New Mexico Environment Department
Comments to the U.S. Environmental Protection Agency
Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review
November 15, 2021

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The State of New Mexico is taking significant steps to fight climate change and reduce ozone concentrations through the reduction of ozone precursors and methane from the oil and gas (O&G) sector. In January 2019, Governor Michelle Lujan Grisham issued Executive Order 2019-003 on Climate Change and Waste Prevention and signed into law New Mexico's Energy Transition Act, establishing New Mexico as a national leader in clean energy. Additionally, the New Mexico Environment Department (NMED) participates in the U.S. Environmental Protection Agency's (EPA) Ozone Advance program and is in the process of adopting new nation-leading rules for ozone precursor pollutants from the O&G sector (proposed 20.2.50 NMAC or Part 50). The proposed rule supports New Mexico's public health and environmental investment to reduce volatile organic compounds (VOC) and greenhouse gases (GHG) emissions that contribute to unhealthy ozone levels and climate change.

NMED is encouraged by, and is in general support of, the EPA's proposal to strengthen the performance standards for new, reconstructed, and modified sources of VOC and GHG, and the proposed emission guidelines (EG) for existing sources of GHG for the protection of public health and welfare. The proposed rule(s), once implemented and enforced, will result in significant and meaningful reductions of air pollutants that negatively impact public health and the environment, including a significant reduction in ozone precursor pollutants which will result in lower ozone concentrations, a significant reduction of methane, a potent GHG that contributes to climate change, and a significant reduction in both toxic and hazardous air pollutants, including carcinogens such as benzene. The proposed rule(s) sets achievable, cost-effective, and appropriate performance standards for the O&G industry. The proposed standards will establish a baseline set of requirements that apply nation-wide and will help to align the varying approaches by states to address emissions from the O&G sector, especially where emissions from one state may impact affected areas in another state.

New Mexico is the second largest oil producing state and shares borders with multiple O&G producing states, including Texas, the largest oil producing state in the U.S. According to the EPA, methane emissions from the upstream O&G sector represent a significant portion of the U.S. GHG emissions profile. New Mexico's own emissions inventory estimates that emissions from the O&G sector make up 53% of the state's GHG emissions and 64% of the total state-wide methane emissions. Over the last two years, NMED and the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) developed an enforceable strategy to reduce ozone precursors and methane emissions and eliminate unnecessary waste from the O&G sector. The EPA's proposal will ensure consistent regulation of the O&G industry on a national level, which is crucial to protect public health and the environment, combat climate change, and to provide an equitable and enforceable national regulatory framework.

New Mexico will require considerable staffing and financial resources to implement and enforce the proposed rules, and NMED urges EPA to provide sufficient funding to states to ensure effective and consistent implemention and compliance with the requirements of the proposed rules. NMED urges EPA to provide proportionate funding to those states with significant oil and gas activities and to fund states based on their proportion of the total national oil and gas production. New Mexico's oil and gas sources

contribute more than 53% of the state's total GHG emissions profile and rising ozone levels over significantly large and rural geographic land areas means ensuring compliance is resource intensive using traditional staff approaches, and expensive using innovative high-altitude platform stations. To that end, the EPA should consider including compliance assurance activities in federal grants, such as in the CAA 105 grant and the PPG grant. As these rules will bring in thousands of new sources under the agency's regulatory jursidiction, a concomitant level of resources and financial assistance is critical to ensure the rule's significant and important emission reductions are achieved. Frontline communities are critically aware that many states already lack sufficient resources to effectively implement and enforce current air regulations. Without new and sufficient resources to states to guarantee effective implementation and compliance, the emissions reductions and public health benefits contemplated from the proposed rules will not be realized, and the health of frontline communities and the environment will continue to be impacted.

I. <u>The proposed rule supports New Mexico's efforts to reduce VOC and GHG emissions that contribute to unhealthy ozone levels and contribute to climate change</u>.

Several ozone monitors in New Mexico show that air quality is approaching or exceeding the 2015 ozone National Ambient Air Quality Standard (NAAQS). The Sunland Park area in southern New Mexico is currently designated as in nonattainment of the 2015 ozone NAAQS, with an additional seven counties in the state monitoring ozone concentrations at or above 95% of the standard. Monitored ozone concentrations increased throughout New Mexico over the last several years, including both of New Mexico's oil and natural gas producing regions in the San Juan and Permian Basins. According to the EPA's latest National Emissions Inventory (EPA, 2014 NEI version II), over 80% of the emissions in these areas are from oil and natural gas sources. The Carlsbad ozone air monitor (AQS ID # 35-015-1005) in the Permian Basin, which is an area of rapid growth in oil production, serves as a prime example of the air pollution problems facing New Mexico. The design value for ozone at this monitor has elevated from 68 ppb in 2016 to 78 ppb in 2020. 2021 data show some of the highest monitored ozone concentrations recorded in the past decade, indicating this upward trend will continue throughout the state.

To improve air quality in these areas, NMED developed the Ozone Attainment Initiative (OAI) and joined the EPA's Ozone Advance program. As part of the OAI, NMED is currently researching options for control measures for all source sectors. The EPA's proposed rule will be fundamental to reducing emissions from the oil and gas sector. Without these important reductions, additional counties in New Mexico and other states may exceed the 2015 ozone NAAQS, resulting in additional nonattainment area designations and nonattainment permitting requirements.

Recent photochemical modeling indicates that interstate transport contributes to high ozone concentrations in New Mexico. As a result, New Mexico faces nonattainment designations and increased nonattainment permitting requirements, while many states contributing to these exceedances have taken no action to address their contributions. This further emphasizes the need for strong, federally enforceable emissions standards for the O&G sector to ensure fair and equitable requirements in basins that span state lines.

<u>II. Robust, effective, and recurring fugitive emissions monitoring is critical to ensuring compliance with the proposed rules and ensuring durable long-lasting emissions reductions. NMED encourages the EPA to consider innovative fugitive monitoring methods to determine compliance with the proposed rule requirements. State agencies may face significant obstacles in implementing the rule and determining compliance with the provisions of this part utilizing standard compliance monitoring methods such as onsite inspections.</u>

NMED strongly urges the EPA to authorize the use of next generation monitoring tools to determine compliance with the requirements of the proposed rule. This is an equally important concept for industry to utilize to monitor emissions as it is for states to use to assure compliance with applicable rules. There are several innovative compliance approaches that can be used to effectively and efficiently monitor sources for compliance, while balancing the already strained resources of state agencies. Given the magnitude of affected sources that will be brought under the rule, EPA should consider allowing technologies that provide quantifiable, verifiable, and consistent monitoring and compliance data at a scale that can accommodate large remote regional areas consisting of hundreds or even thousands of facilities. As noted in EPA's proposal, remote sensing technologies may allow owners and operators to more effectively comply with the monitoring requirements at well pads, without impacting the accuracy of the compliance determination. As further noted, other innovative remote sensing technologies to monitor fugitive and large emission events could include aerial, truck-based, satellite, and continuous monitoring. NMED supports these innovative approaches and has provided a mechanism for their use in the proposed Part 50 rules. Alternative monitoring strategies must be effective, enforceable, and equivalent and will be a critical option for ensuring that emission leaks are identified and repaired as required.

III. NMED urges the EPA to include other innovative compliance and enforcement strategies and tools that provide an effective and efficient means of determining compliance and enforcing rule provisions.

The proposed rules are likely to affect thousands of sources in New Mexico. Given the size and scope of the affected sources, it's critical that the rule contain new approaches to determining compliance with the rule provisions. Providing effective, efficient, and innovative methods to determine overall rule compliance will assist state agencies having limited capacity and resources, will result in better rates of compliance across the industry, and will improve the overall ability of regulatory agencies to enforce on violations of the rule.

Effective, efficient and innovative compliance and enforcement strategies will improve overall rates of compliance, reduce harmful air pollution, and improve overall air quality and impacts on public health and the environment. Strategies could include the preparation and submittal of annual compliance certifications identifying specific areas of compliance and noncompliance with rule provisions and third-party audits of an operator's compliance with the rule, including the effectiveness of the operator's LDAR program.

IV. Comments on the proposed standards of performance for new, reconstructed, and modified sources in the O&G sector (NSPS Subpart OOOOb) and on the proposed emission guidelines (EG) for methane for existing sources (EG NSPS Subpart OOOOc).

NMED recommends that the EPA consider a lower applicability threshold for new and existing storage vessel control requirements. The applicability threshold should be set lower, considering that VOC emissions from new and existing storage vessels and tank batteries are a significant source of emissions from the O&G sector.

Storage vessels and tank batteries are a significant source of VOC emissions from the O&G sector. NMED's proposed applicability thresholds for new and existing storage vessels are lower than what the EPA is currently proposing in OOOOb and OOOOc. NMED's proposed Part 50 requires controls for new storage vessels with a PTE ≥2 tpy of VOC, existing storage vessels in multi-tank batteries with a PTE ≥3 tpy of VOC, and existing storage vessels in single tank batteries with a PTE ≥4 tpy of VOC. The EPA should consider lowering the proposed threshold to include lower emitting storage vessels and tank batteries

and provide sufficient time for owners and operators to comply with the control requirements as part of a phased compliance timeline. During the Part 50 rulemaking hearing, affected owners and operators and industry stakeholders raised concerns about having sufficient numbers of control devices available to implement controls simultaneously. To address this, Part 50 proposes a phased compliance deadline in order to ensure there are sufficient control devices available over the course of the compliance timeline. Lower applicability thresholds for both new and existing vessels with a reasonable compliance deadline will result in important additional emissions reductions from the affected sources.

V. Comments on additional sources of pollution.

a. Pigging operations & related blowdown activities should be addressed in a supplemental proposal. NMED proposed a comprehensive emission reduction and LDAR strategy for pigging operations in the proposed Part 50. Individual pipeline pig launcher and receiver operations with a PTE ≥1 tpy VOC located within the property boundary of, and under common ownership or control with, well sites, tank batteries, gathering and boosting stations, natural gas processing plants, and transmission compressor stations, are subject to the requirements of Part 50. NMED encourages the EPA to adopt similar requirements in the proposed rule.

b. Tank truck loading operations should be addressed in a supplemental proposal. NMED proposed emission control requirements for truck loading operations in the proposed Part 50. NMED encourages the EPA to adopt similar requirements in the proposed supplemental rule.

VI. NMED comments on root cause investigations and corrective actions regarding emission detections.

NMED supports the EPA's proposal to require owners and operators to conduct root cause investigations and take corrective actions when large emission events are detected. NMED supports the EPA's proposal to use advanced technologies to detect and understand the source of large methane emission events. The timely repair of malfunctioning equipment and appropriate corrective actions are especially critical to protecting frontline communities that live near O&G facilities or are affected by O&G pollution.

NMED also supports the EPA's proposed development of a model plan for O&G facilities to respond to third party complaints of large methane emission events. NMED supports developing a single national plan instead of company- or site-specific plans. A uniform plan would set industry-wide standards for O&G facilities, thus eliminating individualized facility plans or a national patchwork of requirements for large emission events.

The EPA is seeking detailed comments on specific elements that could be included in a uniform, nationwide large emission response plan. To that end NMED recommends that:

1. Each affected facility post a legible notice with a company contact, phone number, and email where any regulator or member of the public may submit a formal complaint regarding a large emission event.
2. Each owner or operator assign a complaint specialist to manage complaints, including documenting the receipt, routing the complaint to a qualified technician for investigation, and responding to the complainant.
3. The EPA require a root cause investigation conducted by a qualified and properly trained technician within 14 days of the event and repairs be made no later than 30 days from discovery of the event.

VII. Comments on state plan development for existing sources (EG NSPS OOOOc).

a. NMED supports the EPA's proposal to require a robust and meaningful public participation process during state plan development; however, NMED wants to ensure that the EPA will allow states the flexibility to craft these plans to the unique economic and demographic features of each state.

NMED supports the EPA's proposal regarding meaningful engagement and reasonable notice requirements. The EPA should permit both new and traditional communication technologies to qualify as a means to conduct meaningful public engagement. Requiring states to share information and solicit input from stakeholders at critical junctures during plan development will ensure communities have abundant opportunities to participate in the plan development process.

The EPA is also proposing giving the reasonable notice requirement additional and separate meaning from "public hearing". This will ensure the public has reasonable notice of relevant information, as well as the opportunity to participate in the state plan development. Requiring states to provide this opportunity to stakeholders directly addresses a major issue of environmental inequity; the ability for stakeholders to participate in the process that determines impacts and risks to their health and environment. Requiring the opportunity for stakeholders to participate will necessitate that a state not only holds a public hearing, but guarantees all interested stakeholders have the chance to participate in the development process.

Modern communications technology has made it much easier for states to effectively communicate with various communities and stakeholders. While there may be barriers involving accessibility to these technologies that should be considered, these technologies should still be utilized during the meaningful engagement process. These technologies include video conferencing, social media, and smart phone apps. In light of recent events, it is clear that video conferencing can be an effective planning tool that allows for planners and state officials to communicate with community members and other stakeholders, which is why NMED believes these technologies should be utilized as a way to meaningfully engage with communities and stakeholders.

The EPA is soliciting comments and suggestions on how to coordinate emissions crossing state borders. States, local governments, community organizations, and other stakeholders may find it helpful to create organized groups that can help address interstate air quality issues. NMED participates in the Four Corners Air Quality Group, which could serve as a model for such coordination. New Mexico, along with the Navajo Nation, Colorado, Arizona, and Utah meet regularly to address common air quality issues in the region. The Four Corners Air Quality Group is also a variety of different stakeholders including community members and organizations and industry leaders. The goals and functions of any cross-border groups can, and should, be crafted to the unique needs of the area(s) in which they serve. These organizations open a dialogue between all stakeholders and consist of government officials and staff members that can directly address any issues of concern.

b. Comments on state plan development for existing sources.

The EPA solicits comment on whether states relying on existing programs should be authorized to include a different form of standard in their plans so long as they demonstrate the equivalency of such standards to the level of stringency required under the final EG, and how such equivalency demonstrations can be made in a rigorous and consistent way.

The EPA should consider equivalency and have a streamlined process for the adoption of states' existing rules under the new rule. New Mexico just completed a multi-year comprehensive rulemaking process and has proposed a nationally leading regulation covering both new and existing O&G sources. NMED

recommends that the EPA provide a streamlined demonstration of equivalency if state rules already require meaningful, cost-effective GHG and VOC emission reductions.

c. Response to Timing of State Plan Submissions and Compliance Times.
The EPA is soliciting comment on any facts and circumstances that are unique to the O&G industry that the EPA should consider when proposing a timeline for plan submission applicable to a final EG for this source category. New Mexico is the second largest crude oil producer in the nation and in the top ten states for natural gas production. In New Mexico, there are thousands of large and small designated facilities within the state that would need to provide data required in 40 CFR 60.25a for the state plan. Many owners and operators have operations in both New Mexico and other states and will be required to provide data for all of their designated facilities at the same time that they are required to provide data to NMED. This may lead to a bottleneck in states' plan development. NMED urges the EPA to allow states sufficient time to collect the required data for plan development and for the states to develop their plans accordingly. During the Part 50 rulemaking, equipment inventories were requested for equipment subject to the proposed rulemaking. The response from industry was poor, possibly due to time constraints in gathering the requested data. NMED therefore requests the EPA provide ample time for states to gather the data required for plan development.

NMED urges the EPA to allow states sufficient time to conduct thorough outreach to stakeholders. States must implement a robust outreach program, which is essential to any rulemaking procedure. The Part 50 rulemaking was an arduous task. It was highly visible, high-profile, and of interest to industry stakeholders, communities impacted by emissions from the O&G sector, front line communities, communities whose economies have significant ties to the O&G industry, local governments, state legislators, and non-governmental organizations. It is crucial to inform, and allow all public and private entities, especially those disadvantaged communities directly affected by the O&G sector, to be made aware of the proposed rulemaking and to provide input during the rulemaking process. For the Part 50 rulemaking, NMED provided an initial informal comment period and an extended formal comment period to allow all interested parties the opportunity to comment on the proposed rule. NMED requests that the EPA provide ample time to ensure a thorough and robust outreach program, which will allow for informed engagement during the rulemaking process and the potential to reduce contention during the rulemaking hearing.

The EPA is soliciting comment on whether a two-year compliance schedule is appropriate for all designated facilities, or whether the EG should require a shorter or longer compliance schedule. A two-year compliance schedule may prove to be difficult for the designated facilities to meet. NMED understands the urgency for designated facilities to be brought into compliance as soon as possible but given the many thousands of existing designated facilities, providing an attainable compliance deadline that sets realistic deadlines is paramount to achieving meaningful emissions reductions.

d. NMED supports the EPA's proposal to supersede the requirements of 40 CFT 60.25a(a) for the purpose of EG OOOOc.
The EPA has identified over 15,000 O&G owners and operators, one million producing onshore O&G wells, 5,000 gathering and boosting facilities, over 650 natural gas processing facilities, and 1,400 transmission compression facilities. In New Mexico alone, there are 1,613 permitted O&G facilities[1] and

[1] New Mexico Environment Department Air Permit Map (APMAP), https://air.net.env.nm.gov/rsmt/.

54,887 completed O&G wells[2]. The EPA recognizes, and NMED agrees, that due to the large number of existing O&G sources and the frequent change of configuration and/or ownership, it may not be practical to require states to compile emissions data in the same way as is typically done for other industries. The EPA recognizes that states may not have a GHG emissions inventory of all designated facilities already available and that creating such an inventory would be resource intensive. NMED has collected many years of data on criteria pollutants from Title V sources; and in 2021, NMED conducted a comprehensive minor source emissions inventory of criteria pollutants. However, a GHG emission inventory for all minor sources has yet to be accomplished for New Mexico, although NMED is currently planning and working toward conducting a GHG emission inventory from all minor sources. As the EPA acknowledges, and NMED is experiencing, creating such an inventory is time consuming and resource intensive. NMED agrees with the EPA that a highly detailed GHG emissions inventory is not necessary for states to develop standards of performance, and that such standards of performance could be developed using a different type of emissions inventory data. For these reasons, NMED supports the EPA's proposal to supersede the requirements of 40 CFR 60.25a(a) for purposes of this EG, and to provide options for the use of different types of emissions data to represent the same general type of information. NMED supports the EPA's proposal to allow states flexibility to utilize existing inventories and emissions data to develop their State Implementation Plans (Ss) as they pertain to OOOOc.

In the proposed rule, the EPA suggests the Greenhouse Gas Reporting Program (GHGRP) as an example of an inventory that could be leveraged and used to develop State SIPs. The GHGRP includes emissons data from covered sources that exceed 25,000 metric tons per year of CO_2e.[3] This high threshold eliminates the sources emitting less than 25,000 metric tons per year of GHG. NMED does not agree that the GHGRP data should be used because it would exclude the emissions from thousands of smaller upstream oil and gas facilities, which in the aggregate represent a significant amount of GHG and criteria pollutant emissions. NMED supports allowing states to use other available existing inventory information, so long as the inventory adequately captures data, or estimates emissions from, all potentially affected facilities.

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[2] New Mexico Energy, Minerals and Natural Resources Department, OCD Data-Statistics, OCD Well Statistics-2020, 1/28/2021, https://www.emnrd.nm.gov/ocd/ocd-data/statistics/.

[3] See Greenhouse Gas Reporting Program (GHGRP), available at https://www.epa.gov/ghgreporting/learn-about-greenhouse-gas-reporting-program-ghgrp.