Reducing Waste and Methane Releases in New Mexico

Elizabeth Paranhos, Environmental Defense Fund

Support for OCD’s Venting and Flaring Provisions

EDF **strongly** supports the following:

- The rule's clear prohibition on the venting and flaring of natural gas during drilling, completions and production that constitutes waste. in 19.15.27.8.A. NMAC
- The equally important preference for flaring over venting in 19.15.27.8.A NMAC as an implementation of OCD's authority to regulate the disposition of nondomestic wastes to protect public health and the environment

APD Permitting

EDF proposes that OCD deny an operator an APD if operator is out of compliance with the rule or conditionally approve the APD approval to ensure operator is in compliance with the rule at the time the operator spuds the well subject to the APD by revising 19.15.27.9D(7) as follows:

> "If the operator does not make a certification or fails to submit an adequate venting and flaring plan, if the operator is not in compliance with its statewide natural gas capture requirements, or if the division determines that the operator will not have adequate natural gas takeaway capacity at the time a well will be spud, the division ~~may~~ will:
>
> (a) deny the APD; or
>
> (b) conditionally approve the APD."

Flare Reliability and Efficiency

EDF suggests certain improvements to address unlit or partially malfunctioning flares :

19.15.27.8.E.(3)(b). Retrofitting existing flares within 6 months of the effective date of the rule **(rather than 18)**

19.15.27.8.E.(3)(c).Retrofitting ”stripper wells” within 12 months of the effective date of the rule **(rather than when the flare must be replaced)**

19.15.27.8.E.(8): Requiring operators submit an engineer’s certification that all flares or combustors will have sufficient and consistent gas flow and heat content to achieve the manufacturer’s design destruction efficiency

19.15.27.8.E.(9): Requiring all flaring during completions and productions be done with an enclosed device that has a design destruction efficiency of 98%

Operator Retrofit

EDF proposes shortening the time by which existing operators must retrofit flares with auto igniters or continuous pilot lights in order to limit the incidence of malfunctioning flares that are venting methane to the atmosphere. Suggested language in red:

19.15.27.8.E.(3)(b): A flare stack installed before June 1, 2021 shall be retrofitted with an automatic ignitor or continuous pilot or technology that alerts the operator that the flare has malfunctioned no later than ~~18~~ six months after {effective date of rule}

19.15.27. 8.E.(3)(c): A flare stack located at a well with an average daily production of equal to or less than 10 barrels of oil or 60,000 cubic feet of natural gas shall be equipped with an automatic ignitor or continuous pilot ~~if the flare stack is replaced after~~ no later than six months after {effective date of rule}

Exceptions to Allowable Venting and Flaring

- **Venting and flaring during production operations.** The operator shall not vent or flare natural gas except …**(4)** during the following activities unless prohibited by applicable state or federal law, rule, or regulation for the emission of hydrocarbons and volatile organic compounds: s except:… **(f)** ~~normal operation of dehydration units and amine treatment units; **(g)** normal operations of compressors, compressor engines, and turbines;~~

- EDF proposes to strike (f)and (g).

Initial Flowback

EDF proposes that operators flare, rather than vent, natural gas during the initial stage of completions in 19.15.27.8(C)(1) (suggested language in red and continued on next slide):

(1) During initial flowback, the operator must direct all fluids to flowback vessels and collect and control emissions from each flowback vessel on and after the date of initial flowback by routing emissions to an operating air pollution control equipment that achieves and hydrocarbon control efficiency of at least 95%. If a combustion device is used, it must have a design destruction efficiency of at least 98% for hydrocarbons. ~~shall route flowback fluids into a completion or storage tank and commence operation of a separator as soon as it is technically feasible for a separator to function.~~

Initial Flowback (con't)

Proposed language (con't):

(a) Owners or operators must use enclosed, vapor-tight flowback vessels with an appropriate pressure relief system to be used only as necessary to ensure safety.

(b) Flowback vessels must be inspected, tested, and refurbished where necessary to ensure the flowback vessel is vapor-tight prior to receiving flowback.

(c) Flares used to control emissions from flowback vessels and pressure relief systems must be equipped with an automatic igniter or continuous pilot.

Certification Application

EDF proposes that an accountable official certify the following forms, statements, or reports:

- Annual reports certifying compliance with their gas capture requirements in 19.15.27.9.B
- The operator's ability to connect to a gas gathering system with sufficient capacity to transport 100% of its anticipated natural gas production on the first date of production in 19.15.27.9.D.(4) NMAC
- The operator's statement that it did not know or have reason to know of a leak or release in advance of discovering said leak or release using an advanced leak and repair monitoring technology when requesting a credit against its lost gas for conducting such an inspection in 19.15.27.9.D.(4)(f)

Definition: Certify or Certification

EDF proposes that the following definition, added to 19.15.27.7.F NMAC, apply to provisions 19.15.27.9.B, 19.15.27.9.D.(4), and 19.15.27.9.D.(4)(f):

> "Certify" or "Certification" means signed by an official with accountability over the operations or activities subject to the certification or submission.

Venting and Flaring from Liquids Unloading Activities, Bradenhead Monitoring, and Exploratory Wells

EDF proposes revisions to some of the exceptions form the ban on venting and flaring during production intended to reduce the amount of vented or flared volumes from liquids unloading activities, bradenhead monitoring, and exploratory wells.

Venting and Flaring from Liquids Unloading Activities,

EDF proposed revisions to liquids unloading activities:

19.15.27.8.D.(3)(a): the operator uses an automated control system, such as a plunger lift, where technically feasible and optimizes the system to minimize the venting of natural gas

19.15.27.8.D.(3)(e): the operator must notify the division at least 48 hours prior to conducting unloading or well clean-up activities, except where the operator must act more quickly in order to minimize waste of natural gas. In these cases, the operator must notify the division as soon as possible prior to conducting unloading or well clean-up activities

Venting of Flaring from Exploratory Wells

EDF proposes the following to reduce waste from exploratory wells:

Adding language to 19.15.27.8.D.(3)(c): If an exploratory well is capable of producing in paying quantities within 60 days of the division's approval, the operator submits an updated form C-129 the the division, including a natural gas management plan and timeline for connecting the well to a natural gas gathering system. If it is not possible for the operators to determine if a well is capable of producing in paying quantities within 60 days, the operator may seek approval for an extension of time, not to exceed 12 months

* EDF does not support the Division's revision to 19.15.27.8.D.(3)(c) contained in OCD Exhibit 2A

Venting and Flaring from Bradenhead Monitoring

EDF proposed revisions to the exception allowing an operator to vent during bradenhead monitoring:

> 19.15.27.8.D.(4)(f): a bradenhead test taking no longer than 30 minutes, if practicable

Gas Management Plan Requirements

EDF proposes that operators be required to provide information on anticipated safety risks that will require the operator to allow natural gas to escape during drilling operations when submitting gas management plans by adding subsection (d) to 19.15.27.9D(1) as follows:

(d) any anticipated safety risks that will require the operator to allow natural gas to escape during drilling.

(e) a description of operational best practices that will be sued to minimize venting during active and planned maintenance;

(f) procedures the operator will employ to reduce the frequency of well liquids unloading events; and

(g) anticipated volumes of liquids and gas production and a description of how separation equipment will be sized to optimize gas capture.