August 3, 2020

BY ELECTRONIC MAIL

Leslee Kimbrell, Deepika Saikrishnan,
Marvin Mascarenas, Allie Fullerton,
Asheley Coriz, Arianna Espinoza,
Todd Sherrill, Joseph Mashburn,
Vanessa Springer, Julie Kuhn,
Ted Schooley
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505
Leslee.kimbrell@state.nm.us, Deepika.saikrishnan@state.nm.us,
marvin.mascarenas@state.nm.us, allie.fullerton@state.nm.us,
asheley.coriz@state.nm.us, arianna.espinoza@state.nm.us,
joseph.mashburn@state.nm.us, todd.sherrill2@state.nm.us,
vanessa.springer@state.nm.us, julia.kuhn@state.nm.us,
Ted.schooley@state.nm.us

Re: Comments on General Construction Permit Registration Applications for Oil and Gas Facilities, Concerns Over Approval of General Permits in Southeast New Mexico

Dear New Mexico Air Quality Bureau Contacts:

WildEarth Guardians, Earthworks, New Energy Economy, the Sierra Club, and the Western Environmental Law Center submit the following comments in response to several applications for general construction permits for oil and gas facilities in southeast New Mexico for which you have been identified as New Mexico Environment Department ("NMED") contacts. We object to NMED approving the subject applications as the facilities at issue do not qualify for general permit coverage. We request that NMED provide written notice if it grants general permit registrations for the facilities identified herein.

We also request NMED hold public hearings in relation to these applications for general construction permits pursuant to 20.2.72.206 NMAC.

We understand that under 20.2.72.220(C)(4) NMAC, NMED "may grant or deny an application to register under a general permit without repeating the public notice and participation procedures required under 20.2.7.206 NMAC." While this provision provides some discretion for NMED to forego public participation under 20.2.72.206 NMAC, it does not allow the Department to completely reject a request for public hearing where there is significant public interest. In fact, reading 20.2.72.220(C)(4) together with 20.2.72.206, it is clear that where there is "significant public interest," the Department "shall hold a public hearing." 20.2.72.206(C). This means that even with regards to general permit applications, NMED has a mandatory duty to hold a public hearing where there is significant public interest.

Here, there is significant public interest in the general permit applications listed below. Given their impacts to air quality in southeastern New Mexico and in particular impacts to ground-level ozone concentrations, which are a serious public health concern, there is significant public interest in assuring proper review and scrutiny of the general permits and in assuring they sufficiently protect public health and air quality in Eddy and Lea Counties. Accordingly, NMED must hold public hearings.

We are concerned that in light of ongoing violations of the 8-hour ozone national ambient air quality standards ("NAAQS") in Eddy and Lea Counties, NMED is no longer permitted to allow oil and gas companies to obtain general permits for their operations. In light of this, NMED must reject the following registrations for general construction permits and must immediately halt the issuance of any further general construction permits for oil and gas facilities in Eddy and Lea Counties.

Our comments are specific to the following applications for general construction permits submitted for new and modified oil and gas facilities located in Eddy or Lea Counties:

Company	**Facilities**	**NSR Permit No.**	**Date General Permit Application Received**
Matador Production Company	Janie Conner Facility	7929M2	July 1, 2020
EOG Resources Inc.	Area 4 Central Tank Battery	7523M1	July 1, 2020
ConocoPhillips	Vacuum Glorietta East Unit West	8691M1	July 1, 2020
Matador Production Company	Charles Ling West Fed Tank Battery	8292M1	July 6, 2020
XTO Energy	Los Medanos 36-23-30 State 1H	4838M1	July 8, 2020
LM Touchdown	Texana Compressor Station	8882	July 8, 2020
ConocoPhillips	Warren Unit Blineberry Tubb Battery	8883	July 8, 2020
Matador Production Company	Charles Ling East Fed Tank Battery	8295M2	July 10, 2020
Salt Creek Midstream	Nailed It Compressor Station	8389M1	July 15, 2020
Matador Production Company	Brantley State Com 13 Facility	8202M1	July 15, 2020

Delaware Basin Midstream	Ghost Central Gathering Facility	8574M1	July 15, 2020
Devon Energy Production Company	Thoroughbred 10 CTB 3	8888	July 17, 2020
ConocoPhillips	Caprock Central 23 Central	8887	July 17, 2020
Centennial Resource Development	Tour Bus 23 State No. 301H No. 502H	7763M1	July 17, 2020
WPX Energy Permian	Frontier 32-23-26 State 431H	7925M3	July 21, 2020
Tap Rock Operating	Nailed It A CTB	8897	July 22, 2020
Tap Rock Operating	Hyperion A CTB	8613M1	July 22, 2020
Matador Production Company	Tom Matthews 223H Facility	7733M2	July 22, 2020
XTO Energy	PLU No. 411 Battery	5013M1	July 24, 2020
EOG Resources	Green Drake 21 Fed Com CTB	8899	July 24, 2020
DLK Black River Midstream	Blck River Gas Processing Plant	6567M6	July 24, 2020
Cimarex Energy Co.	Triste Draw 25 West Battery	7468M3	July 24, 2020
Devon Energy Production Co.	Right Meow 31 CTB 5	8898	July 24, 2020

Our primary concern is the fact that ozone monitors in southeast New Mexico are currently violating the ozone NAAQS. At this point, all three ozone monitors in both Eddy and Lea Counties are in nonattainment, with 2017-2019 design values all above the 2015 NAAQS of 0.070 parts per million. Furthermore, these monitoring sites have recorded regular exceedances of the 2015 8-hour ozone NAAQS since 2015. The tables below show the annual first, second, third, and fourth maximum 8-hour ozone readings at the three monitors in Lea and Eddy Counties between 2015 and 2019.[1]

Hobbs, NM 8-Hour Ozone Readings (in ppm), 2015-2019 (Lea County)

	2015	**2016**	**2017**	**2018**	**2019**
1st Max.	0.070	0.069	0.080	0.083	0.082
2nd Max.	0.069	0.066	0.074	0.078	0.075
3rd Max.	0.069	0.065	0.072	0.077	0.073
4th Max.	0.067	0.065	0.069	0.076	0.070
Number of Days Above NAAQS	0	0	3	6	3

[1] Ozone monitoring data was queried from the U.S. Environmental Protection Agency's AirData website, https://www.epa.gov/outdoor-air-quality-data/monitor-values-report.

Carlsbad, NM 8-Hour Ozone Readings (in ppm), 2015-2019 (Eddy County)

	2015	2016	2017	2018	2019
1st Max.	0.069	0.065	0.082	0.096	0.095
2nd Max.	0.068	0.064	0.078	0.095	0.092
3rd Max.	0.067	0.064	0.077	0.091	0.084
4th Max.	0.067	0.063	0.076	0.083	0.080
Number of Days Above NAAQS	0	0	10	18	19

Carlsbad Caverns National Park 8-Hour Ozone Readings, 2015-2019 (Eddy County)

	2015	2016	2017	2018	2019
1st Max.	0.068	0.070	0.069	0.099	0.082
2nd Max.	0.068	0.069	0.065	0.081	0.080
3rd Max.	0.065	0.069	0.065	0.080	0.078
4th Max.	0.065	0.069	0.065	0.080	0.074
Number of Days Above NAAQS	0	0	0	10	6

A violation of the 8-hour ozone NAAQS is triggered when the three-year average of the annual fourth highest daily reading exceeds the NAAQS. *See* 40 C.F.R. § 50.19(b). This three-year average value is commonly referred to as the "design value." Based on this monitoring data, all three ozone monitors are in violation of the NAAQS, with the design value at the Carlsbad monitor even violating the ozone NAAQS adopted in 2008, which limited 8-hour concentrations to no more than 0.075 parts per million. This means these monitors are currently in nonattainment.[2] The table below shows that the design values at the Lea and Eddy County monitors have increased over the last five years and that currently, all three monitors are violating the ozone NAAQS.

8-Hour Ozone Design Values for Lea and Eddy County, New Mexico Monitoring Sites

Monitor	Monitor ID	2015-2017 Design Value	2016-2018 Design Value	2017-2019 Design Value
Hobbs	350250008	0.067	0.070	0.071
Carlsbad	350151005	0.068	0.074	0.079
Carlsbad Caverns	350150010	0.066	0.071	0.073

[2] Although the region of Eddy and Lea Counties is not designated "nonattainment," the U.S. Environmental Protection Agency ("EPA") has been clear that in reference to air quality, a monitor in violation of the NAAQS is considered to be in nonattainment, explaining that in the context of developing and implementing SIPs under Section 110 of the Clean Air Act, "'nonattainment' refers to air quality, not designation status." 63 Fed. Reg. 57,356, 57,372 (October 27, 1998).

So far in 2020, ozone levels continue to rise, indicating there remains a serious air quality problem in Eddy and Lea Counties. Not only have ozone exceedances been recorded in 2020, but the 2018-2020 design value is certain to violate the NAAQS yet again at the Carlsbad monitor. As the table below shows, the Carlsbad monitor has recorded numerous high 8-hour ozone concentrations so far in 2020. **Based on the three-year average of the fourth highest annual 8-hour ozone readings the Carlsbad monitor currently has a 2018-2020 design value of 0.075 parts per million, meaning it is in nonattainment.** In other words, the air pollution problem in southeast New Mexico persists.

Carlsbad, NM 8-Hour High Ozone Readings (in ppm) so Far in 2020[3]

	Date	8-hour Ozone Concentration
1st Max.	June 24	0.075
2nd Max.	July 8	0.067
3rd Max.	July 6	0.066
4th Max.	June 25	0.064

Under the plain terms of NMED's general construction permit for oil and gas, a registration must be denied if the facility is located in a nonattainment area as defined by 20.2.72 and 20.2.79 NMAC. *See* NMED, "Air Quality Bureau General Construction Permit for Oil and Gas Facilities, GCP-Oil and Gas" at Condition A100(H)(6).

A "nonattainment area" is defined under 20.2.72 NMAC as, "an area which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the administrator to be reliable) to exceed any national or New Mexico ambient air quality standard[.]" 20.2.72.7(T) NMAC. Under 20.2.79 NMAC, a "nonattainment area" is similarly defined as "an area which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the administrator to be reliable) to exceed any national ambient air quality standard[.]" 20.2.79.7(AA) NMAC. Given this, there is no question that the region of Eddy and Lea Counties is a "nonattainment area" pursuant to the definitions under 20.2.72 and 20.2.79 NMAC. The monitors in these counties clearly show that the ozone NAAQS are not only being exceeded, but also violated.

Although the Eddy and Lea County region may not be "designated" a nonattainment area by the EPA, under the plain language of the New Mexico Administrative Code, a "nonattainment area" is not defined based on whether the EPA has made a designation. As is clear, the definition of "nonattainment" is based on monitored air quality.

Given that NMED must deny general permit registrations for oil and gas facilities located in a nonattainment area, the aforementioned general permit registrations must be denied. All

[3] Ozone concentration data for 2020 was obtained from EPA's AirNow.gov archives, https://gispub.epa.gov/airnow/.

the aforementioned general permit registrations are for facilities located in Eddy and Lea Counties, which is a nonattainment area pursuant to the definitions under 20.2.72 and 20.2.79 NMAC.

Furthermore, under NMED's regulations, a general construction permit registration cannot be approved if it would "cause or contribute to air contaminant levels in excess of any national or New Mexico ambient air quality standard." 20.2.72.220(A)(2)(c) NMAC. To this end, a source may only register for an oil and gas general construction permit if it can demonstrate compliance with the NAAQS. Indeed, the registration forms for general construction permits for oil and gas facilities requires operators to demonstrate compliance with the NAAQS. Furthermore, NMED can only approve a general construction permit if it determines that "all facilities registered [] will not cause or contribute to air contaminant levels in excess of any national [] ambient air quality standard." *See e.g.* NMED, "Air Quality Bureau General Construction Permit for Oil and Gas Facilities, GCP-Oil and Gas" at Condition B100.

A general permit can also only be approved if a source can meet the terms and conditions of the general permit. *See* 20.2.72.220(C)(3)(b). Under the general construction permit for oil and gas facilities, registered sources "will not cause or contribute to air contaminant levels in excess of any national [] ambient air quality standard." Air Quality Bureau General Construction Permit for Oil and Gas Facilities, Condition B100(A). Additionally, any registered facility "shall comply" with, among other things, "Ambient Air Quality Standards," including "National Ambient Air Quality Standards." *Id*. at Condition A103(A).

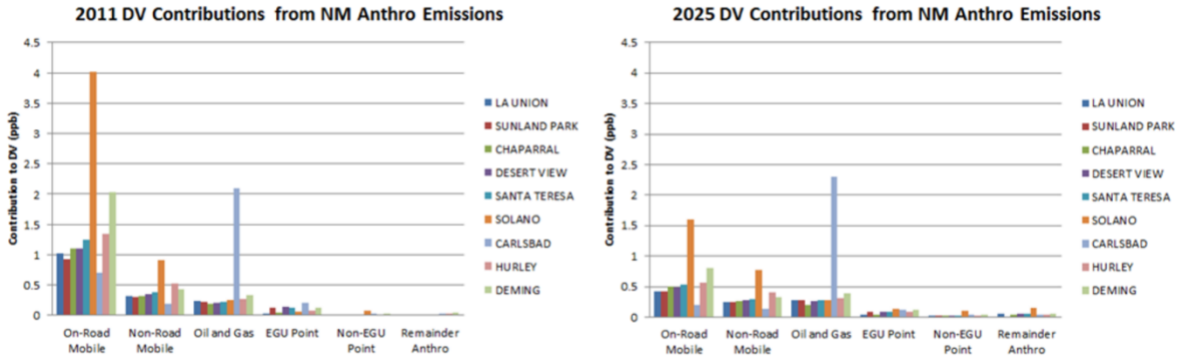
In light of current ozone levels in Eddy and Lea Counties, there is no possible way for NMED or sources to conclude that construction or modification of oil and gas facilities would not cause or contribute to violations of the ozone NAAQS. Every general construction permit registration would authorize increases in nitrogen oxides ("NOx") and volatile organic compounds ("VOCs")—both gases that react with sunlight to form ozone. The general construction permit applications for each facility listed above anticipate increases of up to 95 tons/year for both VOCs and NOx for each source. This means that every source seeking general construction permits will cause or contribute to ozone violations in Eddy and Lea Counties by increasing overall ozone-forming pollution in the region at a time when ozone levels are in violation of the NAAQS.

Studies have confirmed that oil and gas production activities contribute to ozone levels at monitors in southeast New Mexico. In a study of ozone in southern New Mexico, modeling confirmed that oil and gas sources of emissions were by far the biggest contributor to ozone at the Carlsbad monitor. In the *Southern New Mexico Ozone Study Technical Support Document* prepared in 2016, researchers reported, "Oil and gas sources make the largest contribution at the Carlsbad monitor, which is the monitor located closest to the Permian Basin."[4] The report

[4] Kemball-Cook, S., J. Johnson, A. Wentland, Z. Liu, R. Morris, and Z. Adelman, *Southern New Mexico Ozone Study Technical Support Document* (Oct. 19, 2016) at 70, available at https://www.wrapair2.org/pdf/SNMOS_TechnicalSupportDocument_19Oct2016.pdf.

further found that "the impact of oil and gas sources increases in 2025 due to projected growth in Permian Basin emissions."[5]

The graphs below, which are excerpted from that report, illustrate the contribution from oil and gas at Carlsbad. Assessing a 2011 base year design value, which was prior to the region experiencing the current level of oil and gas development and experiencing elevated ozone, oil and gas contributed 2 parts per billion (or 0.002 ppm). For that same year's design value, on-road mobile sources, or cars and trucks, contributed only a little more than 0.5 parts per billion at Carlsbad. The report found that even at other monitoring sites in southern New Mexico, including the Solano ozone monitor in Las Cruces, other emission sectors, such as non-road mobile sources, electric generating units, and other stationary sources, contribute far less to ozone concentrations.[6]



It is critical to point out that the purpose of the *Southern New Mexico Ozone Study* was to determine sources of high ozone at monitoring sites in Doña Ana County and was not a rigorous analysis of ozone at monitoring sites in Eddy or Lea Counties. Still, even the report's limited assessment of ozone at Carlsbad revealed the industry's heavy contribution. Given that the emissions inventory used at the time is now considerably outdated and does not reflect current levels of oil and gas production activity in Eddy and Lea Counties, it is extremely likely that the contribution of oil and gas to high ozone in the region is presently much, much higher.

Indeed, in a 2018 article published in *Environmental Science and Technology,* researchers reported on the impact of oil and gas emissions in the U.S. on ozone concentrations nationwide and disclosed much a more significant contribution.[7] The modeling data revealed the summer season daily average contribution of oil and gas to 8-hour ozone concentrations to be higher than six parts per billion for the Eddy and Lea County region. The image below from

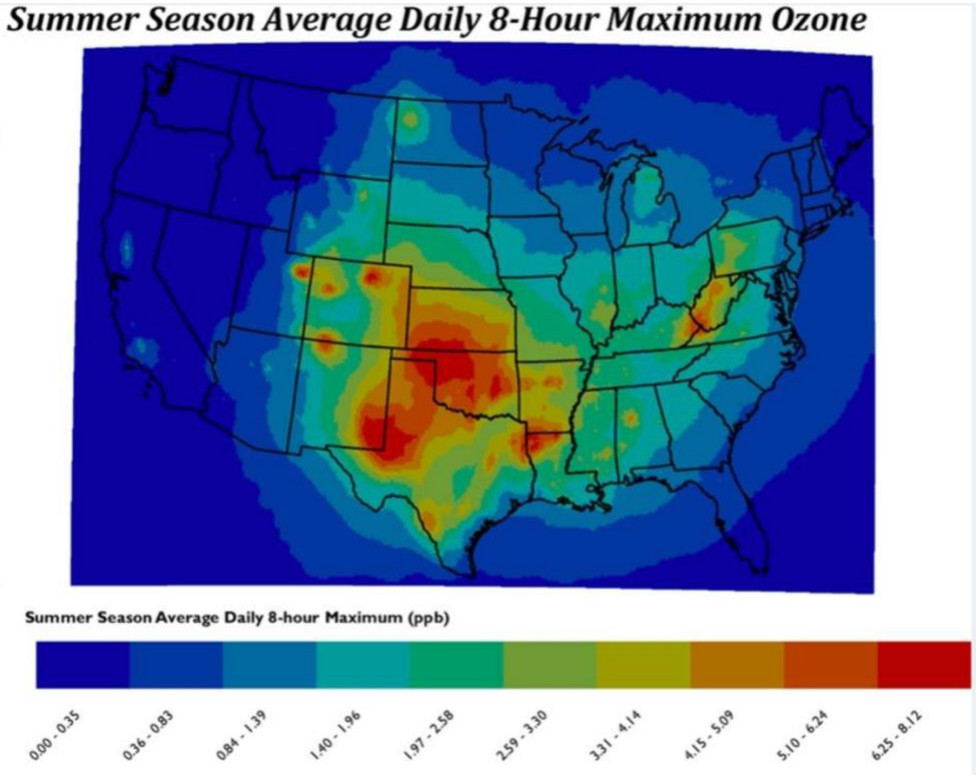
---

[5] *Id*. at 81.

[6] These charts also confirm that oil and gas emissions contribute to high ozone at the Chaparral, Desert View, and Santa Teresa monitors, all of which are also currently in violation of the ozone NAAQS.

[7] Fann, Neal et al. "Assessing Human Health $PM_{2.5}$ and Ozone Impacts from U.S. Oil and Natural Gas Sector Emissions in 2025." *Environmental science & technology* vol. 52,15 (2018): 8095-8103. doi:10.1021/acs.est.8b02050, available online at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6718951/.

that article confirms that emissions from oil and gas production have a major impact on southeast New Mexico.



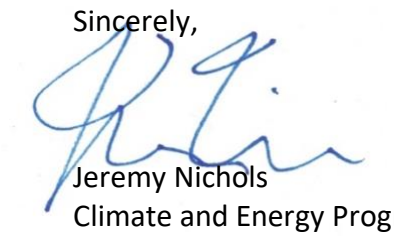
It is therefore clear that more air pollution from oil and gas production activities in Eddy and Lea Counties will contribute to ozone levels at monitors that are currently violating the NAAQS. Given this, there is no currently no legal justification for oil and gas sources to qualify for registration for general permits in Eddy and Lea Counties. Accordingly, NMED cannot approve the aforementioned applications for general construction permits, as well as any additional general construction permits, unless and until the ozone NAAQS are attained in Eddy and Lea Counties. [8]

If NMED continues to approve general construction permits for oil and gas facilities in southeast New Mexico, then it will indicate the SIP is inadequate to attain and maintain compliance with the NAAQS and will jeopardize the state's ability to continue implementing its air quality regulatory program under the Clean Air Act.

[8] Additionally, NMED must also ensure that emissions from the aforementioned general permits do not cause or contribute to ozone NAAQS violations at other monitors currently violating both within and outside of New Mexico. Other nearby monitors currently in violation of the NAAQS include the Foothills monitor in Bernalillo County, New Mexico (site id 35-001-1012), the Chaparral, Desert View, and Santa Theresa monitors in Doña Ana County, and monitors in and around neighboring El Paso, Texas, including the UTEP, Chamizal, and Skyline Park monitors.

Again, we request that NMED hold public hearings with regards to the aforementioned general permit applications and provide written notice if it grants general permit registrations for the facilities identified herein. Thank you for the opportunity to provide these comments.

Sincerely,



Jeremy Nichols
Climate and Energy Program Director
WildEarth Guardians
(303) 437-7663
jnichols@wildearthguardians.org

Bruce Baizel
Director
Energy Program, Oil and Gas Accountability Project
Earthworks
(970) 799-3552
bruce@earthworks.org

Mariel Nanasi
Executive Director
New Energy Economy
(505) 469-4060
mariel@seedsbeneaththesnow.com

Camila Feibelman
Director
Sierra Club: Rio Grande Chapter (505)
715-8388
Camilla.feibelman@sierraclub.org

Erik Schlenker-Goodrich
Executive Director
Western Environmental Law Center
(575) 613-4197
eriksg@westernlaw.org