Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

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Highlights of the "Pit Rule" – 19.15.17 NMAC

19.15.17.8 PERMIT REQUIRED:
- Permit required for permanent pits, temporary pits, below-grade tanks, closed-loop systems, or approved alternatives.
- A single permit for all pits, below-grade tanks, closed-loop systems, or approved alternative associated with a single application to drill.

19.15.17.9 PERMIT APPLICATION:
- Shall include appropriate engineering principles and practices, operating and maintenance procedures, a closure plan, and hydrogeologic data.
- The applicant may reference a standard design that has been previously filed with the division.

19.15.17.10 SITING REQUIREMENTS:
- Established for temporary pits and below-grade tanks; permanent pits; excavated material from pit construction; and on-site closure methods, including but not limited to setbacks to watercourses, lakebeds, sinkholes, or playa lakes; a permanent residence, school, hospital, institution or church in existence at the time of initial application; fresh water wells or springs; municipal fresh water well fields; wetlands; subsurface mines; unstable areas; and 100-year floodplains.
- No temporary pit, below-grade tank, permanent pit, or on-site closure method shall be located where ground water is less than 50 feet below the bottom of the design.
- On-site Closure Methods:
    - In-place burial:
        - Where ground water is between 50 and 100 feet below the bottom of the buried waste and the waste material or stabilized soil, mixing ratio no greater than 3:1, does not exceed the specified closure standards.
        - Where ground water is more than 100 feet below the bottom of the buried waste and the waste material or stabilized soil, mixing ratio no greater than 3:1, does not exceed the specified closure standards.
    - On-site trench burial:
        - Where ground water is more than 100 feet below the bottom of the buried waste and the waste material or stabilized soil, mixing ratio no greater than 3:1, does not exceed the specified closure standards.

19.15.17.11 DESIGN AND CONSTRUCTION SPECIFICATIONS:
- Established requirements and specifications regarding stockpiling topsoil, signs, fencing, and netting.
- Temporary pits:

  - Requires a properly constructed foundation, a 20-mil string reinforced LLPE geomembrane liner or equivalent, and welded liner seams.
- Permanent Pits:
  - Requires a properly constructed foundation, a dual geomembrane liner system with a leak detection system, and welded liner seams. The geomembrane liners shall consist of 30-mil PVC or 60-mil HDPE liner or equivalent.
- Closed-Loop System:
  - Requires an appropriate liner, sumps to facilitate the collection of liquids, and berms to prevent run-on of surface water and fluids.
- Below-grade Tanks:
  - If side walls are not visible for leak inspection, the design shall be double walled with leak detection.
  - If side walls are visible for leak inspection, the design shall include an automatic high-level shut-off control device and manual controls to prevent overflow and a geomembrane liner to divert leaked liquids to a location that can be visually inspected.
- On-site Trenches for Closure:
  - Location must comply with the siting criteria.
  - Design requires a properly constructed foundation; a 20-mil string reinforced LLPE geomembrane liner or equivalent for the trench and trench cover, and welded liner seams.

19.15.17.12 OPERATIONAL REQUIREMENTS:
- Operators must notify the division if a liner is damaged and must to repair and/or replace the damaged liner for all pits.
- Operators are required to meet new technical standards for temporary pits (freeboard, daily or weekly inspections).
- Operators must remove drilling fluids within 30 days after the rig is released.
- Operators of permanent pits must permanently mark the three foot freeboard level/limit on the pit.
- Operators must inspect below-grade tanks monthly and maintain inspection records.
- Operators must inspect sumps annually for integrity and maintain inspection records.

19.15.17.13 CLOSURE REQUIREMENTS:
- Establishes time requirements for the closure of pits, below-grade tanks, and closed-loop systems existing prior to the effective date of the rule and permitted after the effective date.
- Temporary Pits:
  - Three methods: Waste excavation and removal, On-site burial, and a proposed alternative.
  - Waste excavation and removal: Requires the excavation and removal of the pit contents and the liner. Also requires the delineation of the soils beneath the pit to determine if a release has occurred. Release delineation specifications are as follows:
    - Where ground water is between 50 and 100 feet below the bottom of the temporary pit or for cavitation pits, the operator shall collect a five point, composite sample; and collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for benzene, total BTEX, TPH, the GRO and DRO combined fraction and chlorides to demonstrate that benzene, does not exceed 0.2 mg/kg; total BTEX does not exceed 50 mg/kg; TPH does not exceed 2500 mg/kg; the GRO and DRO combined fraction does not exceed 500 mg/kg; and chlorides do not exceed 500 mg/kg or the background concentration, whichever is greater.

- Where ground water is more than 100 feet below the bottom of the temporary pit, the operator shall collect a five point, composite sample; and collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for benzene, total BTEX, TPH, the GRO and DRO combined fraction and chlorides to demonstrate that benzene, does not exceed 0.2 mg/kg; total BTEX does not exceed 50 mg/kg; TPH does not exceed 2500 mg/kg; the GRO and DRO combined fraction does not exceed 500 mg/kg; and chlorides do not exceed 1000 mg/kg or the background concentration, whichever is greater.

- Permanent Pits:
  - Requires the excavation and removal of the pit contents and the liner. Also requires the delineation of the soils beneath the pit to determine if a release has occurred. Release delineation specifications are as follows:
    - the operator shall collect a five point, composite sample; and collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for benzene, total BTEX, TPH, and chlorides to demonstrate that benzene, does not exceed 0.2 mg/kg; total BTEX does not exceed 50 mg/kg; TPH does not exceed 100 mg/kg; and chlorides do not exceed 250 mg/kg or the background concentration, whichever is greater.
- Closed-loop systems:
  - Three methods: Waste removal, On-site burial, and a proposed alternative.
  - No release delineation required for waste removal of a closed-loop system.
- Below-grade tanks:
  - Requires the removal of the contents of the below-grade tank and the removal, disposal, recycle, reuse, or reclamation of the below-grade tank. Also requires the delineation of the soils beneath the below-grade tank to determine if a release has occurred; the same release delineation specifications required for permanent pits.
- On-site Closure Methods:
  - For temporary pits and drying pads associated with closed-loop systems.
  - Requires compliance with siting criteria, proof of surface owner notice with application submittal, must comply with on-site closure requirements and standards, and must place a steel marker at the center of an on-site burial.
  - Permanent structures shall not be built over an on-site burial without division approval.
  - Operators must file a deed notice identifying the exact location of the on-site burial with the appropriate county clerk.
  - Two types of on-site closure methods – In-place burial and On-site trench burial.
  - In-place burial:
    - Operators of drying pads associated with closed-loop systems that wish to implement this closure method must construct a temporary pit pursuant to the design and construction specifications of the Rule.
    - Temporary pit and drying pad contents must be stabilized or solidified to bearing capacity sufficient to support the final cover and must not exceed the 3:1 mixing ratio limit.
    - Where ground water is between 50 and 100 feet below the bottom of the buried waste, the operator shall collect a five point, composite sample of the contents of the drying pad or temporary pit prior to or after treatment or stabilization to demonstrate that benzene, does not exceed 0.2 mg/kg; total BTEX does not exceed 50 mg/kg; TPH does not exceed 2500 mg/kg; the GRO and DRO combined fraction does not exceed 500 mg/kg; and chlorides do not exceed 500 mg/kg or the background concentration, whichever is greater.
    - Where ground water is more than 100 feet below the bottom of the buried waste, the operator shall collect a five point, composite sample of the contents of the drying pad

or temporary pit prior to or after treatment or stabilization to demonstrate that benzene, does not exceed 0.2 mg/kg; total BTEX does not exceed 50 mg/kg; TPH does not exceed 2500 mg/kg; the GRO and DRO combined fraction does not exceed 500 mg/kg; and chlorides do not exceed 1000 mg/kg or the background concentration, whichever is greater.

- Operators shall use a separate temporary pit for the closure of each drying pad associated with a closed-loop system.
- Operators shall backfill the pit, install the prescribed cover, contour, and re-vegetate.

- On-site trench burial:
  - Operators shall use a separate on-site trench for the closure of each drying pad associated with a closed-loop system or each temporary pit.
  - Pit and drying pad contents must be stabilized or solidified to bearing capacity sufficient to support the final cover and not exceed the 3:1 mixing ratio limit.
  - The operator shall collect a five point, composite sample of the contents of the drying pad or temporary pit prior to or after treatment or stabilization to demonstrate that TPH does not exceed 2500 mg/kg; chlorides do not exceed 250 mg/l and that the concentrations of the water contaminants specified in Subsection A of 20.6.2.3103 NMAC as determined by appropriate EPA methods do not exceed the standards specified in Subsection A of 20.6.2.3103 NMAC, unless otherwise specified.
  - Operators must construct the on-site trench pursuant to the design and construction specifications of the Rule.
  - Excavated material must pass the paint filter test and the closure specified standards for on-site trench burial.
  - Operators must test the soils beneath the temporary pit after excavation to determine if a release has occurred; the same release delineation specifications required for temporary pits regarding the implementation of the waste excavation and removal closure method.
  - Operators shall install the geomembrane cover over the filled on-site trench; install the prescribed cover, contour, and re-vegetate.
- Operators must reclaim and restore the impacted surface areas associated with a closed-loop system, pit, trench or below-grade tank, including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area and to the condition that existed prior to oil and gas operations.
- Operators may propose an alternative to the re-vegetation requirement if the operator demonstrates that the proposed alternative effectively prevents erosion, and protects fresh water, human health and the environment and the alternative is agreed upon by the surface owner.
- Soil cover specifications are established for scenarios regarding the implementation of waste removal closure methods and on-site closure methods.
- The vegetative cover shall equal 70% of the surrounding undisturbed native perennial vegetative cover for two successive growing seasons and no artificial irrigation.
- Operators must notify the surface owner prior of plans to close a temporary pit, a permanent pit, a below-grade tank or where the operator has approval for on-site closure. Notice to the division is required for on-site closures and the cessation of operations of permanent pits.
- Closure reports shall be submitted with 60 days of closure completion and include such items as the necessary attachments to document all closure activities including sampling results; a plot plan; details on back-filling, capping and covering; and any additional information required by the Rule.

19.15.17.14 EMERGENCY ACTIONS:
- No permit is required for true emergencies
- Operators must remove fluids within 48 hours of the end of the emergency condition.

19.15.17.15 EXCEPTIONS:
- Permit requirements; the exception requirements; or the permit approval, condition, denial, revocation, suspension, modification or transfer requirements of the Rule are not open to exceptions.
- Only the environmental bureau in the division's Santa Fe office may grant an exception, unless a hearing is granted.
- Operators requesting an exception are required to provide a comprehensive public notice.
- Alternative closure methods must be requested as an exception and must be submitted to the environmental bureau in the division's Santa Fe office for consideration.

19.15.17.16 PERMIT APPROVALS, CONDITIONS, DENIALS, REVOCATIONS, SUSPENSIONS, MODIFICATIONS OR TRANSFERS:
- Permits are required for pits, closed-loop systems, below-grade tanks, and alternatives.
- The division may impose additional conditions or requirements.
- Operators may request modifications to permit for good cause.
- The division may revoke, suspend, or modify a permit for good cause.
- Permits may be transferred.

19.15.17.17 TRANSITIONAL PROVISIONS:
- The division will no longer accept applications for permits for unlined temporary pits, unless the operator requests an exception for this provision.
- Within 30 days, operators must submit closure plans for an existing unlined permanent pit that has not been permitted.
- Within six months, operators must submit closure plans for an existing permitted, unlined permanent pit or below-grade tank.
- Within 180 days, operators of permitted permanent pits must submit a modification request to modify its pits to comply with the new technical standards.
- Within 18 months of modifying its permit, operators must comply with new technical standards for an existing lined, permitted or registered, permanent pit.
- Within 90 days, operators of an existing below-grade tank must apply for a permit or request a permit modification and must comply with the construction standards within one year of permit issuance.
- An operator of an existing permitted pit or below-grade tank may continue to operate if it meets the new operational and closure requirements
- An operator of an existing, permitted or registered, temporary pit must comply with the new operational and closure standards.
- An operator of an existing below-grade tank must comply with the new operational and closure standards.
- Operators with existing below-grade tank have five years to comply with the new design and construction standards.
- Operators do not have to obtain a permit for an existing closed-loop system, but must to close to the new standards.
- An operator of an existing sump must comply with the new operational standards.