devon

Devon Energy Corporation
20 North Broadway
Oklahoma City, Oklahoma 73102-8260

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Ms Davidson
State of New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Proposed Pit Rule 19.15.17 NMAC

Devon Energy Production Company (Devon) would like to thank the State of New Mexico Oil Conservation Division (NMOCD) for the opportunity to comment on the proposed pit rule to be codified as 19.15.17 NMAC. Devon conducts oil and gas operations on federal, state, and fee lands located in Montana, New Mexico, Texas, Utah and Wyoming.

Devon is a member of New Mexico Oil & Gas Association (NMOGA), the Independent Petroleum Association of New Mexico (IPANM) and the Pit Rule Joint Defense Agreement (JDA) Industry Committee which will each be submitting comments under a separate cover. Devon hereby supports and incorporates those comments and proposed language by reference.

Devon is herewith submitting our comments regarding the Proposed Pit Rule 19.15.17 NMAC of the NMOCD. While we support the general efforts of the NMOCD to protect public health, welfare and the environment, we encourage consideration of a revision of the proposed rule which addresses the comments discussed below.

Definitions - 19.15.1.7

"Below-grade tank means a vessel, excluding sumps and pressurized pipeline drip traps, where a portion of the tank's sidewalls is below the surrounding ground surface's elevation".

Devon recommends that the proposed definition of a Below-Grade Tank be moved from 19.15.1.7 to 19.15.17 and modified as follows:

Below-Grade Tank means a vessel, excluding a sump or pressurized pipeline drip trap, placed so that any part of the vessel's sidewalls is covered with soils such that the condition and integrity of the entire tank can not be visually inspected.

Siting Requirements – 19.15.17.10 (A) (1) (b)

"An operator shall not locate a temporary pit or below-grade tank within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole or playa lake (measured from the ordinary highwater mark), unless the appropriate division district office approves an alternative distance based upon the operator's demonstration that surface and ground water will be protected"

The current requirement for location of pits is fully appropriate and reasonable for temporary pits. The proposed requirement is prohibitively restrictive and will not be feasible in portions of the state. Therefore, Devon requests for this requirement to be changed as indicated below.

An operator shall not locate a temporary pit or below-grade tank in any watercourse, lakebed, sinkhole or playa lake. Temporary pits adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression.

Siting Requirements – 19.15.17.10 (A) (3) (a)

"An operator shall not locate material excavated from the construction of the pit within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole or playa lake (measured from the ordinary highwater mark), unless the division approves an alternative distance based upon the operator's demonstration that surface and ground water will be protected".

Excavated material from the construction of the pit should be clean. Therefore, Devon requests this siting requirement to be modified as stated below.

An operator shall not locate material excavated from the construction of the pit in any watercourse, lakebed, sinkhole or playa lake. Excavated material from the construction of the pit adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression.

Siting Requirements – 19.15.17.10 (C) (2) (a)

"An operator shall not implement an onsite closure within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole or playa lake (measured from the ordinary highwater mark), unless the division approves an alternative distance based upon the operator's demonstration that surface and ground water will be protected".

The current requirements for implementation of onsite closure are protective of public health, welfare and the environment. Therefore, Devon requests for this implementation of onsite closure to be modified as follows:

An operator shall not implement an onsite closure in any watercourse, lakebed, sinkhole or playa lake. An onsite closure adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression.

Design and Construction Specifications – 19.15.17.11 (F) (3)

"The operator shall design and construct a temporary pit with a geomembrane liner. The geomembrane liner shall consist of 20mil string reinforced LLDPE or equivalent liner material that the appropriate division district office approves. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW846 method 9090A".

With the additional proposed design, operational and water removal requirements, the use of a 12-mil string reinforced LLDPE or equivalent material should be adequate for a temporary pit to protect public health, welfare and the environment. Therefore, Devon requests the 20mil string reinforced LLDPE be replaced with 12mil string reinforced LLDPE.

Design and Construction Specifications – 19.15.17.11 (I) (2)

"A below-grade tank shall have secondary containment and leak detection".

A double wall below-grade tank located in a vault must be exempted from this requirement because the double wall will contain any leaked liquids and the operator can visually observe if a release has occurred.

Closure Requirements for Temporary Pits – 19.15.17.13 (B)

The current pit closure requirements for temporary pits are appropriate for the management of the risk associated with the contents of these pits. If the pit and its contents are closed in place, the location of the pit is known for all time, the volume and contents of material is approximately known and the relative footprint after proper surface restoration is minimal to nonexistent.

The action of excavating and transporting the pit contents presents greater opportunities for human exposure and increases the risk of detrimental impact on the environment. The volume of material accumulated in a single landfill storage facility as a result of the transfer and storage of pit contents from multiple generators substantially increases the risk of detrimental impact to the environment. Historically, landfill facilities eventually fail and if the contents of drilling pits have actually been scientifically proven to be detrimental to the environment, then it would be preferable to have these constituents controlled in small, known quantities rather than large accumulated quantities that increase the sheer volume of the constituents of concern. Potential impact to groundwater is increased by the size of the landfills footprint and the volume of material present.

Another concern is the lack of data showing the 100 mile radius requirement is technically valid. If there is actual scientifically based information to demonstrate that minor accumulations of pit contents when closed in place are detrimental to human health and the environment then the apparently arbitrarily chosen distance of 100 miles is not protective of the environment.

By applying a closure standard of 250 mg/kg for chlorides in soil as the concentration protective of groundwater, it is assumed that surface water infiltration will dissolve the entire mass of chloride present in the soil. This is unrealistic based on the well understood knowledge of fate and transport mechanisms controlling the movement of dissolved minerals in the subsurface. Groundwater flow velocities below the root zone average less than 10 mm/year in semi-arid climates. This does not take into consideration the effect of dilution or dispersion on the process. Transpiration and soil particle size have an influence on the movement of groundwater through the subsurface as well. All of these factors combine to impede the dissolution, movement and ability of chloride to impact a groundwater aquifer.

Consideration should also be given to the depth to groundwater and the actual condition of the first encountered groundwater. Typically, the first encountered groundwater is nonpotable nor of a quantity or yield sufficient to warrant the protected status it is being given under this proposed rule. On the other hand, while this water is typically of poor quality, yield and volume, it will act as a barrier to further downward migration of any potential impacts that may reach it. However, it should be remembered that it is highly unlikely that dissolved minerals from a closed temporary pit will ever reach the water table in the first place.

In Southeast New Mexico, deep trench burial of the temporary pit contents is appropriate given the dissolved solids concentrations found in pit contents. In the northwest portion of the state, the dissolved solids concentrations in the pit contents are not high enough to warrant the restrictions in the proposed pit rule.

Requiring that the fluids in pits are not to contain concentrations of chemicals of concern above Water Quality Control Commission (WQCC) standards specified in Section 3103 of 20.6.2 NMAC is both unrealistic and punitive. No reasonable rationalization is available to justify this requirement. The fluid contents of pits will never be mistaken as a potable water source. The fluid contents are removed or allowed to evaporate prior to closure in place of a pit and to require that this water meet drinking water standards is unnecessary and inappropriate.

Utilizing field testing methods to measure the chloride concentrations in soil is appropriate for determining their concentration prior to pit closure. However, to require an excavation to remain open while a laboratory analyzes soil samples is imprudent and presents an unnecessary safety hazard to workers and potentially any unauthorized trespasser on a location.

The level of drilling activity currently in the State of New Mexico is such that the infrastructure required to meet the terms of the proposed rule does not exist. This lack of availability will have severe and detrimental economic impact on the work force not only of the oil and gas industry but the associated support services such as restaurants, hotels, residential construction, auto service, sales and repair as well as many others whose livelihood depends on a fully utilized work force with economic stability. Reducing employment opportunities for the citizens of the state and lowering the tax revenues collected will negatively impact schools, police, fire and other public service providers. Requiring a vital industry in the State of New Mexico to comply

with rules and regulations that are not based on sound science will severely hamper the overall quality of life for the citizens of New Mexico.

Thank you for the opportunity to respond to the Proposed Pit Rule 19.15.17 NMAC. It is our hope that these comments will be considered during the rulemaking process. Please do not hesitate to contact me directly should you have questions or require additional information.

Sincerely,

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