OIL CONSERVATION COMMISSION

APPLICATION OF OIL CONSERVATION DIVISION TO ADOPT 19.15.27 NMAC AND 19.15.28 NMAC, AND TO AMEND 19.15.7 NMAC, 19.15.18 NMAC, AND 19.15.19 NMAC; STATEWIDE

CASE NO. 21528

CLIMATE ADVOCATES AND EDF'S CLOSING BRIEF IN SUPPORT OF FINAL PROPOSED RULES FOR 19.15.27 NMAC AND 19.15.28 NMAC

The Center for Civic Policy, Conservation Voters New Mexico Education Fund, Diné C.A.R.E., Earthworks, Natural Resources Defense Council, San Juan Citizens Alliance, Sierra Club, and 350 New Mexico ("Climate Advocates") and the Environmental Defense Fund ("EDF") support the rules proposed by the Oil Conservation Division ("OCD"). We urge the Oil Conservation Commission ("OCC") to adopt, and not dilute, OCD's proposals to (1) prohibit venting and flaring of natural gas except under limited, enumerated circumstances; (2) require flaring instead of venting, unless flaring is unsafe or technically infeasible; (3) require operators to capture 98% of their natural gas by the end of 2026; and (4) require operators to account for waste of "low-pressure" gas in achieving their gas capture requirement.

We also strongly urge OCC to adopt our proposed modifications, set forth in our Final Proposed Rules for Parts 27 and 28. In her recent State of the State address, Governor Lujan Grisham reaffirmed her commitment to pass nation-leading methane rules and "enact the country's toughest methane and air pollutant rules in the oil and gas industry." Our proposals will help OCC meet that commitment. First, OCC should adopt our proposal to limit venting of natural gas during initial flowback during completions and recompletions of wells. Colorado recently promulgated rules to prevent waste of the natural gas during this critical period and New Mexico's rules must be at least as stringent if it is to put the "toughest" methane rules in the

¹ https://nmpoliticalreport.com/2021/01/26/watch-gov-michelle-lujan-grishams-2021-state-of-the-state-address/.

country on the books. Second, OCC should modify the proposal to require operators to account for *all* major sources of waste in complying with the rule's gas capture requirement—including venting from outdated pneumatic devices and flaring from controlled storage tanks. Finally, OCC should ensure that operators that are not in compliance with gas capture requirements face automatic consequences, including automatic denials of new APDs.

Argument

I. OCC HAS AUTHORITY TO PROTECT PUBLIC HEALTH AND THE ENVIRONMENT IN PROMULGATING METHANE WASTE RULES

OCC's fundamental obligation under the Oil and Gas Act ("Act") is to prevent "waste" associated with the production or handling of oil and gas resources. NMSA 1978, § 70-2-11. Under the Act, "waste" is given its "ordinary meaning," with more specific definitions for "surface waste" and "underground waste." *Id.* § 70-2-3. Thus, the Act comports with the longstanding understanding in oil and gas law that "waste" is not a static concept, but takes its meaning from an evolving technological, economic, and social contexts. *See R.R. Comm'n v. Shell Oil Co.*, 206 S.W.2d 235, 240 (Tex. 1947) ("Whatever the dictates of reason, fairness, and good judgment *under all the facts* would lead one to conclude is a wasteful practice in the production, storage or transportation of oil and gas, must be held to have been denounced by the legislature as unlawful.") (emphasis added); Tr. 1-6-21 at 79:13-80:6 (OCD legal expert Matt Lepore testifying that concept of "waste" constantly evolves).

Exercising its authority to regulate waste, OCC also has authority to protect public health and the environment. Section 70-2-12(B)(21) of the Act, regulating "nondomestic wastes," authorizes the OCC "to protect public health and the environment" in promulgating its waste rules. Furthermore, when promulgating rules, the OCC also is authorized to "prevent fires,"

NMSA 1978, § 70-2-12(B)(5), and "to require wells to be drilled, operated and produced in such manner as to prevent injury to neighboring leases or properties"" *Id.* § 70-2-12(B)(7).

The legislature intended for OCC and OCD to protect public health and the environment while regulating oil and gas production. This statutory scheme does create overlap between OCC's responsibilities and those of the New Mexico Environment Department ("NMED") and Environmental Improvement Board, but that fact does not diminish OCC's independent responsibility to protect public health and the environment. The legislature is not required to confine regulatory agencies to independent silos and can, and often does, delegate broadly, authorizing multiple agencies to address issues of critical concern, with the expectation that they will coordinate their efforts. *Cf. Massachusetts v. EPA*, 549 U.S. 497, 532 (2007) (despite Congress conferring overlapping jurisdiction upon two agencies, "there is no reason to think the two agencies cannot both administer their obligations and yet avoid inconsistency.").

II. VENTING OR FLARING GAS THAT CAN BE CAPTURED AND PUT TO BENEFICIAL USE IS WASTEFUL, REGARDLESS OF WHETHER THIS GAS IS CONSIDERED "LOW PRESSURE" GAS

The New Mexico Oil and Gas Association ("NMOGA") urges OCC to adopt an artificial distinction between "low pressure" and "high pressure" sources of waste. This approach is inconsistent with the statute, which prohibits wasteful practices at *any* stage of oil and gas production or handling. *See* NMSA 1978, § 70-2-2 ("The production or handling of crude petroleum oil or natural gas of any type or in any form, or the handling of products thereof, in such manner or under such conditions or in such amounts as to constitute or result in waste is each hereby prohibited."). As noted above, Mr. Lepore explained the concept of waste is not static, but is constantly evolving as technology improves. *See* Tr. 1-6-21 at 79:13-80:6. The touchstone is whether it is possible to capture gas for sale or beneficial use, either by changing

operational practices or by using up-to-date equipment designed to keep gas in the system. *See* OCD Ex. 4C, item 79 ("emissions from downhole maintenance, manual liquid unloading, and uncontrolled storage tanks "constitute waste *because they can be controlled*") (emphasis added). If this is possible, an operator's decision to vent or flare gas is appropriately considered a form of waste. Nothing in the statute contemplates that wasteful practices should be allowed simply because the wasted gas leaves the system at a "low pressure." In fact, the statute specifically defines "surface waste" to include the loss of natural gas due to "evaporation" or "leakage," NMSA 1978, § 70-2-3(C), confirming that accidental, low pressure releases are every bit as unlawful as purposeful destruction of high-pressure streams of gas.

Regulating waste from devices such as pneumatic controllers, and operations such as liquids unloading, is particularly important, as it is undisputed that these activities are some of the largest sources of waste in New Mexico. *See* Tr. 1-12-21, at 198:5-200:9 (discussion with NMOGA witness Greaves about NMOGA "Methane Mitigation Roadmap," available at https://www.nmoga.org/methaneroadmap, which states that four of the most significant sources of methane waste in New Mexico are fugitive emissions, storage tanks, pneumatic controllers, and well maintenance and liquids unloading); *id.* at 275:9 - 278:25 (Chair Sandoval noting "striking similarities" between the categories that NMOGA identified as the largest sources of waste in its Methane Mitigation Roadmap and those NMOGA proposed to exclude from the rule); *See* OCD Ex. 4C, item 79 (waste from these sources can be "significant").

NMOGA's attempted reliance on distinctions drawn by the Colorado Oil and Gas

Conservation Commission ("COGCC") and the Bureau of Land Management ("BLM") fall flat.

These regulations were adopted against a different regulatory backdrop, pursuant to different statutory authority. The COGCC regulations NMOGA cites, for example, were enacted against a

background that included robust, state-level pollution standards specifically designed to reduce methane emissions for sources like pneumatics and storage tanks and for operations like liquids unloading. *See* Tr. 1-14-21 at 219:21-22 (Dr. McCabe, noting that Colorado began regulating methane emissions from pneumatic devices statewide in 2014). By contrast, NMOGA has argued that NMED does not have authority to regulate methane emissions from these sources, raising doubts about whether these wasteful emissions can be appropriately controlled by NMED. Although the BLM did not regulate low-pressure devices as part of its gas capture requirement, it *did* promulgate performance standards and/or best practices for pneumatic devices, storage tanks, liquids unloading, and downhole maintenance—all pursuant to its waste prevention mandate. *See* Tr. 1-12-21 at 199:15-200:9 (NMOGA witness Greaves, acknowledging that BLM regulated these low-pressure sources as part of its Waste Prevention Rule); *see also* OCD, Ex. 37 (text of Waste Prevention Rule).

Nor is there any merit to NMOGA's suggestion that the OCC should ignore a category of waste, simply because it may be hard to measure with precision. As Dr. McCabe explained, while emissions factors commonly used by the industry may not be perfectly accurate in measuring each specific event, "on average they will produce reasonable results." *See* Tr. 1-14-21 at 227:12-15. Since operators are allowed to average waste across all of their facilities, inaccurate measurement in individual cases is unlikely to affect an operator's overall compliance. *Id.* at 227:16-22. Secondly, even when the rule is fully effective by the end of 2026, operators will still be allowed to waste up to 2 percent of the gas they produce. Any uncertainty or inaccuracy related to the calculation of waste from low-pressure sources will be insignificant compared to this standard. *Id.* at 227:23 - 228:3.

Simply put, this rule will not achieve its objectives unless it addresses *all* significant sources of waste. *See* Tr. 1-12-21 at 277:4-6 (Chair Sandoval noting there "could be a large gap" if low-pressure sources of waste are excluded from the rules).

III. OCC HAS AUTHORITY TO REQUIRE FLARING RATHER THAN VENTING, AND, IN EXERCISING THAT AUTHORITY, SHOULD REQUIRE OPERATORS TO INSTALL UP-TO-DATE FLARE TECHNOLOGY AT ALL WELLSITES

NMOGA contends that OCC does not have authority to require operators to flare natural gas instead of venting it. This argument ignores the fact that OCC has required flaring rather than venting since at least 1972 (*nearly 50 years*) OCC has required that operators flare, not vent, gas prior to connecting to a pipeline unless OCD approves an exception allowing operators to emit gas 60 days after completion. OCD Ex. 56 (OCC Order No. R-4382, p. 3 (Sept. 1, 1972). This nearly five decades-old rule remains codified today at 19.15.18.12.F NMAC.

OCC is clearly authorized to adopt regulations of this type, consistent with its broad mandate to prevent waste, to promote operational safety, and to protect human health and the environment. *See* NMSA 1978, §§ 70-2-11(B) (authority to prevent waste), 70-2-12(B)(21) (authority to protect "public health and the environment" when regulating nondomestic wastes "resulting from the exploration, development, production, or storage" of oil and natural gas), 70-2-12(B)(3) (authority to prevent fires), & 70-2-12(B)(7) (authority to prevent injury to neighboring leases or properties); *see also* Tr. 1-13-21 at 164:4-9 (Teitz). It is well established that "flaring is more safe than venting." Tr. 1-14-21 at 110:21-111:17 (Alexander). Similarly, it is "well documented that venting is more destructive to the environment than flaring." *Id.* at 110:21-111:17 (Alexander). "[V]enting releases much higher quantities of methane," a much more powerful greenhouse gas than carbon dioxide, and "other hydrocarbons including [VOCs] and [HAPs]," which pose health and safety risks. Tr. 1-14-21 at 52:17-53:14 (Lyon).

Finally, the preference for flaring over venting is consistent with standard industry practice. It is therefore difficult to understand why NMOGA objects. Tr. 1-13-21 at 163:5-20 (Teitz). According to NMOGA witness Joe Leonard, a facilities engineer with Devon Energy, "[f]rom a design stand point it is always my goal to minimize venting." Tr. 1-12-21 at 8:16-19, 46:8-47:3. There is no question that OCC has authority to require operators to require flaring instead of venting unless flaring is unsafe or technically infeasible.

Consistent with its authority to require flaring over venting, OCC has appropriately proposed to require the use of continuous pilot or auto-ignitor technology at most flare stacks in the state. Manual flares are notoriously prone to malfunction, turning these flare stacks into a source of uncontrolled venting, which threatens operational safety, public health, and the environment. See Tr. 1-14-21 at 173:11-174:8 (Nathalie Eddy states it is "pretty common to encounter unlit or malfunctioning flares" in New Mexico); id. at 213:18-25 (Dr. McCabe explains that flares routinely malfunction in New Mexico and aerial surveys suggest that as many as one out of every ten flares may be unlit or malfunctioning). Notably, although NMOGA objects to the general requirement to flare rather than vent, it states that it "supports the transition away from manual ignition flares," noting that "[m]anual ignition flares are not as reliable in ensuring combustion as continuous pilot and auto-ignitor flares. NMOGA Ex. C at 12, Commentary to Proposed 19.15.27.8.E(3)(c). And NMOGA's witness Morgan Iannuzzi agreed that partially lit or unlit flares release more methane than a properly lit flare, and that installing auto igniters or continuous pilot lights on flares will help reduce the incidence of partially lit or unlit flares. Tr. 1-11-21 at 165:24-166:13.

The main sources of disagreement appear to be the timeline for completing this transition, and whether stripper wells should be subject to retrofit requirements. On the issue of timing,

NMOGA argued that operators needed 24 months to complete retrofits due to alleged limitations in supply and installation capacity, but was unable to provide any evidence in support of this position. *See* OCD Ex. 4C, item 47. By contrast, Dr. Lyon testified that shortening the time to retrofit equipment with automatic ignitors or continuous pilot lights will result in reduced methane emissions, and that this equipment is available from multiple vendors such that operators should not have trouble purchasing and installing it. Tr. 1-14-21 at 50:8-51:3. Consistent with this evidence, we urge OCC to require retrofits at all remaining manual flares within 6 months of the rule's effective date.

The second point of contention is whether to require retrofits at stripper wells, or permit antiquated manual flares until the entire flare stack is replaced. As an initial matter, we note that Ms. Eddy testified that many stripper wells do not have flare stacks, but instead vent natural gas straight into the atmosphere. Tr. 1-14-21 at 173:16-23. As we understand the proposed rule, facilities that do not have any flare stack at all would be required to install a new flare, consistent with the rule's general requirement to flare rather than vent whenever technically feasible and safe. *Id.* at 215:10-16 (McCabe). This is entirely appropriate and will be an important step towards reducing the safety, health, and environmental impacts of unmitigated venting.

With respect to stripper wells that have existing, manual flares, operators should be required to retrofit within 12 months of the rule's effective date. As Dr. Lyon noted, stripper wells have issues with malfunctioning and unlit flares, and requiring stripper wells to retrofit flares with an automatic ignitor or continuous pilot light will reduce emissions from these facilities. Tr. 1-14-21 50:8-51:3. And Dr. McCabe testified that it was *particularly* important to require flare retrofits at these facilities, given that there are so many stripper wells in New Mexico, that operators typically inspect them less frequently than other, larger facilities, and that

OCD's proposal would apply relaxed AVO inspection requirements to these facilities. *Id.* at 216:6-16. As Dr. McCabe explained: "given the large number of these wells, the observed high frequency of flare malfunctions and long length of time these malfunctions may continue, unlit or malfunctioning flares at stripper wells are liable to cumulatively vent very significant amounts of gas." *Id.* at 216:12-16.

IV. OCC SHOULD REQUIRE EMISSION CONTROL DURING INITIAL FLOWBACK

For almost two decades, EPA has recognized that uncontrolled completions vent significant quantities of natural gas, making them a large source of methane waste, along with other volatile organic compounds and toxic air pollutants. In 2012, EPA required hydraulically fractured natural gas wells to use reduced emissions completions ("REC") equipment, and added hydraulically fractured oil wells in 2016. However, EPA's regulations did not achieve their intent because of unintentional loopholes in the regulatory language that operators interpreted to exempt emissions during initial flowback. Tr. 1-13-21 at 191:2-192:1, 193:13-194:11 (Teitz).

EDF technical expert Tom Alexander testified about his experience with operators in other jurisdictions who safely control emissions during initial flowback with systems designed and deployed to control such emissions and that result in significant reductions in vented emissions. Mr. Alexander explained that controlling these emissions can be safely accomplished by routing the gas to a combustion device or vapor recovery unit with a pressure relief system installed. Tr. 1-14-21 at 91:1-93:4.

OCD's new proposed language on completions - requiring operators to "route flowback fluids into a completion or storage tank and flare rather than vent if technically feasible under the applicable well conditions" - suffers from the same defect as EPA's language in OOOOa. EPA defines initial flowback as the period "when it is not technically feasible for a separator to

function" and its regulations exempt REC requirements during the initial flowback period, only applying once a "separator can function." This distinction sets up a test that is ambiguous and subject to abuse because, when a separator can function depends on the specifications for the separator and whether other equipment is used in conjunction with it. EPA recently amended its regulations to try to limit the extent of the exemption, but it did not close the loophole created by this distinction. Tr. 1-13-21 at 193:11-194:11 (Teitz).

The key problem with both the EPA regulations and OCD's previous -- and now current - proposal is the broad exemption from any requirements to limit venting when it is deemed not "technically feasible" to operate a separator. "Connecting to REC equipment, including enclosed vessels, from the initiation of flowback, allows operators to basically eliminate venting and flare any gas that cannot be sent to a sales line." *Id.* at 194:12-23 (Teitz).

Both the State of Colorado and the Canadian federal government, for hydraulically fractured wells, prohibit operators from venting during flowback. It is reasonable to assume these jurisdictions have determined that equipment is available and operators are able to meet these requirements without raising safety concerns. *Id.* at 194:24-195:18 (Teitz).

EDF and Climate Advocates have modeled their proposed language after Colorado's while keeping within the regulatory framework proposed by OCD. If New Mexico is to lead the nation, it must pass methane rules at least as strong as Colorado's and adopt rules that control the significant methane waste emitted during initial flowback.

V. OCC SHOULD DENY AN APD IF AN OPERATOR IS OUT OF COMPLIANCE WITH ITS ANNUAL GAS CAPTURE REQUIREMENT

OCD should deny APDs if an operator is out of compliance with its gas capture target.

Regulators never have sufficient enforcement resources to enforce every violation. One of the basic principles of exercising regulatory authority to maximize limited enforcement resource is

to make compliance the default action whenever possible. Tr. 1-13-21 171:23-172:2 (Teitz). Environmental permitting and enforcement expert, Charles de Saillan, testified that ambitious environmental and natural resources laws are most effective when they provide clear, automatic consequences for noncompliance. It is common for these laws to provide that operators shall be ineligible to receive permits for new facilities if their existing facilities are out of compliance with key regulatory requirements. Examples include the Clean Air Act's Non-Attainment New Source Review program, the New Mexico Water Quality Act - to which OCC is subject - and two provisions of the Resource Conservation and Recovery Act. OCD's proposed language does not provide for clear or automatic consequences for noncompliance with an operator's gas capture requirement. Instead, the operator has the opportunity to submit a plan showing it will come into compliance in the future. If OCD believes this plan is inadequate, the operator may then contest that determination in a hearing. This represents an extremely resource intensive effort and would not be as effective as a provision that creates automatic consequences. Furthermore, because 2021 is the baseline year, operators have all of 2022 to improve their gas capture compliance, and 2023 is the earliest before any operator is deemed out of compliance. It is appropriate, and certainly not unfair, to impose consequences on an operator that is still not in compliance by the end of 2022, which will be more than four years after the Governor's Executive Order on climate change put the industry on notice that it needed to sharply reduce wasteful venting and flaring. Tr. 1-14-21 at 141:19-148:7, 149:22-157:3 (de Saillan).

Conclusion

For the foregoing reasons and the reasons set forth in Climate Advocates and EDF's Final Proposed Rules for Parts 27 and 28, the OCC should adopt our proposed modifications to OCD's final proposed rules.

Respectfully submitted,

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