance with §§ 49.4169 through 49.4171 and 49.4174 through 49.4185, as applicable, is required no later than

[**DATE 18 MONTHS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER**] for oil and natural gas sources that commence construction before **[DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**. You may submit a written request to the EPA for an extension of the compliance date for existing sources that describes the specific reasons for the requested extension. Any decision to approve or deny the request, including the length of time of an approved request, will be based on the determined merits of case-specific circumstances. Compliance with §§ 49.4169 through 49.4171 and 49.4174 through 49.4185, as applicable, is required upon startup for oil and natural gas sources that commence construction on or after **[DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**. Compliance with § 49.4173 is required upon commencing construction of any new and modified true minor oil and natural gas source in the oil and natural gas production and natural gas processing segments of the oil and natural gas sector that is located on portions of the U&O Reservation that are included in the Uinta Basin ozone nonattainment area that commences construction on or after **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**.

§ 49.4170 Delegation of authority of administration to the tribe.

(a) *What is the purpose of this section?* The purpose of this section is to establish the process by which the Regional Administrator may delegate to the Ute Indian Tribe the authority to assist the EPA with administration of this proposed U&O FIP. This section

provides for administrative delegation and does not affect the eligibility criteria under 40 CFR 49.6 for treatment in the same manner as a state.

(b) *How does the Ute Indian Tribe request delegation?* In order to be delegated authority to assist us with administration of this proposed U&O FIP, the authorized representative of the Ute Indian Tribe must submit a written request to the Regional Administrator that:

(1) Identifies the specific provisions for which delegation is requested;

(2) Includes a statement by the Ute Indian Tribe's legal counsel (or equivalent official) that includes the following information:

(i) A statement that the Ute Indian Tribe is an Indian tribe recognized by the Secretary of the Interior;

(ii) A descriptive statement that meets the requirements of § 49.7(a)(2) and demonstrates that the Ute Indian Tribe is currently carrying out substantial governmental duties and powers over a defined area;

(iii) A description of the laws of the Ute Indian Tribe that provide adequate authority to carry out the aspects of the rule for which delegation is requested; and

(3) Demonstrates that the Ute Indian Tribe has, or will have, adequate resources to carry out the aspects of the rule for which delegation is requested.

(c) *How is the delegation of administration accomplished?* (1) A Delegation of Authority Agreement setting forth the terms and conditions of the delegation and specifying the provisions of this rule that the Ute Indian Tribe will be authorized to implement on behalf of the EPA will be entered into by the Regional Administrator and the Ute Indian Tribe. The Agreement will become effective upon the date that both the Regional Administrator

and the authorized representative of the Ute Indian Tribe have signed the Agreement. Once the delegation becomes effective, the Ute Indian Tribe will be responsible, to the extent specified in the Agreement, for assisting us with administration of the FIP and will act as the Regional Administrator as that term is used in these regulations. Any Delegation of Authority Agreement will clarify the circumstances in which the term "Regional Administrator" found throughout the FIP is to remain the EPA Regional Administrator and when it is intended to refer to the "Ute Indian Tribe," instead.

(2) A Delegation of Authority Agreement may be modified, amended, or revoked, in part or in whole, by the Regional Administrator after consultation with the Ute Indian Tribe.

(d) *How will any Delegation of Authority Agreement be publicized?* The Agency will publish a notice in the Federal Register informing the public of any Delegation of Authority Agreement with the Ute Indian Tribe to assist us with administration of all or a portion of the FIP and identifying such delegation in the FIP. The Agency will also publish an announcement of the Delegation of Authority Agreement in local newspapers.

§ 49.4171 General provisions.

(a) At all times, including periods of startup, shutdown, and malfunction, each owner or operator must, to the extent practicable, design, operate, and maintain all equipment used for hydrocarbon liquid and gas collection, storage, processing, and handling operations covered under §§ 49.4171 and 49.4174 through 49.4185, regardless of emissions rate and including associated air pollution control equipment, in a manner that is consistent with good air pollution control practices and that minimizes leakage of VOC emissions to the atmosphere.

(b) *Definitions*. As used in §§ 49.4169 through 49.4185, all terms not defined herein have the meaning given them in the Act, in 40 CFR part 60, 40 CFR part 63, in the Prevention of Significant Deterioration regulations at 40 CFR 52.21, in the Federal Minor New Source Review Program in Indian Country at 40 CFR 49.151, or in the Federal Implementation Plan for Managing Air Emissions from True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector at 40 CFR 49.102. The following terms have the specific meanings given them:

Bottom filling means the filling of a tank through an inlet at or near the bottom of the tank designed to have the opening covered by the liquid after the pipe normally used to withdraw liquid can no longer withdraw any liquid.

Condensate means hydrocarbon liquid separated from produced natural gas that condenses due to changes in temperature, pressure, or both, and that remains liquid at standard conditions.

Crude oil means hydrocarbon liquids that are separated from well-extracted reservoir fluids during oil and natural gas production operations, and that are stored or injected to pipelines as a saleable product. Condensate is not considered crude oil.

Electronically controlled automatic ignition device means an electronic device which generates sparks across an electrode and reaches into a combustible gas stream traveling up a flare stack or entering an enclosed combustor, at the point of the pilot tip, equipped with a temperature monitor that signals the device to attempt to re-light an extinguished pilot flame.

Enclosed combustor means a thermal oxidation system with an enclosed combustion chamber that maintains a limited constant temperature by controlling fuel and combustion air.

Flashing losses means natural gas emissions resulting from the presence of dissolved natural gas in the crude oil, condensate, or produced water, which are under high pressure that occurs as the liquids are transferred to storage tanks that are at atmospheric pressure.

Fugitive emissions component means any component that has the potential to emit fugitive emissions of VOC at an oil and natural gas source, such as valves, connectors, pressure relief devices, open-ended lines, access doors, flanges, closed-vent systems, covers, thief hatches or other openings on a controlled storage vessel, compressors, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device's vent is not considered a fugitive emission. Emissions originating from other than the vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions.

Glycol dehydration unit process vent emissions means VOC-containing emissions from the glycol dehydration unit regenerator or still vent and the vent from the dehydration unit flash tank (if present).

Malfunction alarm and remote notification system means a system connected to an electronically controlled automatic ignition device that sends an alarm through a remote notification system to an owner or operator's central control center, if an attempt to relight the pilot flame is unsuccessful.

Pneumatic pump means a single diaphragm pump powered by pressurized natural gas.

Pneumatic pump emissions means the VOC-containing emissions from pressurized natural gas-driven pneumatic pumps.

Produced natural gas means natural gas that is separated from extracted reservoir fluids during oil and natural gas production operations.

Regional Administrator means the Regional Administrator of EPA Region 8 or an authorized representative of the Regional Administrator of EPA Region 8, except to the extent otherwise specifically specified in a Delegation of Authority Agreement between the Regional Administrator and the Ute Indian Tribe.

Standing and breathing losses means VOC emissions from fixed roof tanks as a result of evaporative losses during storage.

Storage tank means a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic), which provide structural support.

Submerged fill pipe means any fill pipe with a discharge opening which is entirely submerged when the liquid level is six inches above the bottom of the tank and the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.

Supervisory Control and Data Acquisition (SCADA) system generally refers to industrial control computer systems that monitor and control industrial infrastructure or source-based processes.

Unsafe to repair means (in the context of fugitive emissions monitoring) that operator personnel would be exposed to an imminent or potential danger as a consequence of the attempt to repair the leak during normal operation of the source.

Utility flare means a thermal oxidation system using an open (without enclosure) flame that is designed and operated in accordance with the requirements of 40 CFR 60.18(b). An enclosed combustor is not considered a utility flare. A combustion device is not considered a utility flare when installed horizontally or vertically within an open pit and often used in oil and natural gas operations to combust produced natural gas during initial well completion or temporarily during emergencies when enclosed combustors or utility flares installed at a source are not operational or injection of recovered produced natural gas is unavailable.

Visible smoke emissions mean air pollution generated by thermal oxidation in a flare or enclosed combustor and occurring immediately downstream of the flame present in those units. Visible smoke occurring within, but not downstream of, the flame, does constitute visible smoke emissions.

Working losses means natural gas emissions from fixed roof tanks resulting from evaporative losses during filling and emptying operations.

§ 49.4172 Emissions inventory.

(a) *Applicability*. The emissions inventory requirements of this section apply to each oil and natural gas source as identified in § 49.4169(b), and that has actual emissions of any pollutant identified in paragraph (c) of this section greater than or equal to one ton in any consecutive 12-month period.

(b) Each oil and natural gas source shall submit an inventory for every third year, beginning with the 2017 calendar year, for all emission units at a source.

(c) The inventory shall include the total emissions for PM_{10}, $PM_{2.5}$, oxides of sulfur, oxides of nitrogen, carbon monoxide and volatile organic compounds for each emissions unit at the source. Emissions for the emissions unit at the source shall be calculated using the emissions unit's actual operating hours, product rates and types of materials processed, stored or combusted during the calendar year of the reporting period.

(d) The inventory shall include the type and efficiency of any air pollution control equipment present at the reporting source.

(e) The inventory shall be submitted to the EPA Region 8 Office no later than April 15th of the year following each inventory year, except that the first inventory covering calendar year 2017 shall be submitted no later than October 1, 2018.

(f) The inventory shall be submitted in an electronic format specific to this source category that is available on the EPA Region 8 Office website at *https://www.epa.gov/air-quality-implementation-plans/approved-air-quality-implementation-plans-region-8*.

§ 49.4173 Compliance with the National Indian Country Oil and Natural Gas Federal Implementation Plan for New and Modified True Minor Oil and Natural Gas Sources in the Uinta Basin Ozone Nonattainment Area.

(a) *Applicability*. This section applies to each owner or operator of a new and modified true minor source in the oil and natural production and natural gas processing segments of the oil and natural gas source sector that is located on portions of the U&O

Reservation that are included in the Uinta Basin ozone nonattainment area and that commences construction on or after **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**. Owners/operators of such sources shall comply with the requirements of the Federal Implementation Plan for Managing Air Emissions from True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector at 49.101 through 49.105, as applicable, except for § 49.101(b)(1)(v), and, applicable requirements of the Federal Minor New Source Review Program in Indian Country at 40 CFR 49.151 through 49.161.

(b) Complying with the requirements of § 49.4173(a) does not relieve the owner/operator from the obligation to comply with the requirements of §§ 49.4169 through 49.4171 and 49.4174 through 49.4185, as applicable.

§ 49.4174 VOC emissions control requirements for storage tanks.

(a) *Applicability*. The VOC emissions control requirements of this section apply to each crude oil, condensate, and/or produced water storage tank located at an oil and natural gas source as identified in § 49.4169(b) that meets the criteria in one of paragraphs (1) through (4):

(1) At an oil and natural gas source that began operations before **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**, the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps is equal to or greater than 4 tpy, as determined according to this section;

(2) At an oil and natural gas source that began operations on or after **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**, upon startup of operation, for a minimum of 12 consecutive calendar months; or

(3) At an oil and natural gas source that began operations before **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**, with one or more storage tanks and no glycol dehydrators or pneumatic pumps, the source-wide throughput is equal to or greater than 8,000 barrels of crude oil or 2,000 barrels of condensate in any consecutive 12-month period

(4) Modification to an oil and natural gas source shall require a re-evaluation of the source-wide VOC emissions from all storage tanks, glycol dehydrators and pneumatic pumps or the source-wide crude oil or condensate throughput.

(b) *Exemptions*.

(1) This section does not apply to crude oil, condensate, and/or produced water storage tanks located at an oil and natural gas source that are subject to the emissions control requirements for storage vessels in 40 CFR part 60, subparts OOOO or OOOOa, or 40 CFR part 63, subpart HH.

(2) This section does not apply to an emergency storage tank located at an oil and natural gas source, if it meets the following requirements:

(i) The emergency storage tank is not used as an active storage tank;

(ii) The owner or operator empties the emergency storage tank no later than 15 days after receiving fluids; and

(iii) The emergency storage tank is equipped with a liquid level gauge or equivalent device.

(c) *VOC emission control requirements*. For each storage tank, you must comply with the VOC emissions control requirements of paragraphs (1) or (2) of this section.

(1) You must reduce VOC emissions from each storage tank by at least 95.0 percent on a continuous basis according to paragraphs (c)(1)(i) or (ii) of this section. You must route all flashing, working, standing and breathing losses from the crude oil, condensate, and/or produced water storage tanks through a closed-vent system that meets the conditions specified in § 49.4177(d) to:

(i) An operating system designed to recover 100 percent of the emissions and recycle them for use in a process unit or incorporate them into a product; or

(ii) An enclosed combustor or utility flare designed to reduce the mass content of VOC in the natural gas emissions vented to the device by at least 95.0 percent and operated as specified in §§ 49.4177(d) and 49.4178;

(2) You must maintain the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at an oil and natural gas source at less than 4 tpy. Before using the uncontrolled actual VOC emission rate for compliance purposes, you must demonstrate that the uncontrolled actual VOC emissions have remained at less than 4 tpy, as determined monthly for 12 consecutive months. After such demonstration, you must determine the uncontrolled actual VOC emission rate each month. The uncontrolled actual VOC emissions must be calculated using a generally accepted model or calculation methodology. Monthly calculations must be based on the

average throughput of the source for the month. Monthly calculations must be separated by at least 14 days. You must comply with paragraph (c)(1) of this section within 30 days of the monthly emissions determination required in this section if the determination indicates that VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at your oil and natural gas source increased to 4 tpy or greater.

(3) Except as provided in paragraph (c)(4) of this section, if you use a control device to reduce emissions from your storage tanks, you must equip each storage tank with a cover that meets the requirements of § 49.4177(c).

(4) If you use a floating roof to reduce emissions, you must meet the requirements of §60.112b(a)(1) or (2) and the relevant monitoring, inspection, recordkeeping, and reporting requirements in 40 CFR part 60, subpart Kb.

(5) After a minimum of 12 consecutive months of operation at a source that begins operation on or after **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**, controls may be removed under one of the following conditions:

(i) The source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps has been maintained at a rate less than 4 tpy, as determined according to this section; or

(ii) At a source with one or more storage tanks and no glycol dehydrators or pneumatic pumps, the source-wide throughput is less than 8,000 barrels of crude oil or 2,000 barrels of condensate.

§ 49.4175 VOC emissions control requirements for dehydrators.

(a) *Applicability*. The VOC emissions control requirements of this section apply to each glycol dehydration unit located at an oil and natural gas source as identified in § 49.4169(b) where the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps is equal to or greater than 4 tpy, as determined according to § 49.4174. Applicability for glycol dehydrators that began operation before **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]** shall be determined using uncontrolled actual emissions. Applicability for glycol dehydrators that began operation on or after **[30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]** shall be determined using potential to emit.

(b) *Exemptions*. This section does not apply to glycol dehydration units subject to with the emissions control requirements for glycol dehydration unit process vents in 40 CFR, part 63, subpart HH.

(c) VOC *emissions control requirements*. For each glycol dehydration unit, you must comply with the VOC emissions control requirements of paragraphs (1) or (2) of this paragraph.

(1) You must reduce VOC emissions from each glycol dehydration unit process vent by at least 95.0 percent on a continuous basis according to paragraphs (c)(1)(i) and (ii) of this section. You must route all glycol dehydration unit process vent emissions through a closed-vent system that meets the conditions specified in § 49.4177(d) to:

(i) An operating system designed to recover 100 percent of the emissions and recycle them for use in a process unit or incorporate them into a product; or

(ii) An enclosed combustor or utility flare designed to reduce the mass content of VOC in the emissions vented to the device by at least 95.0 percent and operated as specified in §§ 49.4177(d) and 49.4178; or

(2) You must maintain the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at an oil and natural gas source at less than 4 tpy for 12 consecutive months in accordance with the procedures specified in § 49.4174(c)(2).

§ 49.4176 VOC emissions control requirements for pneumatic pumps.

(a) *Applicability*. The requirements of this section apply to each pneumatic pump located at an oil and natural gas source as identified in § 49.4169(b) where the potential for source-wide uncontrolled VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps is equal to or greater than 4 tpy, as determined according to § 49.4174. You must reevaluate the source-wide VOC emissions from all storage tanks, glycol dehydrators and pneumatic pumps for each modification to an existing source.

(b) *Exemptions*. This section does not apply to pneumatic pumps subject to the emissions control requirements for pneumatic pumps in 40 CFR part 60, subpart OOOOa.

(c) *VOC Emission Control Requirements*. For each pneumatic pump, you must comply with the VOC emissions control requirements of paragraph (1) or (2) of this section.

(1) You must reduce VOC emissions from each pneumatic pump by at least 95.0 percent on a continuous basis according to paragraph (c)(1)(i) or (ii) of this section. You must route all pneumatic pump emissions through a closed-vent system that meets the conditions specified in § 49.4177(d) to:

(i) An operating system designed to recover 100 percent of the emissions and recycle them for use in a process unit or incorporate them into a product; or

(ii) An enclosed combustor or utility flare designed to reduce the mass content of VOC in the emissions vented to the device by at least 95.0 percent and operated as specified in §§ 49.4177(d) and 49.4178; or

(2) You must maintain the source-wide uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at an oil and natural gas source at less than 4 tpy for any 12 consecutive months in accordance with the procedures specified in § 49.4174(c)(2).

§ 49.4177 VOC emissions control requirements for covers and closed-vent systems.

(a) *Applicability*. The VOC emissions control requirements in this section apply to each cover on a crude oil, condensate or produced water storage tank subject to § 49.4174 and each closed-vent system used to convey VOC emissions from storage tanks, glycol dehydration units and pneumatic pumps (to a vapor recovery system or control device) that are subject to §§ 49.4174 through 49.4176.

(b) *Exemptions*. This section does not apply to covers and closed-vent systems subject to the requirements for covers and closed-vent systems in 40 CFR part 60, subparts OOOO or OOOOa, or 40 CFR part 63, subpart HH.

(c) *Covers.* Each owner or operator must equip all openings on each crude oil, condensate, and/or produced water storage tank with a cover to ensure that all flashing, working, standing and breathing emissions are routed through a closed-vent system to a vapor recovery system, an enclosed combustor, or a utility flare.

(1) Each cover and all openings on the cover (*e.g.*, access hatches, sampling ports, pressure relief valves (PRV), and gauge wells) must form a continuous impermeable barrier over the entire surface area of the crude oil, condensate, and/or produced water in the storage tank.

(2) Each cover opening must be secured in a closed, sealed position (*e.g.*, covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except when it is necessary to use an opening as follows:

(i) To add fluids to, or remove fluids from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);

(ii) To inspect or sample the fluids in the unit; or

(iii) To inspect, maintain, repair, or replace equipment located inside the unit.

(3) Each thief hatch cover must be weighted and properly seated to ensure that flashing, working, standing and breathing emissions are routed through the closed-vent system to the vapor recovery system, the enclosed combustor, or the utility flare under normal operating conditions.

(4) Each PRV must be set to release at a pressure that will ensure that flashing, working, standing and breathing emissions are routed through the closed-vent system to the vapor recovery system, the enclosed combustor, or the utility flare under normal operating conditions.

(d) *Closed-vent systems*. Each owner or operator must meet the following requirements for closed-vent systems:

(1) Each closed-vent system must route all captured storage tank flashing, working, standing and breathing losses, glycol dehydration unit process vent emissions, and pneumatic pump emissions from the oil and natural gas source to a gathering pipeline system for sale, use in a process unit, incorporation into a product, or other beneficial purpose, or to a VOC emission control device, as specified in §§ 49.4174 through 49.4176.

(2) All vent lines, connections, fittings, valves, relief valves, or any other appurtenance employed to contain and collect captured storage tank flashing, working, standing and breathing losses, glycol dehydration unit process vent emissions, and pneumatic pump emissions to transport such emissions to a gathering pipeline system for sale, use in a process unit, incorporation into a product, or other beneficial purpose, or to a VOC emission control device, as specified in §§ 49.4174 through 49.4176, must be maintained and operated properly at all times.

(3) Each closed-vent system must be designed to operate with no detectable emissions, as demonstrated by the fugitive emissions component monitoring requirements in § 49.4179(c).

(4) If any closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the captured storage tank flashing, working, standing and breathing losses, glycol dehydration unit process vent emissions, and pneumatic pump emissions, from entering a gathering pipeline system for sale, use in a process unit, incorporation into a product, or other beneficial purpose, or from being transferred to the VOC emissions control device, the owner or operator must meet one of the requirements

in paragraphs (i) or (ii) for each bypass device. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements applicable to bypass devices:

(i) At the inlet to such a bypass device the owner or operator must properly install, calibrate, maintain, and operate a flow indicator that is capable of taking continuous readings and sounding an alarm when the bypass device is open such that emissions are being, or could be, diverted away from a gathering pipeline system for sale, use in a process unit, incorporation into a product, or other beneficial purpose, or the VOC emission control device and into the atmosphere; or

(ii) The owner or operator must secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

§ 49.4178 VOC emissions control devices.

(a) *Applicability*. The requirements in this section apply to all utility flares and enclosed combustors used to control VOC emissions at an oil and natural gas source as identified in § 49.4169(b) in order to meet the requirements specified in §§ 49.4174 through 49.4177, as applicable.

(b) *Exemptions*. This section does not apply to VOC emission control devices subject to the requirements for control devices used to comply with the emissions standards in 40 CFR part 60, subparts OOOO or OOOOa; or 40 CFR part 63, subpart HH.

(c) *Enclosed combustors and utility flares.* Each owner or operator must meet the following requirements for enclosed combustors and utility flares:

(1) For each enclosed combustor or utility flare, the owner or operator must follow the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing emissions;

(2) The owner or operator must ensure that each enclosed combustor or utility flare is designed to have sufficient capacity to reduce the mass content of VOC in the captured emissions routed to it by at least 95.0 percent for the minimum and maximum natural gas volumetric flow rate and BTU content routed to the device;

(3) Each enclosed combustor or utility flare must be operated to reduce the mass content of VOC in the captured emissions routed to it by continuously meeting at least 95.0 percent VOC control efficiency;

(4) The owner or operator must ensure that each utility flare is designed and operated in accordance with the requirements of 40 CFR 60.18(b) for such flares;

(5) The owner or operator must ensure that each enclosed combustor is:

(i) A model demonstrated by a manufacturer to meet the VOC control efficiency requirements of §§ 49.4174 through 49.4177 using the EPA-approved performance test procedures specified in 40 CFR 60.5413 by the due date of the first annual report as specified in § 49.4185(b); and

(ii) Demonstrated by the owner or operator to meet the VOC control efficiency requirements of §§ 49.4174 through 49.4177 using the EPA-approved performance test procedures specified in 40 CFR 60.5413 by the due date of the first annual report as specified in § 49.4183(b); and

(6) The owner or operator must ensure that each enclosed combustor and utility flare is:

(i) Operated properly at all times that captured emissions are routed to it;

(ii) Operated with a liquid knock-out system to collect any condensable vapors (to prevent liquids from going through the control device);

(iii) Equipped and operated with a flash-back flame arrestor;

(iv) Equipped and operated with one of the following:

(A) A continuous burning pilot; or

(B) An operational electronically controlled automatic ignition device;

(v) Equipped with a monitoring system for continuous measuring and recording of the parameters that indicate proper operation of each continuous burning pilot flame or electronically controlled automatic ignition device (such as a chart recorder, data logger or similar device), or connected to a SCADA system, to monitor and document proper operation of the enclosed combustor or utility flare;

(vi) Maintained in a leak-free condition; and

(vii) Operated with no visible smoke emissions.

§ 49.4179 Fugitive emissions VOC emissions control requirements.

(a) *Applicability*. The requirements of this section apply to all owners or operators of the collection of fugitive emissions components, as defined in § 49.4171, at an oil and natural gas source, as identified in § 49.4169(b), that is required to control VOC emissions according to §§ 49.4174 through 49.4178.

(b) *Exemptions*. This section does not apply to owners or operators of the collection of fugitive emission components, as defined in 40 CFR 60.5430a, at an oil and natural gas source subject to the fugitive emissions monitoring requirements in 40 CFR part 60,

subpart OOOOa.

(c) *Monitoring requirements*. (1) Each owner or operator must develop and implement a fugitive emissions monitoring plan to reduce emissions from fugitive emissions components at all of their oil and natural gas sources on Indian country lands within the U&O Reservation. This Reservation-wide monitoring plan must include the following elements:

(i) A requirement to perform an initial monitoring of the collection of fugitive emissions components at each oil and natural gas source by **[DATE 18 MONTHS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**;

(ii) A requirement to perform subsequent monitoring of the collection of fugitive emissions components at each oil and natural gas source once every 6 months after the initial monitoring survey, with consecutive monitoring surveys conducted at least five months apart.

(iii) A description of the technique used to identify leaking fugitive emission components, which must be limited to:

(A) Onsite EPA Reference Method 21, 40 CFR part 60, appendix A, where an analyzer reading of 500 parts per million volume (ppmv) VOC or greater is considered a leak in need of repair;

(B) Onsite optical gas imaging instruments, as defined in 40 CFR 60.18(g)(4), where any visible emissions are considered a leak in need of repair, unless the owner or operator evaluates the leak with an analyzer meeting EPA Reference Method 21 at 40 CFR part 60, appendix A and the concentration is less than 500 ppmv. The optical gas imaging

instrument must be capable of meeting the optical gas imaging equipment requirements specified in 40 CFR part 60, subpart OOOOa; or

(C) Another method approved by the Administrator other than EPA Reference Method 21 or optical gas imaging instruments to demonstrate compliance with the fugitive emissions monitoring requirements.

(iv) The manufacturer and model number of any fugitive emissions monitoring device to be used;

(v) Procedures and timeframes for identifying and repairing components from which leaks are detected, including:

(A) A requirement to repair any leaks identified from components that are safe to repair and do not require source shutdown as soon as practicable, but no later than 30 calendar days after discovering the leak;

(B) Timeframes for repairing leaking components that are unsafe to repair or require source shutdown, to be no later than the next required monitoring event; and

(C) Procedures for verifying leaking component repairs, no more than 30 calendar days after repairing the leak;

(vi) Training and experience needed before performing surveys;

(vii) Procedures for calibration and maintenance of any fugitive emissions monitoring device to be used; and

(viii) Standard monitoring protocols for each type of typical oil and natural gas source (*e.g.*, well site, tank battery, compressor station), including a general list of component types that will be inspected and what supporting data will be recorded (*e.g.*, wind speed,

detection method device-specific operational parameters, date, time, and duration of inspection).

(2) The owner or operator is exempt from inspecting a valve, flange, or other connection, pump or compressor, pressure relief device, process drain, open-ended valve, pump or compressor seal system degassing vent, accumulator vessel vent, agitator seal, or access door seal under any of the following circumstances:

(i) The contacting process stream only contains glycol, amine, methanol, or produced water;

(ii) If using Method 21, the monitoring could not occur without elevating the monitoring personnel to an immediate danger as a consequence of completing monitoring;

(iii) Monitoring could not occur without exposing monitoring personnel to an immediate danger as a consequence of completing monitoring; or

(iv) The item to be inspected is buried, insulated in a manner that prevents access to the components by a monitor probe or optical gas imaging device, or obstructed by equipment or piping that prevents access to the components by a monitor probe or optical gas imaging device.

§ 49.4180 Tank truck loading VOC emissions control requirements.

(a) *Applicability*. The requirements in this section apply to each owner or operator who loads or permits the loading of any intermediate hydrocarbon liquid or produced water at an oil and natural gas source as identified in § 49.4169(b).

(b) *Tank truck loading requirements.* Tank trucks used for transporting intermediate hydrocarbon liquid or produced water must be loaded using bottom filling or a

submerged fill pipe, as defined in § 49.4171(b).

§ 49.4181 VOC emissions control requirements for pneumatic controllers.

(a) *Applicability*. The VOC emissions control requirements in this section apply to each owner or operator of any existing pneumatic controller located at an oil and natural gas source as identified in § 49.4169(b).

(b) *Exemptions*. This section does not apply to pneumatic controllers subject to and controlled in accordance with the requirements for pneumatic controllers in 40 CFR part 60, subparts OOOO or OOOOa.

(c) *Retrofit requirements.* All existing pneumatic controllers must meet the standards established for pneumatic controllers that are constructed, modified, or reconstructed on or after October 15, 2013, as specified in 40 CFR part 60, subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution.

(d) *Documentation requirements.* The owner or operator of any existing pneumatic controllers must meet the tagging requirements in 40 CFR 60.5390(b)(2) and (c)(2) and 40 CFR 60.5390a(b)(2) and (c)(2), except that the month and year of installation, reconstruction or modification is not required.

§ 49.4182 Other combustion devices.

(a) *Applicability*. The VOC emission control requirements in this section apply to each owner or operator of any existing enclosed combustor, utility flare, or other flare located at an oil and natural gas source as identified in § 49.4169(b) that is used to control VOC emissions, but is not required under §§ 49.4174 through 49.4176, and 49.4178 of this rule.

(b) *Retrofit requirements.* All existing enclosed combustors, utility flares, or other open flares must be equipped with an operational electronically controlled automatic ignition device.

§ 49.4183 Monitoring requirements.

(a) *Applicability*. The monitoring requirements in paragraphs (c) through (e) of this section apply, as appropriate, to each oil and natural gas source as identified in § 49.4169(b) with equipment or activities that are subject to §§ 49.4174 through 49.4178.

(b) *Exemptions*. Paragraphs (c) through (e) do not apply to any crude oil, condensate, or produced water storage tanks, glycol dehydration units, pneumatic pumps, covers, closed-vent systems or VOC emission control devices subject to and monitored in accordance with the monitoring requirements for such equipment and activities in 40 CFR part 60, subparts OOOO or OOOOa, or 40 CFR part 63, subpart HH.

(c) Each owner or operator must inspect at least once every calendar month each closed-vent system, including storage tank openings, thief hatches, and bypass devices, for defects that can result in air emissions according to the procedures in 40 CFR 60.5416(c). Any defects identified must be corrected or repaired within 15 days of identification.

(d) Each owner or operator must perform auditory, visual, and olfactory (AVO) inspections at least once every calendar month of each VOC emissions control device, tank thief hatch, cover, seal, pressure relief valve, and closed-vent system to ensure proper condition and functioning of the equipment. The monthly inspections must be performed while the crude oil, condensate, and produced water storage tanks are being filled. If any of the components are not in good working condition, they must be repaired within 15 days of

identification of the deficient condition.

(e) Each owner or operator must monitor the operation of each enclosed combustor and utility flare to confirm proper operation and demonstrate compliance with the requirements of §49.4178(c)(6)(iv) and (v), as follows:

(1) Check the system for proper operation whenever an operator is on site, at least once per calendar month; and

(2) Respond to any indication of pilot flame failure and ensure that the pilot flame is relit as soon as practically and safely possible after discovery.;

(3) Demonstrate compliance with the requirements of §49.4178(c)(6)(vii), that each enclosed combustor is operated with no visible smoke emissions, by complying with the requirements in 40 CFR 60.5412(d)(i) through (iii).

(e) Where sufficient to meet the monitoring requirements in this section, the owner or operator may use a SCADA system to monitor and record the required data in paragraphs (c) through (d).

§ 49.4184 Recordkeeping requirements.

(a) Each owner or operator of an oil and natural gas source as identified in § 49.4169(b) must maintain the following records, as applicable:

(1) For each oil and natural gas source as identified in § 49.4169(b):

(i) As applicable, the monthly calculations, as specified in § 49.4174(c)(2), demonstrating that the uncontrolled actual VOC emissions from all storage tanks, glycol dehydrators, and pneumatic pumps at an oil and natural gas source, as identified in § 49.4169(b), has been maintained at less than 4 tpy;

(ii) As applicable, records of monthly and rolling 12-month crude oil or condensate throughput;

(iii) For each enclosed combustor or utility flare at an oil and natural gas source required under §§ 49.4174 through 49.4178:

(A) Manufacturer-written, site-specific designs, operating instructions, operating procedures and maintenance schedules, including those of any operation monitoring systems;

(B) Date of installation;

(C) Records of all required monitoring of operations in § 49.4183;

(D) Records of any instances in which the pilot flame is not present or the monitoring equipment is not functioning in the enclosed combustor or utility flare, the date and times of the occurrence, the corrective actions taken, and any preventative measures adopted to prevent recurrence of the occurrence;

and

(E) Records of any time periods in which visible smoke emissions are observed emanating from the enclosed combustor or utility flare.

(iv) For each closed-vent system:

(A) The date of installation; and

(B) Records of any instances in which any closed-vent system or control device was bypassed or down, the reason for each incident, its duration, and the corrective actions taken, and any preventative measures adopted to avoid such bypasses or downtimes; and

(v) Documentation of all storage tank and closed-vent system inspections required in §

49.4183(d) and (e) All inspection records must include the following information:

(A) The date of the inspection;

(B) The findings of the inspection;

(C) Any adjustments or repairs made as a result of the inspection, and the date of the adjustment or repair; and

(D) The inspector's name and signature;

(vi) The Uinta Basin-wide fugitive emissions monitoring plan for the U&O Reservation; and

(vii) Documentation of each fugitive emissions inspection at all oil and natural gas sources. All inspection records must include the following information:

(A) The date of the inspection;

(B) The identification of any component that was determined to be leaking;

(C) The identification of any component not exempt under § 49.4179(b)(2) that is not inspected and the reason it was not inspected;

(D) The date of the first attempt to repair the leaking component;

(E) The identification of any component with a delayed repair and the reason for the delayed repair:

(*1*) For unavailable parts:

(*i*) The date of ordering a replacement component; and

(*ii*) The date the replacement component was received; and

(*2*) For a shutdown:

(*i*) The reason the repair is technically infeasible;

(*ii*) The date of the shutdown;

(*iii*) The date of subsequent startup after a shutdown; and

(*iv*) Emission estimates of the shutdown and the repair if the delay is longer than 6 months;

(F) The date and description of any corrective action taken, including the date the component was verified to no longer be leaking;

(G) The identification of each component exempt under § 49.4179(b)(2), including the type of component and a description of the qualifying exemption; and

(H) The inspector's name and signature.

(2) For each oil and natural gas source as identified in § 49.4169(b):

(i) For each electronically controlled automatic ignition system required under § 49.4182, records demonstrating the date of installation and manufacturer specifications; and

(ii) For each retrofitted pneumatic controller, the records required in 40 CFR 60.5420(c)(4)(i).

(b) Each owner or operator must keep all records required by this section onsite at the source or at the location that has day-to-day operational control over the source and must make the records available to the EPA upon request.

(c) Each owner or operator must retain all records required by this section for a period of at least five years from the date the record was created.

§ 49.4185 Notification and reporting requirements.

(a) Each owner or operator must submit any documents required under this rule to: U.S. EPA Region 8, Enforcement and Compliance Assurance Division, Air Toxics and

Enforcement Branch, 8ENF-AT, 1595 Wynkoop St., Denver, CO 80202, or documents may be submitted electronically to *r8airreportenforcement@epa.gov*.

(b) Each owner and operator must submit an annual report containing the information specified in paragraphs (b)(1) through (3) of this section. The annual report must cover the period for the previous calendar year. The initial annual report is due within fifteen months of **[DATE 30 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**. Subsequent annual reports are due on the same date each year as the date the initial annual report was submitted. If you own or operate more than one oil and natural gas source, you may submit one report for multiple oil and natural gas sources provided the report contains all of the information required as specified in paragraphs (b)(1) through (3) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. An alternative schedule on which the annual must be submitted will be allowed as long as the schedule does not extend the reporting period. The annual report must include:

(1) The owner or operator name, and the name and location (decimal degree latitude and longitude location indicating the datum used in parentheses) of each oil and natural gas source being included in the annual report.

(2) The beginning and ending dates of the reporting period.

(3) For each oil and natural gas source a summary of all required records specified in § 49.4183 as they relate to the source's compliance with the requirements of §§ 49.4174 through 49.4183.

§§ 49.4186-49.9860 [Reserved]

3. Reserve §§ 49.4186 through 49.9860.