From:	NMOAI, NMENV
To:	Spillers, Robert, NMENV
Subject:	Fw: [EXT] Oil and gas ozone precursor rule comments
Date:	Thursday, September 17, 2020 7:25:28 AM
Attachments:	Earthworks NMED StakeholderComments 9-15-20.pdf

From: Nadia Steinzor <nsteinzor@earthworksaction.org>
Sent: Tuesday, September 15, 2020 4:51 PM
To: NMOAI, NMENV
Subject: [EXT] Oil and gas ozone precursor rule comments

Thank you for the opportunity to comment on NMED's proposed oil and gas ozone precursor control rule. Attached are comments from Earthworks.

=== EARTHWORKS: Protecting Communities and the Environment

Nadia Steinzor
Manager, Community Empowerment Project
202-887-1872, ext. 109
nsteinzor@earthworks.org
skype: nadia.steinzor-ewa
twitter: @earthworks

Watch invisible oil & gas pollution become visible through optical gas imaging videos created for the Community Empowerment Project.

EARTHWORKS

September 15, 2020

Liz Bisbey-Kuehn
New Mexico Environment Department, Air Quality Bureau
1190 St. Francis Drive
Santa Fe, NM 87505
Comments submitted by email to nm.oai@state.nm.us

Dear Ms. Bisbey-Kuehn and NMED staff:

Thank you for the opportunity to submit comments on NMED's draft regulations to reduce emissions from the oil and natural gas sector (the ozone precursor rule). Earthworks appreciated being part of the Methane Advisory Panel (MAP) convened to guide the development of these regulations.

Earthworks is a national nonprofit organization committed to protecting communities and the environment from the impacts of mining and energy development while seeking sustainable solutions. For nearly 30 years, we have fulfilled our mission by working with communities and grassroots groups to reform government policies, improve corporate practices, influence investment decisions and encourage responsible materials sourcing and consumption.

Our comments are informed by the governor's mandate to NMED and the Energy, Minerals, and Natural Resources Department (EMNRD):
"...jointly develop a statewide, enforceable regulatory framework to secure reductions in oil and gas sector methane emissions and to prevent waste from new and existing sources and enact such rules as soon as practicable."

The issuance of regulations to reduce emissions is an important step on the path toward New Mexico's stated goal of curbing climate pollution, including from the oil and gas industry.

Efforts to stem this pollution are particularly critical now because methane--a key component of oil and gas production--is 86 times more damaging to our climate than carbon dioxide over a 20-year timeframe.[1] Currently, this is only twice as long as the time that scientists say we have to avoid the most catastrophic effects of climate change[2]

In addition to being bad for the climate, oil and gas pollution must be reined in because of its contribution to the formation of ozone. It is well-known that oil and gas pollution causes a range of health problems, in particular those connected with volatile organic compounds (VOCs).[3] Recent science also indicates that methane and ethane play a role in the formation of ground-level ozone.[4]

The contributions of the oil and gas industry to the formation of ozone threatens the health of the nearly 140,000 New Mexico residents who live within a half-mile of active operations—a number that is growing as the state allows industry to continue to expand.[5]

The following comments are underpinned by these pressing realities, which Earthworks has closely documented in oil and gas fields nationwide. We have worked with directly impacted residents, researched the ability of state agencies to oversee the industry and enforce regulations, and, since 2014, used Optical Gas Imaging (OGI) to make visible otherwise invisible oil and gas pollution.

In short, our experience underscores the importance of having strong rules to reduce the harm caused by the oil and gas industry. However, equally important is the need for state agencies to have the resources, staff, and political will to enforce rules and, in so doing, increase protection for communities and the environment. Only then will regulations serve their intended purpose as mechanisms to hold operators accountable for the pollution and harm they cause.[6]

1. Leak detection and repair (LDAR) frequency should be strengthened

Earthworks supports NMED in setting a threshold of 500 parts per million (ppm) of hydrocarbon for defining a "leak" using a gas detector instrument. We also appreciate the requirements in the draft rule that operators conduct LDAR quarterly or monthly depending on the Potential to Emit (PTE) of facilities. These thresholds would bring New Mexico in line with neighboring Colorado--with a key exception that NMED should correct.

In late 2019, Colorado's Air Quality Control Commission (AQCC) adopted additional LDAR requirements for oil and gas pollution sources within 1,000 feet of "occupied areas"--defined as residences, schools, businesses, and recreational venues. In these locations, operators will have to conduct inspections on a monthly basis for any sources with a PTE over 12 tons per year (tpy).[7]

NMED should add to the draft rule an inspection requirement for any wells and facilities emitting at (or preferably below) the 12 tpy level that are located near occupied areas. As currently written, NMED would require monthly inspections only for large facilities (i.e., those used for boosting, processing, and transmission) that emit over 25 tpy, regardless of location and proximity to people whose health could be negatively impacted.

In addition, NMED should be more specific with regard to the permission for operators to forego LDAR activities if components are "unsafe, difficult, or inaccessible to monitor" and until it "becomes feasible to do so." As currently worded, this provision could result in indefinite delays and allow operators to claim prohibitive conditions for a wide range of reasons. We suggest adding timeframes within which operators would be required to find a safe way to access, inspect, and repair their polluting equipment and then adhere to LDAR frequencies in §20.2.50.16.

Repair requirements in the current proposal (§20.2.50.16(D)) give operators substantial flexibility (7-15 days) to conduct repairs depending on the leak detection method used. NMED should also base leak repair schedules on the size of the leak, which determines the relative volume of emissions released.

This approach underpins California's Oil and Gas Regulation (COGR), which requires daily audio/visual/olfactory (AVO) inspections to improve the chances of finding leaks and recommends that operators use OGI as a screening tool to find visible leaks, followed by measurement using a gas analyzer.[8] Importantly, COGR establishes compliance periods that, over time, require operators to detect and repair ever-smaller leaks faster; for example, starting in January 2020, operators have 5 days to repair leaks of 10,000-49,999 parts per million by volume (ppmv) and 2 days to repair leaks of 50,000 ppmv.

As the MAP recognized in its technical report, several studies demonstrate that measured emissions can be significantly higher than what operators report to inventories.[9] NMED should have independent third parties conduct independent measurements at select sites (e.g., large well sites, compressor stations, and processing plants) to ensure that the emissions data being submitted by operators are accurate. This would support both emissions tracking and enforcement actions. NMED should pass the costs of measurement on to operators as part of increased permit fees (discussed further below).

One option to conduct emission measurement is quantitative optical gas imaging (QOGI), a technology that is increasingly being deployed in oil and gas fields and directly marketed to operators and regulators.[10] Earthworks has significant experience using QOGI, which is compatible with industry-standard OGI cameras. The technology allows for real-time quantification for any fairly well-defined point source that is not derived from combusted emissions (e.g., at unlit flares, pneumatic controllers, and tanks). NMED could use QOGI technology, or have third parties use it, to periodically verify the estimates associated with a site's air permits.

In addition, NMED could use a stationary monitoring system on a roving basis to ensure that larger sources (e.g., processing facilities and compressor stations) are operating consistently with emissions estimates in permits. Stationary monitoring could include a mobile monitoring van using hyperspectral imaging, which can speciate and quantify a variety of gasses at the same time. Used by researchers and regulators in Colorado, this t ype of system also has air sampling capacity to detect gasses that are not visible through optical sensing.

NMED could send the van to priority sites (such as those which have received public complaints) for a few days at a time, unannounced, to verify regulatory compliance and sample for air toxics at the same time. The operation could be paid for by a dedicated fund derived from fines and penalties levied on operators that exceed their permitted emissions volumes.

2. Marginal wells should not be exempt from pollution control rules

The current draft rule does not apply LDAR requirements to stripper (marginal) wells. NMED is effectively exempting 95% of operating wells in New Mexico, the owners of which would not be required to detect and fix leaks. We oppose the stripper well exemption because if NMED's goal is to reduce emissions and to have an enforceable mechanism for doing so, *all* active wells should be covered by a future rule because *all* wells are potential pollution sources.

NMED should not conflate "low producing" with "low emitting." A recent study documented that stripper wells were a disproportionate source of methane and VOCs relative to oil and gas production.[11] This trend was also noted in a 2016 study on methane leaks from oil and gas operations in the Marcellus Shale region, which concluded that conventional wells can have far higher leakage rates than unconventional ones due to a greater prevalence of equipment failure and maintenance problems.[12]

Earthworks also objects to the threshold for stripper wells and "low-emitting" facilities set out in §20.2.50.25 (i.e., under 15 tons tpy based on operator PTE estimates) because it ignores the potentially significant and cumulative pollution impact of many smaller sources at a single well site and across a geographic area.

As indicated in our comments on the MAP report, Earthworks has quantified emissions at sites in New Mexico using the QL320 from Providence Photonics, equipment designed to complement OGI cameras. Our measurements indicate the potential for leaks from even a single tank or unlit flare

that--if left undetected and unrepaired for weeks or months on end--could far exceed the 15 tpy threshold that NMED is using to define "small" emissions sources. A lack of inspection regimes could, over time, lead to both persistent and numerous leaks.

In addition, the 15 tpy threshold in §20.2.50.25 may be at odds with the LDAR requirements in §20.2.50.16. The former section exempts sources with emissions under 15 tpy from LDAR, but the latter one establishes LDAR frequencies for wells, tanks, and facilities that emit volumes of 5-25 tpy.

We also note that the MAP report included a comment that the cost of conducting emissions surveys at stripper wells would be prohibitive given their low profitability. However, as Earthworks indicated in our comments to the MAP report, the costs cited were based on OGI technical services for single sites. Traditional Method 21 alternatives of sniffer instruments and soap bubble assessments could be far more affordable options for leak detection, as would planned, comprehensive surveys covering all of an operator's wells within a certain radius.

Finally, the so-called "emission standards" and "monitoring requirements" for stripper wells in the draft rule do not, as currently drafted, support the control and monitoring of emissions. The information NMED seeks (e.g., location, identification numbers, and operator PTE estimates of flaring, venting, and other releases) could be useful only to understand the pollution impact of stripper wells and "low emitting" sites and perhaps for regulatory purposes.

At minimum, NMED should specify in the draft rule how the agency will use the information gathered, for example to develop a future rulemaking based on reducing pollution from marginal wells and presumed "low emitting" sites. By leaving out requirements related to operator practices in the current draft rule, NMED is missing a current opportunity to directly address pollution from widespread and potentially significant emission sources.

3. NMED should leverage public complaints to enforce pollution reduction rules

Earthworks greatly appreciates NMED's recent issuance of violations to operators for their negligence in controlling pollution and causing emissions in excess of permitted levels--actions that harm both communities and the climate. We have also appreciated NMED's interest in using Earthworks' OGI videos and official complaints as valid third-party evidence on which to base the agency's enforcement actions. We believe that public complaints are an essential part of regulatory enforcement, as they can lead to actions that directly reduce pollution while building trust in agencies and improving operator accountability.

Earthworks has conducted many of its own investigations of oil and gas pollution in New Mexico. Between 2018-2020, Earthworks made 25 trips to 6 counties using OGI to film oil and gas pollution caused by intentional releases, equipment failures, and operator errors in oil and gas fields. We made over 300 visits to about 200 sites, and documented significant problems at many wells, compressor stations, and storage facilities.

Subsequently, Earthworks staff filed 108 complaints with NMED, based on our OGI findings and any odor or health impacts recorded by field staff. Nine (8%) of these complaints resulted in direct pollution reductions. One led to an equipment repair and one was connected to a regulatory violation issued after NMED and the US Environmental Protection Agency (EPA) conducted an inspection. Seven complaints resulted in unprecedented Letters of Potential Violation issued directly to the operators that gave operators 14 days to demonstrate compliance or be subject to further NMED enforcement actions.

Only a handful of Earthworks' complaints (6, or nearly 6%) generated some oversight action by regulators, in the form of inspections; however, none of these resulted in the issuance of violations. About half (60, or 55%) generated no regulatory action at all. (The results of the remaining 31 complaints, or 27%, are pending, as they were filed more recently and were not closed out at the time of writing.)

To improve response to complaints and in turn enforcement of the proposed rules, NMED should create a publicly accessible tracking system for public complaints. Any community member should be able to go online and easily obtain information about the oil and gas facilities that concern them. Every time they file a complaint, they should receive a single tracking number they can use to track agency inspections and progress on the agency investigation.

In addition, both the public and NMED would benefit from a map of complaints with which to identify "clusters" of pollution events and associated problems (e.g., persistent odors, noise, and onset of health symptoms). A publicly accessible and searchable complaint tool (offering data views as a map and a list, as NMED makes available for "Permitted Sites." These tools would help connect the reported problems to specific operators and facilities, which would in turn support enforcement and accountability.

Examples of complaints filed with NMED

In the last 2 years, Earthworks' certified thermographers and field staff filed 6 complaints relying on OGI of emissions from Matador Production Company's Coleman well site in Eddy County. Using NMED's online complaint tool, we filed 6 complaints for an unlit (or in some cases a "dirty," or improperly combusting) flare and/or venting tanks. For each complaint filed by Earthworks, the emissions description and link to the OGI video is provided below.

- 11/15/19 (***NMED complaint #: 13941):*** OGI video captures consistent emissions venting from the tank vent pipe. https://youtu.be/ncLyEaYl210.
- 4/16/19 (***NMED complaint # 13531)***: OGI video shows emissions leaking from the thief hatches. Visible black smoke is coming off the flare as it is not burning efficiently. https://youtu.be/dFy9kc15FA8.
- 2/15/19 ***(NMED complaint #13455):*** OGI video shows emissions coming from an unlit flare, tank vents, and leaking thief hatches over the course of 3 separate days and 5 visits. Workers on the site explained that the auto-ignite on the flare was broken and they had to bring in a "man-lift" to manually relight the flare. When we discovered the unlit flare it has already been unlit for several days, if not a full week. The flare problem was re-lit, but significant emissions continued from the tanks (both from the vents and the thief hatches). https://youtu.be/u2yYXfuekDU.
- 10/17/18 ***(NMED complaint #13318):*** OGI video shows emissions on both Thursday, September 27 and on Friday, September 28. On September 27, OGI video shows a large plume of emissions from the top of the tanks. Field staff called the emergency number on the operator sign (972-371-5200) to alert the operator of the emissions, and left a voicemail shortly after 6:00pm that evening. We did not receive a return call from Matador Production Company. We returned to the site on the morning of Friday, September 28 and documented a worker opening the thief hatch without any kind of respirator protection. The OGI video includes footage of significant emissions from the thieving: https://youtu.be/nflrYEhqJpQ

- 6/22/18 ***(NMED complaint #13137):*** OGI video shows consistent emissions coming from the vertical elbow on the tank vapor release pipe. Earthworks also captured OGI video and filed a complaint for an unlit flare on March 13 (NMED complaint #13024, filed online on April 26, 2018: https://youtu.be/QF8xwNeKSss). The flare was lit when we filmed on June 4, 2018. https://youtu.be/3e8saToYFHw
- 4/25/18 ***(NMED complaint #13024):*** OGI video recorded at 5:12 PM on 3/13/18 shows emissions were coming from an unlit flare and from tank vents. Video recorded at 10:50 PM on 3/13/18 shows a dense plume of emissions coming from the unlit flare and continuing emissions from the tank vents. These emissions were traveling far across the fenceline of the facility and out into the surrounding area. https://youtu.be/QF8xwNeKSss

Earthworks staff did not find significant emissions or any malfunction of the flare at the Coleman site during our last round of fieldwork in early March 2020. On November 4, 2019, NMED issued a Notice of Violation to Matador Production Company and Mewbourne Oil Company for air quality violations resulting from failures to capture emissions and equipment failures, but of which resulted in air pollution. Discussions with Matador, NMED, and the EPA were ongoing as of September 2020.

Also in Eddy County, Earthworks documented repeat emissions events at the Enterprise South Carlsbad compressor station. We filed 7 complaints in 2 years, one of which resulted in a Letter of Potential Violation from NMED. Please find Earthworks' complaints and links to our thermographers' OGI videos below.

- 11/15/19 ***(NMED complaint #13940):*** OGI video captures a dense plume of emissions from the improperly combusting flare that is traveling far across the facility fenceline and away from the combustion source. Intense venting was observed from the tanks. Since April 2018, Earthworks has filed 6 complaints with NMED regarding emissions from this site (primarily focused on the flare operating inefficiently and emissions venting from the tanks: https://youtu.be/t2YqQILT4tY.
- 8/1/19: ***(NMED complaint #13725):*** OGI video shows emissions venting off of several point sources at this large Title V Major Source. Emissions carry off site in a combined plume towards a herd of cattle in the adjacent land. Since 4/25/18, Earthworks has filed 4 complaints with NMED for VOC and methane emissions from this site: https://youtu.be/e612beirkOQ.
- 4/16/19 ***(NMED complaint #13532):*** OGI video shows heavy emissions from the flare and emissions venting from the tank battery: https://youtu.be/O1HSs7Dwmew.
- 3/18/19 ***(NMED complaint #13497):*** OGI video shows emissions coming from a venting flare, venting tanks and compressors over the course of 4 visits over 4 days: https://youtu.be/9qwlSAKVAlY
- 10/17/18 ***(NMED complaint #13320):*** OGI video shows significant emissions venting from the 3 tall skinny stacks. Emissions carrying offsite over neighboring agricultural land. Fieldstaff called Enterprise contact number (281 887-2633). Jimmy informed us that the facility was just coming back on line and that the emissions event was normal operations and would be reported to NMED under permit requirements. Jimmy put us in touch with on-site managers. On both Sept 27 and Sept 28 on-site managers (Jeremiah and Blake) came

to speak to us on the county road, and indicated that they were not authorized to speak with us, but that someone would follow up with a phone call. We did not hear back from any Enterprise representatives: https://youtu.be/atix6ahhUFY

- 6/22/18 ***(NMED complaint #13139):*** OGI video shows emissions from the tall exposed flare. The flare appears to be burning very inefficiently. OGI video also shows some type of non-point source emissions at this compressor station, possibly from a source at the ground level that field staff was not able to pinpoint. The density of equipment made it difficult to identify the exact point source from the public road**:** https://youtu.be/fnVhgTI-U34 '
- Earthworks captured OGI video and filed a complaint for similar emissions on March 13, 2018. (NMED complaint #13023, filed online on April 26, 2018; see https://youtu.be/LIJOipIgDlM). NMED staff closed the complaint and concluded that the OGI showed "heat from the flare." Based on the findings and assessment of Earthworks' ITC-certified thermographer, the emissions shown in this latest OGI video are not heat. This is demonstrated by the following components of the compiled OGI video:
    - The plume dissipation into ambient temperature shows gases dispersing beyond the heat plume and into the air.
    - Beyond the heat (which the OGI shows as a white plume around the exhaust stack) gases are visible, as the temperature spot meter shows a relatively consistent background temperature even as a substantial gas plume is visible. These gases are unburned hydrocarbons and probably also VOCs that are escaping combustion, as not all combustion is 100% efficient.
    - The very large non-thermogenic hydrocarbon and VOC plume appears to be vapors. The vapors show a consistent background ambient temperature which indicates the presence of gases.
- 4/25/18 ***(NMED complaint #13023):*** There are many emission points at this site that are difficult to pinpoint from the public road. The small flare has a dense plume of emissions. There are emissions from other combustion sources that appear to be compressors and, to the right of those is a large source of emissions. The tall flare is emitting a plume. All of these emissions are traveling offsite. There are residential homes downwind. https://youtu.be/LIJOipIgDlM

On January 9, 2020, NMED issued a Letter of Potential Violation in response to significant emissions Earthworks captured on OGI video from an incomplete flare combustion and from the stabilized condensate tanks. Enterprise responded on February 9, 2020 (outside of the required 14-day response deadline) and stated that "the flare and tank vent shown in the FLIR video appeared to be operating correctly and normally" and therefore the facility is in compliance. As of September 15, 2020, no further NMED enforcement actions are reported on the NMED methane map.

On July 1, 2020, NMED issued an Offsite FCE Inspection Report of the South Carlsbad Compressor Station based on offsite inspections on 9/27/19 and 9/30/19. The report lists three Areas of Concern (AOCs) relating to reporting, notification and timely repair, and does not recommend any future enforcement action. The Offsite FCE Inspection Report states "There have been no enforcement actions in the last two years. There are currently no active NOV cases or settlement agreements for this facility."

4. NMED should make emissions data and operator reporting transparent and accessible
NMED has proposed the ozone reduction rule largely because significant portions of New Mexico could soon exceed the national ambient air quality standard for the pollutant. To prevent air quality from worsening and widespread violations of federal standards, it is essential for New Mexico to track pollution increases and spikes from the oil and gas industry--which generates the largest proportion of greenhouse gases in the state (including 62% of methane emissions).[13]

Earthworks appreciates that New Mexico requires operators to report their "excess emissions," or pollution events that were unforeseen and are larger in volume, rate, or concentration than specified in an air permit (e.g., from startups and shutdowns, operational malfunction, or blowdowns to release pressure in a system), and recent efforts to improve transparency of these events.[14] The pollutants tracked include both ozone precursors and direct health-harming pollutants (such as hydrogen sulfide and particulate matter).

NMED currently issues updates to the emissions exceedance reports on a monthly basis, making a 12-month rolling report publicly available on the Air Quality Bureau's Excess Emissions Reporting webpage.[15] As of July 31, 2020, oil and gas operators self-reported 404 exceedances in Eddy County and 400 in Lea county in just the first 7 months of 2020.

Drawing on the data in these exceedance reports, NMED should issue public notifications of major emissions exceedances of oil and gas pollutants that harm health and contribute to the formation of ozone every ten days (the time period that operators have to report their excess emissions per §20.2.50.12(c)(4) of the draft rule).

More frequent preparation of these reports would serve three critical purposes:

1. Support more accurate tracking of emissions by NMED. Review of excess emissions data reported by operators is key to assessing the gaps between permitted and actual pollution, and in turn the degree of progress being made (or not) toward the goals that underpin the ozone precursor rule.

2. *Facilitate enforcement actions for emissions exceedances that were preventable and avoidable.* Certain excess emission events are often planned and scheduled, in particular blowdowns or venting in conjunction with maintenance activities. This is implied in §20.2.50.12(c)(4)(f) and (g) but NMED should specify which excess emissions events are allowable and which are not. The agency should take enforcement actions in response to emission exceedances resulting from operator error, failure to maintain equipment, or failure to take actions to capture gas rather than release it.

If operators continue to be allowed to conduct blowdowns as a last resort, NMED should require them to develop and implement a notification system for blowdowns or other large emissions and/or noise events that would allow sufficient time (e.g., 72 hours) for nearby residents to either leave the area or take measures to limit their exposure. Notification (for example through email and local papers) should be given to all residents within, at minimum, a half-mile, as that is a conservative estimate of the distance at which elevated levels of toxic pollution from oil and gas operations can impact health, according to peer-reviewed studies.[16]

3. *Providing New Mexicans with information regarding emissions exceedances that occur near them and may directly impact their health.* Environmental health research confirms that large, episodic emission events can cause health impacts immediately or in as little as 1-2 hours, in part because toxicity is determined by the concentration of the chemical and intensity of exposure.[17] This

includes the operational malfunctions, startup and shutdown activities, or blowdowns to release pressure--all of which are covered by NMED's excess emissions reporting requirement.

5. Higher fines, fees, and penalties are needed to ensure enforcement

NMED's Letters of Potential Violation and significant penalties that are publicly announced send a clear message that the state is entering a new chapter in oversight and accountability of New Mexico's oil and gas industry. However, the unavoidable fact remains that NMED currently only has four oil and gas air inspectors, none of whom is based in the Permian region where oil and gas is expanding most rapidly. Nor does NMED employ certified thermographers trained to operate the state's single OGI camera.

NMED is an essential agency, but simply lacks sufficient oversight resources and enforcement capacity to oversee a burgeoning oil and gas industry. As a result, New Mexico is at risk of even worse health, environmental, and climate impacts than the current rule attempts to address. With 40,000 active oil and gas wells in Eddy and Lea county alone, operators appear able to safely roll the dice and assume chances are good that they will fall under the radar of NMED's enforcement actions.

NMED should take quick action to increase operator fines, fees, and penalties for regulatory violations. Doing so is essential to ensure future enforcement of the proposed rule, as well as others already on the books. Expanded agency resources would help to level the playing field between frontline communities and operators, ensure greater public accountability, and protect the health of New Mexicans. Notably, the Oil Conservation Division (OCD) recently updated penalties to reflect a more appropriate and impactful penalty amount. Similarly, NMED should raise the daily maximum penalty from $15,000 to an amount that will offer stronger operator incentives to avoid violations.

6. NMED should track and evaluate the effectiveness of the rules

New Mexico's Governor, state land commissioner, and NMED Secretary have committed to ensuring greater accountability and pollution reductions by the oil and gas industry. In addition, New Mexico recently adopted a climate plan; among other issues, it emphasizes the need to address pollution from the oil and gas sector, which generates the largest proportion of greenhouse gases in the state (including 62% of methane emissions).[18] In early 2019, the Governor issued an Executive Order establishing the ambitious goal of achieving a statewide reduction in greenhouse gas emissions of at least 45% by 2030, compared to 2005 levels.[19]

In order to track the effectiveness of these rules in moving the industry towards meeting these goals, we suggest several mechanisms for enhancing NMED's ability to track progress. NMED should add language to §20.50.2.12 C.(6) clarifying that a full compliance evaluation of all equipment includes evaluation of emissions volumes and leaks and that stripper wells are subject to the full compliance evaluation.

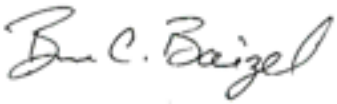
Under section §20.50.2.25 B., NMED should add a subsection (4) that requires, beginning on June 1, 2023, an annual facility emissions audit in order to determine if the facility still qualifies for the low PTE classification.

Finally, we suggest that NMED add language to §20.2.50.7 to broaden the objective of this rule, consistent with the Governor's directive, to include a commitment to effective emissions reductions: "The objective of this Part is to **effectively reduce emissions, consistent with state**

and federal policies, by establishing emission standards for volatile organic compounds (VOC) and nitrogen oxides (NOx) for oil and gas production and processing sources."

Thank you for your time and consideration of our comments. Earthworks looks forward to continued dialogue with NMED, EMNRD, and the stakeholders whose engagement will pave the way for comprehensive and effective ozone reduction rules for the oil and gas sector in New Mexico.

Sincerely,



Bruce Baizel
Energy Program Director, Earthworks
PO Box 1102
Durango, CO 81302
Tel: 970-799-3552
bruce@earthworksaction.org

Nadia Steinzor
Community Empowerment Project Manager
PO Box 149
Willow, NY 12495
202-887-1872 x109
nsteinzor@earthworks.org

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[3] See database of peer-reviewed science on health impacts at https://www.zotero.org/groups/248773/pse_study_citation_database/items/collectionKey/SASKSKDG; and Concerned Health Professionals of New York, Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Oil and Gas Extraction), Sixth Edition 2019. http://concernedhealthny.org/compendium/

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