Attachment A to June 6, 2013 Order and Statement of Reasons [Order No. R-13506-D]

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 17 PITS, CLOSED-LOOP SYSTEMS, BELOW-GRADE TANKS AND SUMPS

19.15.17.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.17.1 NMAC - Rp, 19.15.17.1 NMAC, 6/28/13]

19.15.17.2 SCOPE: 19.15.17 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.17.2 NMAC - Rp, 19.15.17.2 NMAC, 6/28/13]

19.15.17.3 STATUTORY AUTHORITY: 19.15.17 NMAC is adopted pursuant to the Oil and Gas Act, NMSA 1978, Section 70-2-6, Section 70-2-11 and Section 70-2-12.
[19.15.17.3 NMAC - Rp, 19.15.17.3 NMAC, 6/28/13]

19.15.17.4 DURATION: Permanent.
[19.15.17.4 NMAC - Rp, 19.15.17.4 NMAC, 6/28/13]

19.15.17.5 EFFECTIVE DATE: June 28, 2013, unless a later date is cited at the end of a section.
[19.15.17.5 NMAC - Rp, 19.15.17.5 NMAC, 6/28/13]

19.15.17.6 OBJECTIVE: To regulate pits, closed-loop systems, and below-grade tanks and sumps used in connection with oil and gas operations for the protection of fresh water, public health and the environment.
[19.15.17.6 NMAC - Rp, 19.15.17.6 NMAC, 6/28/13]

19.15.17.7 DEFINITIONS:

A. "Alluvium" means detrital material that water or other erosional forces have transported and deposited at points along a watercourse's flood plain. It typically is composed of sands, silts and gravels; exhibits high porosity and permeability; and generally carries fresh water.

B. "Below-grade tank" means a vessel with greater than a five barrel capacity, excluding sumps and pressurized pipeline drip traps, installed within an excavation or buried below the surrounding ground surface's elevation. Below-grade tank does not include an above-ground storage tank that is located above or at the surrounding ground surface's elevation and is surrounded by berms.

C. "Closed-loop system" means a system that uses above ground steel tanks for the management of drilling fluids.

D. "Continuously flowing watercourse" means a river, stream or creek that is named or delineated by a solid blue line on a USGS quadrangle map having a scale factor of 1:24,000, or an irrigation channel, or a water course that typically has water flowing during the majority of the days of the year. This does not include ephemeral washes, arroyos, and similar depressions that do not have flowing water during the majority of the days of the year.

E. "Division-approved facility" means a division-permitted surface waste management or injection facility, a facility permitted pursuant to 20.6.2 NMAC, a facility approved pursuant to 19.15.35.8 NMAC or other facility that the division specifically approves for the particular purpose. The division shall not approve any facility not otherwise permitted unless it finds that the facility's use for the specified purpose will protect fresh water, public health and the environment and comply with other applicable federal or state statutes, federal regulations, state rules and local ordinances.

F. "Emergency pit" means a pit that is constructed during an emergency to contain a spill in the event of a release.

G. "Exception" means authorization from the division's Santa Fe office to depart from the requirements of 19.15.17 NMAC.

H. "Floodplain" means US army corps of engineers or FEMA documented 100-year floodplain.

I. "Life-form ratio" means the relative percentage of regionally native plant species in each of the following classifications: shrubs, forbs, and grasses.

J. "Low chloride fluids" means water-based fluids that contain less than 15,000 mg/liter of chlorides as determined by field or laboratory analysis.

K. "Measureable" means a layer of oil, the thickness of which is discernible by color cutting or other acceptable method.

L. "Multi-well fluid management pit" means a pit used for the storage, treatment and recycling of stimulation fluids and flow-back water during the drilling and completion of multiple wells. Multi-well fluid management pits may not be used for the disposal of drilling, completion or other waste. Multi-well fluid management pits may be located either onsite or offsite of a well drilling location and may remain in use until all wells with approved application for permit to drill that are identified in the pit permit are completed. Any addition of wells or extensions for permits to drill identified in the pit permit shall go to hearing. Any containment structure such as a pond, pit, or other impoundment that holds only fresh water that has not been treated for oil field purposes, is not a multi-well fluid management pit.

M. "Onsite" means within the boundaries of a single lease where exploration and production waste is generated.

N. "Permanent pit" means a pit used for collection, retention or storage of produced water or brine that is constructed with the conditions and for the duration provided in its permit, and is not a temporary pit.

O. "Restore" means to return a site to its former condition, in the manner and to the extent required by applicable provisions of 19.15.17 NMAC.

P. "Significant watercourse" means a watercourse with a defined bed and bank either named or identified by a dashed blue line on a USGS 7.5 minute quadrangle map or the next lower order tributary with a defined bed and bank of such watercourse.

Q. "Sump" means a subgrade impermeable vessel that is partially buried in the ground, is in contact with the ground surface, or is a collection device incorporated within a secondary containment system, which remains predominantly empty, serves as a drain or receptacle for de minimis releases on an intermittent basis and is not used to store, treat, dispose of or evaporate products or wastes. Buckets, pails, drip pans or similar vessels that are not in contact with the ground surface are not sumps.

R. "Temporary pit" means a pit, including a drilling or workover pit, which is constructed with the intent that the pit will hold liquids and mineral solids. Temporary pits may be used for one or more wells and must be located at one of the associated permitted well drilling locations. Temporary pits must be closed within six months from the date the operator releases the drilling or workover rig from the first well using the pit. Any containment structure such as a pond, pit, or other impoundment that holds only fresh water that has not been treated for oil field purposes, is not a temporary pit.

S. "Variance" means authorization from the appropriate division district office to depart from the requirements of 19.15.17 NMAC. A variance may not be obtained where exceptions are required by a provision of 19.15.17 NMAC.

T. "Visible" when used with respect to oil on the surface of a pit means any amount of oil whether measurable or a sheen on the pit's liquid surface.

[19.15.17.7 NMAC - Rp, 19.15.17.7 NMAC, 6/28/13]

19.15.17.8 PERMIT OR REGISTRATION REQUIRED:

A. A person shall not construct or use a pit except in accordance with a division-issued permit. Only an operator may apply for a division-issued permit. After June 16, 2008, an unlined pit is prohibited and the division shall not issue a permit for an unlined pit.

B. The division may issue a single permit for all pits or division-approved alternative methods associated with a single application for permit to drill.

C. All below-grade tanks installed after June 28, 2013 must be registered with the appropriate division district office. The operator shall file a single registration for all below-grade tanks associated with a single application for permit to drill.

D. Closed-loop systems and sumps do not require a division-issued permit or registration with the division's district office.

[19.15.17.8 NMAC - Rp, 19.15.17.8 NMAC, 6/28/13]

19.15.17.9 PERMIT APPLICATION AND REGISTRATION:

A. An operator shall use the appropriate form C-144 to apply to the division for a permit to construct or use a pit or proposed alternative method, or to register a below-grade tank. The operator shall submit the form C-144 either separately or as an attachment to a permit application for a facility with which the pit, below-grade tank or proposed alternative method will be associated. An operator shall use a C-101, C-103 or applicable bureau of land management form to notify the appropriate division district office of construction or use of a closed-loop system.

B. The permit application shall include a detailed plan as follows.

(1) Permanent pits. A registered professional engineer shall certify engineering, design and construction specifications as contained in the plan for permanent pits. The plan shall include:

(a) a quality control/quality assurance construction and installation plan;

(b) operating and maintenance procedures;

(c) a closure plan;

(d) a hydrogeologic report that provides sufficient information and detail on the site's topography, soils, geology, surface hydrology and ground water hydrology to enable the division's Santa Fe office to evaluate the actual and potential effects on soils, surface water and ground water;

(e) detailed information on dike protection and structural integrity; and leak detection, including an adequate fluid collection and removal system;

(f) liner specifications and compatibility;

(g) freeboard and overtopping prevention;

(h) prevention of nuisance or hazardous odors, including H2S;

(i) an emergency response plan, unless the permanent pit is part of a facility that has an integrated contingency plan;

(j) type of oil field waste stream;

(k) climatological factors, including freeze-thaw cycles;

(l) a monitoring and inspection plan;

(m) erosion control; and

(n) other pertinent information the environmental bureau in the division's Santa Fe office requests.

(2) Temporary pits. The plan for design and construction of a temporary pit shall follow applicable liner manufacturers' requirements. The permit application also shall include operating and maintenance procedures, a closure plan and hydrogeologic data that provides sufficient information and detail on the site's topography, soils, geology, surface hydrology and ground water hydrology to enable the appropriate division district office to evaluate compliance with the siting criteria of 19.15.17.10 NMAC. In the absence of site-specific ground water data, the operator can provide a reasonable determination of probable ground water depth using data generated by models, cathodic well lithology, published information or other tools as approved by the appropriate division district office. The plan for a temporary pit may incorporate by reference a standard design for multiple temporary pits that the operator files with the application or has previously filed with the appropriate division district office. The operator may utilize, with approval by the appropriate division district office, standardized plans for pit construction, pit closure, and other plans which will remain approved until a subsequent plan is either required by the appropriate division district office or is submitted by the operator and approved by the appropriate division district office. A copy of the approved standardized plan shall be included in the division's electronic well file for each associated well.

(3) Below-grade tanks. The registration of a below-grade tank shall include operating and maintenance procedures, a closure plan and a hydrogeologic report that demonstrates compliance with the siting criteria of 19.15.17.10 NMAC. In the absence of site-specific ground water data, the operator can provide a reasonable determination of probable ground water depth using data generated by models, cathodic well lithology, published information or other tools as approved by the appropriate division district office. The registration of a below-grade tank may incorporate by reference a standard design for multiple below-grade tanks that the operator files with the application or has previously filed with the appropriate division district office. The operator may utilize, with approval by the appropriate division district office, standardized plans for below-grade tank construction, and other plans which will remain approved until a subsequent plan is either required by the appropriate division district office or is submitted

by the operator and approved by the appropriate division district office. A copy of the approved standardized plan shall be included in the division's electronic well file for each associated well.

(4) Multi-well fluid management pits. The design and construction plan for a multi-well fluid management pit shall follow applicable liner manufacturers' requirements. The permit application also shall include operating and maintenance procedures, a list of wells with approved application for permit to drill associated with the pit, a closure plan and hydrogeologic data that provides sufficient information and detail on the site's topography, soils, geology, surface hydrology and ground water hydrology to enable the appropriate division district office to evaluate compliance with the siting criteria of 19.15.17.10 NMAC. In the absence of site-specific ground water data, the operator can provide a reasonable determination of probable ground water depth using data generated by models, cathodic well lithology, published information or other tools as approved by the appropriate division district office. The plan for a multi-well fluid management pit may incorporate by reference a standard design for multiple fluid management pits that the operator files with the application or has previously filed with the appropriate division district office. The operator may utilize, with approval by the appropriate division district office, standardized plans for pit construction, pit closure, and other plans which will remain approved until a subsequent plan is either required by the appropriate division district office or is submitted by the operator and approved by the appropriate division district office.

C. Filing of permit application.

(1) Permanent pits: An operator shall file an application on form C-144, including required attachments, with the division's Santa Fe office to request approval to use or construct a permanent pit and shall provide a copy to the appropriate division district office.

(2) Temporary pits, and multi-well fluid management pits. An operator shall file an application on form C-144, including required attachments, with the appropriate division district office. If the operator plans to use a temporary pit, or multi-well fluid management pit, the operator shall provide the proposed pit location on form C-102.

[19.15.17.9 NMAC - Rp, 19.15.17.9 NMAC, 6/28/13]

19.15.17.10 SITING REQUIREMENTS:

A. Except as otherwise provided in 19.15.17 NMAC.

(1) An operator shall not locate a temporary pit containing low chloride fluid:

(a) where ground water is less than 25 feet below the bottom of the pit; a variance may be granted for a pit used solely to cavitate a coal bed methane well and where the operator demonstrated that the proposed operation will protect groundwater during the temporary pit's use;

(b) within (i) 100 feet of any continuously flowing watercourse or any other significant watercourse, or (ii) 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);

(c) within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence at the time of initial application;

(d) within (i) 200 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or (ii) 300 feet of any other fresh water well or spring, in existence at the time of the initial application;

(e) within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended, unless the municipality specifically approves;

(f) within 100 feet of a wetland;

(g) within the area overlying a subsurface mine, unless a variance is granted that approves the proposed location based upon the operator's demonstration that the temporary pit's construction and use will not compromise the subsurface integrity;

(h) within an unstable area, unless a variance is granted upon a demonstration that the operator has incorporated engineering measures into the design to ensure that the temporary pit's integrity is not compromised; or

(i) within a 100-year floodplain.

(2) Unless a variance is specifically provided for in Paragraph (1) of Subsection A of 19.15.17.10 NMAC, an operator must obtain an exception to locate a temporary pit containing low chloride fluids inside setbacks set forth in Paragraph (1) of Subsection A of 19.15.17.10 NMAC.

(3) An operator shall not locate a temporary pit containing fluids that are not low chloride fluids:

(a) where ground water is less than 50 feet below the bottom of the pit; a variance may be granted for a pit used solely to cavitate a coal bed methane well and where the operator demonstrated that the proposed operation will protect groundwater during the temporary pit's use;

(b) within (i) 300 feet of any continuously flowing watercourse or any other significant watercourse or (ii) 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);

(c) within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence at the time of initial application;

(d) within (i) 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or (ii) 1,000 feet of any other fresh water well or spring, in existence at the time of the initial application;

(e) within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended, unless the municipality specifically approves;

(f) within 300 feet of a wetland;

(g) within the area overlying a subsurface mine, unless a variance is granted that approves the proposed location based upon the operator's demonstration that the temporary pit's construction and use will not compromise the subsurface integrity;

(h) within an unstable area, unless a variance is granted upon a demonstration that the operator has incorporated engineering measures into the design to ensure that the temporary pit's integrity is not compromised; or

(i) within a 100-year floodplain.

(4) An operator must obtain a variance to locate a temporary pit containing non-low chloride fluids inside setbacks set forth in Paragraph (3) of Subsection A of 19.15.17.10 NMAC. The operator must obtain an exception to locate a non-low chloride fluids temporary pit inside setbacks set forth in Paragraph (1) of Subsection A of 19.15.17.10 NMAC.

(5) An operator shall not locate a permanent pit or multi-well fluid management pit:

(a) where ground water is less than 50 feet below the bottom of the permanent pit;

(b) within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole or playa lake (measured from the ordinary high-water mark), unless the division's Santa Fe office approves an alternative distance based upon the operator's demonstration that surface and ground water will be protected;

(c) within 1000 feet from a permanent residence, school, hospital, institution or church in existence at the time of initial application;

(d) within 500 feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application;

(e) within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended, unless the municipality specifically approves;

(f) within 500 feet of a wetland;

(g) within the area overlying a subsurface mine, unless the operator obtains an exception and demonstrates that the pit's construction and use will not compromise subsurface integrity;

(h) within an unstable area, unless the operator demonstrates that it has incorporated engineering measures into the design to ensure that the pit's integrity is not compromised; or

(i) within a 100-year floodplain.

(6) An operator must obtain an exception to locate a permanent pit or multi-well fluid management pit inside setbacks set forth in Paragraph (5) of Subsection A of 19.15.17.10 NMAC.

(7) An operator shall not locate material excavated from a pit's construction:

(a) within 100 feet of a continuously flowing watercourse or a significant watercourse;

(b) 200 feet from a lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);

(c) within 100 feet of a wetland; or

(d) within a 100-year floodplain.

(8) An operator shall not locate a below-grade tank:

(a) within 100 feet of a continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark);

(b) within 200 feet of a spring or a fresh water well used for public or livestock consumption;

(c) where depth to ground water is less than 25 feet below the bottom of the tank.

B. An emergency pit is exempt from the siting criteria of 19.15.17 NMAC.

C. Closure for burial trenches and in place closure.

(1) An operator shall not implement trench or in-place closure:

(a) where ground water is less than 25 feet below the bottom of the buried waste;

(b) within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);

(c) within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence at the time of initial application;

(d) within 300 feet of a spring or private, domestic fresh water well used for domestic or stock watering purposes;

(e) within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended, unless the municipality specifically approves;

(f) within 300 feet of a wetland;

(g) within the area overlying a subsurface mine, unless the division specifically approves the proposed location based upon the operator's demonstration that subsurface integrity will not be compromised;

(h) within an unstable area, unless the operator demonstrates that it has incorporated engineering measures into the design to ensure that the onsite closure method will prevent contamination of fresh water and protect public health and the environment; or

(i) within a 100 year floodplain.

(2) An operator must obtain a variance to locate a burial trench inside setbacks set forth in Paragraph (3) of Subsection A of 19.15.17.10 NMAC. The operator must obtain an exception to locate a burial trench inside setbacks set forth in Paragraph (1) of Subsection A of 19.15.17.10 NMAC.
[19.15.17.10 NMAC - Rp, 19.15.17.10 NMAC, 6/28/13]

19.15.17.11 DESIGN AND CONSTRUCTION SPECIFICATIONS:

A. General specifications. An operator shall design and construct a pit, closed-loop system, below-grade tank or sump to contain liquids and solids; prevent contamination of fresh water; and protect public health and the environment.

B. Stockpiling of topsoil. Prior to constructing a pit, except a pit constructed in an emergency, the operator shall strip and stockpile the topsoil for use as the final cover or fill at the time of closure.

C. Signs. The operator shall post an upright sign not less than 12 inches by 24 inches with lettering not less than two inches in height in a conspicuous place on the fence surrounding the pit or below-grade tank, unless the pit or below-grade tank is located on a site where there is an existing well, signed in compliance with 19.15.16.8 NMAC, that is operated by the same operator. The operator shall post the sign in a manner and location such that a person can easily read the legend. The sign shall provide the following information: the operator's name; the location of the site by quarter-quarter or unit letter, section, township and range; and emergency telephone numbers.

D. Fencing.

(1) The operator shall fence or enclose a pit or below-grade tank in a manner that deters unauthorized access and shall maintain the fences in good repair. Fences are not required if there is an adequate surrounding perimeter fence that prevents unauthorized access to the well site or facility, including the pit or below-grade tank. During drilling or workover operations, the operator is not required to fence the edge of the pit adjacent to the drilling or workover rig.

(2) The operator shall fence or enclose a pit located within 1000 feet of an occupied permanent residence, school, hospital, institution or church with a chain link security fence, at least six feet in height with at least two strands of barbed wire at the top. The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not onsite. During drilling

or workover operations, the operator is not required to fence the edge of the temporary pit adjacent to the drilling or workover rig.

(3) The operator shall fence any other pit or below-grade tank to exclude livestock with a four foot fence that has at least four strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level.

E. Netting. The operator shall ensure that a permanent pit, a multi-well fluid management pit, or an open top tank is screened, netted or otherwise rendered non-hazardous to wildlife, including migratory birds. Where netting or screening is not feasible, the operator shall on a monthly basis inspect for, and within 30 days of discovery, report discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the appropriate division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring.

F. Temporary pits. The operator shall design and construct a temporary pit in accordance with the following requirements.

(1) The operator shall design and construct a temporary pit to ensure the confinement of liquids to prevent releases.

(2) A temporary pit shall have a properly constructed foundation and interior slopes consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear. The operator shall construct a temporary pit so that the slopes are no steeper than two horizontal feet to one vertical foot (2H:1V). The appropriate division district office may approve an alternative to the slope requirement if the operator demonstrates that it can construct and operate the temporary pit in a safe manner to prevent contamination of fresh water and protect public health and the environment.

(3) The operator shall design and construct a temporary pit with a geomembrane liner. The geomembrane liner shall consist of 20- mil 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 SW-846 Method 9090A.

(4) The operator shall minimize liner seams and orient them up and down, not across, a slope. The operator shall use factory welded seams where possible. Prior to field seaming, the operator shall overlap liners four to six inches. The operator shall minimize the number of field seams in corners and irregularly shaped areas. Qualified personnel shall field weld and test liner seams.

(5) Construction shall avoid excessive stress-strain on the liner.

(6) Geotextile is required under the liner where needed to reduce localized stress-strain or protuberances that may otherwise compromise the liner's integrity.

(7) The operator shall anchor the edges of all liners in the bottom of a compacted earth-filled trench. The anchor trench shall be at least 18 inches deep, unless anchoring to encountered bedrock provides equivalent anchoring.

(8) The operator shall ensure that the liner is protected from any fluid force or mechanical damage at any point of discharge into or suction from the lined temporary pit.

(9) The operator shall design and construct a temporary pit to prevent run-on of surface water. A berm, ditch, proper sloping or other diversion shall surround a temporary pit to prevent run-on of surface water. During drilling operations, the edge of the temporary pit adjacent to the drilling or workover rig is not required to have run-on protection if the operator is using the temporary pit to collect liquids escaping from the drilling or workover rig and run-on will not result in a breach of the temporary pit.

(10) The volume of a temporary pit shall not exceed 10 acre feet, including freeboard.

(11) The part of a temporary pit used to vent or flare gas during a drilling or workover operation that is designed to allow liquids to drain to a separate temporary pit does not require a liner, unless the appropriate division district office requires an alternative design in order to protect surface water, ground water and the environment. The operator shall not allow freestanding liquids to remain on the unlined portion of a temporary pit used to vent or flare gas.

G. Permanent pits. The operator shall design and construct a permanent pit in accordance with the following requirements.

(1) Each permanent pit shall have a properly constructed foundation consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear. The operator shall construct a permanent pit so that the inside grade of the levee is no steeper than

two horizontal feet to one vertical foot (2H:1V). The levee shall have an outside grade no steeper than three horizontal feet to one vertical foot (3H:1V). The levee's top shall be wide enough to install an anchor trench and provide adequate room for inspection and maintenance.

(2) Each permanent pit shall contain, at a minimum, a primary (upper) liner and a secondary (lower) liner with a leak detection system appropriate to the site's conditions. The edges of all liners shall be anchored in the bottom of a compacted earth-filled trench. The anchor trench shall be at least 18 inches deep.

(3) The primary (upper) liner and secondary (lower) liner shall be geomembrane liners. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material the division's Santa Fe office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to ultraviolet light, petroleum hydrocarbons, salts and acidic and alkaline solutions. Liner compatibility shall comply with EPA SW-846 Method 9090A, or subsequent relevant publication.

(4) The division's Santa Fe office may approve other liner media if the operator demonstrates to the satisfaction of the division's Santa Fe office that the alternative liner protects fresh water, public health, and the environment as effectively as the specified media.

(5) The operator shall minimize liner seams and orient them up and down, not across, a slope. The operator shall use factory welded seams where possible. The operator shall ensure field seams in geosynthetic material are thermally seamed (hot wedge) with a double track weld to create an air pocket for non-destructive air channel testing. The operator shall test a seam by establishing an air pressure between 33 and 37 psi in the pocket and monitoring that the pressure does not change by more than one percent during five minute after the pressure source is shut off from the pocket. Prior to field seaming, the operator shall overlap liners four to six inches and orient seams, up and down, not across, the slope. The operator shall minimize the number of field seams in corners and irregularly shaped areas. There shall be no horizontal seams within five feet of the slope's toe. Qualified personnel shall perform field welding and testing.

(6) At a point of discharge into or suction from the lined permanent pit, the operator shall ensure that the liner is protected from excessive hydrostatic force or mechanical damage. External discharge or suction lines shall not penetrate the liner.

(7) The operator shall place a leak detection system between the upper and lower geomembrane liners that consists of two feet of compacted soil with a saturated hydraulic conductivity of 1 x 10-5 cm/sec or greater to facilitate drainage. The leak detection system shall consist of a properly designed drainage and collection and removal system placed above the lower geomembrane liner in depressions and sloped to facilitate the earliest possible leak detection. Piping used shall be designed to withstand chemical attack from oil field waste or leachate; structural loading from stresses and disturbances from overlying oil field waste, cover materials, equipment operation or expansion or contraction; and to facilitate clean-out maintenance. The material the operator places between the pipes and laterals shall be sufficiently permeable to allow the transport of fluids to the drainage pipe. The slope of the interior sub-grade and of drainage lines and laterals shall be at least a two percent grade, i.e., two feet vertical drop per 100 horizontal feet. The piping collection system shall be comprised of solid and perforated pipe having a minimum diameter of four inches and a minimum wall thickness of schedule 80. The operator shall seal a solid sidewall riser pipe to convey collected fluids to a collection, observation and disposal system located outside the permanent pit's perimeter. The operator may install alternative methods that the division's Santa Fe office approves.

(8) The operator shall notify the division's Santa Fe office at least 72 hours prior to the primary liner's installation so that a representative of the environmental bureau in the division's Santa Fe office may inspect the leak detection system before it is covered.

(9) The operator shall construct a permanent pit in a manner that prevents overtopping due to wave action or rainfall and maintain a three foot freeboard at all times.

(10) The volume of a permanent pit shall not exceed 10 acre-feet, including freeboard.

(11) The operator shall maintain a permanent pit to prevent run-on of surface water. A permanent pit shall be surrounded by a berm, ditch or other diversion to prevent run-on of surface water.

H. Drying pads associated with closed-loop systems.

(1) An operator of a closed-loop system with drying pads shall design and construct the drying pads to include the following:

(a) appropriate liners that prevent the contamination of fresh water and protect public health and the environment;

(b) sumps to facilitate the collection of liquids derived from drill cuttings; and

(c) berms that prevent run-on of surface water or fluids.

I. Below-grade tanks. The operator shall design and construct a below-grade tank in accordance with the following requirements, as applicable.

(1) The operator shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight.

(2) A below-grade tank shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom.

(3) The operator shall construct a below-grade tank to prevent overflow and the collection of surface water run-on.

(4) An operator shall construct a below-grade tank in accordance with one of the following designs.

(a) An operator may construct and use a below-grade tank that does not have double walls provided that the below-grade tank's side walls are open for visual inspection for leaks, the below-grade tank's bottom is elevated a minimum of six inches above the underlying ground surface and the below-grade tank is underlain with a geomembrane liner, which may be covered with gravel, to divert leaked liquid to a location that can be visually inspected. The operator shall equip below-grade tanks designed in this manner with a properly operating automatic high-level shut-off control device and manual controls to prevent overflows. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the appropriate division district office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to ultraviolet light, petroleum hydrocarbons, salts and acidic and alkaline solutions. Liner compatibility shall comply with EPA SW-846 Method 9090A, or subsequent relevant EPA publication.

(b) All below-grade tanks, in which the side walls are not open for visible inspection for leaks shall be double walled with leak detection capability.

(c) An operator may construct a below-grade tank according to an alternative system that the appropriate division district office approves based upon the operator's demonstration that the alternative provides equivalent or better protection.

(5) The operator of a single walled below-grade tank constructed and installed prior to June 16, 2008 that has the side walls open for visual inspection and that does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is not required to equip or retrofit the below-grade tank to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as it demonstrates integrity. If the existing below-grade tank does not demonstrate integrity, the operator shall promptly drain the below-grade tank and remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.

(6) The operator of a single walled below-grade tank constructed and installed prior to June 16, 2008 and where any portion of the tank sidewall is below the ground surface and not visible shall equip or retrofit the below-grade tank to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, or close it, by June 16, 2013. If the existing below-grade tank does not demonstrate integrity, the operator shall promptly drain the below-grade tank, remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.

(7) The operator of a double walled below-grade tank constructed and installed prior to June 16, 2008 and which does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is not required to equip or retrofit the below-grade tank to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as it demonstrates integrity. If the existing below-grade tank does not demonstrate integrity, the operator shall promptly drain the below-grade tank, remove it from service and comply with the closure requirements of 19.15.17.13 NMAC.

J. Multi-well fluid management pits. The operator shall design and construct a multi-well fluid management pit in accordance with the following requirements.

(1) The operator shall design and construct the pit to ensure the confinement of liquids to prevent releases and to prevent overtopping due to wave action or rainfall.

(2) The pit shall have a properly constructed foundation and interior slopes consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear. Geotextile is required under the liner where needed to reduce localized stress-strain or protuberances that may otherwise compromise the liner's integrity. The operator shall construct a multi-well fluid management pit so that the slopes are no steeper than two horizontal feet to one vertical foot (2H:1V). The levee shall have an outside grade no steeper than three horizontal feet to one vertical foot (3H:1V). The levee's top shall be wide enough to install an anchor trench and provide adequate room for inspection and maintenance. The appropriate division district office may approve an alternative to the slope requirement if the operator demonstrates that it can construct and operate the pit in a manner that provides equivalent or better protection to fresh water, public health and the environment.

(3) Each multi-well fluid management pit shall contain, at a minimum, a primary (upper) liner and a secondary (lower) liner with a leak detection system appropriate to the site's conditions. The edges of all liners shall be anchored in the bottom of a compacted earth-filled trench. The anchor trench shall be at least 18 inches deep.

(4) The primary (upper) liner and secondary (lower) liner shall be geomembrane liners. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the division's district office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to ultraviolet light, petroleum hydrocarbons, salts and acidic and alkaline solutions. Liner compatibility shall comply with EPA SW-846 Method 9090A or subsequent relevant publication.

(5) The appropriate division's district office may approve other liner media if the operator demonstrates to the satisfaction of the appropriate division's district office that the alternative liner protects fresh water, public health, and the environment as effectively as the specified media.

(6) The operator shall minimize liner seams and orient them up and down, not across, a slope. The operator shall use factory welded seams where possible. The operator shall ensure field seams in geosynthetic material are thermally seamed. Prior to field seaming, the operator shall overlap liners four to six inches. The operator shall minimize the number of field seams in corners and irregularly shaped areas. There shall be no horizontal seams within five feet of the slope's toe. Qualified personnel shall perform field welding and testing.

(7) At a point of discharge into or suction from the lined multi-well fluid management pit, the operator shall ensure that the liner is protected from excessive hydrostatic force or mechanical damage. External discharge or suction lines shall not penetrate the liner.

(8) The operator shall place a leak detection system between the upper and lower geomembrane liners that consists of two feet of compacted soil with a saturated hydraulic conductivity of 1 x 10-5 cm/sec or greater to facilitate drainage. The leak detection system shall consist of a properly designed drainage and collection and removal system placed above the lower geomembrane liner in depressions and sloped to facilitate the earliest possible leak detection. The operator may install alternative methods that the appropriate division's district office approves.

(9) The operator shall maintain a multi-well fluid management pit to prevent run-on of surface water. A multi-well fluid management pit shall be surrounded by a berm, ditch or other diversion to prevent run-on of surface water.

K. Burial trenches for closure. The operator shall design and construct a burial trench in accordance with the following requirements.

(1) A trench shall have a properly constructed foundation and side walls consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear.

(2) Geotextile is required under the liner where needed to reduce localized stress-strain or protuberances that may otherwise compromise the liner's integrity.

(3) A trench shall be constructed with a geomembrane liner. The geomembrane shall consist of a 20-mil string reinforced LLDPE liner or equivalent liner 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. Liner compatibility shall comply with EPA SW-846 Method 9090A.

(4) The operator shall minimize liner seams and orient them up and down, not across, a slope. The operator shall use factory welded seams where possible. Prior to field seaming, the operator

shall overlap liners four to six inches and orient liner seams parallel to the line of maximum slope, i.e., oriented along, not across, the slope. The operator shall minimize the number of field seams in corners and irregularly shaped areas. Qualified personnel shall perform field welding and testing.

(5) The operator shall install sufficient liner material to reduce stress-strain on the liner.

(6) The operator shall ensure that the outer edges of all liners are secured for the deposit of the excavated waste material into the trench.

[19.15.17.11 NMAC - Rp, 19.15.17.11 NMAC, 6/28/13]

19.15.17.12 OPERATIONAL REQUIREMENTS:

A. General specifications. An operator shall maintain and operate a pit or closed-loop system, below-grade tank or sump in accordance with the following requirements.

(1) The operator shall operate and maintain a pit or closed-loop system, below-grade tank or sump to contain liquids and solids and maintain the integrity of the liner, liner system or secondary containment system, prevent contamination of fresh water and protect public health and the environment.

(2) The operator shall recycle, reuse, reclaim or dispose of all drilling fluids in a manner consistent with division rules.

(3) The operator shall not discharge into or store any hazardous waste in a pit, closed-loop system, below-grade tank or sump.

(4) If a pit liner's integrity is compromised above the liquid's surface then the operator shall repair the damage or initiate replacement of the liner within 48 hours of discovery or seek a variance from the appropriate division district office.

(5) If a pit or below-grade tank develops a leak, or if any penetration of the pit liner occurs below the liquid's surface, then the operator shall remove all liquid above the damage or leak within 48 hours of discovery, notify the appropriate division office pursuant to 19.15.29 NMAC and repair the damage or replace the pit liner or below-grade tank as applicable.

(6) The injection or withdrawal of liquids from a pit shall be accomplished through a header, diverter or other hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.

(7) The operator shall operate and install a pit, below-grade tank or sump to prevent the collection of surface water run-on.

(8) The operator shall install, or maintain on site, an oil absorbent boom or other device to contain an unanticipated release.

B. Temporary pits. An operator shall maintain and operate a temporary pit in accordance with the following additional requirements.

(1) Only fluids or mineral solids generated or used during the drilling, completion or workover process may be discharged into a temporary pit. The operator shall maintain a temporary pit free of miscellaneous solid waste or debris. Immediately after cessation of a drilling or workover operation, the operator shall remove any visible layer of oil from the surface of a drilling or workover pit.

(2) The operator shall maintain at least two feet of freeboard for a temporary pit. For temporary extenuating circumstances an operator may maintain a freeboard of less than two feet. In such circumstances the operator shall maintain a log describing such circumstances and make the log available to the division upon request.

(3) The operator shall inspect a temporary pit containing drilling fluids at least daily while the drilling or workover rig is on location. Thereafter, the operator shall inspect the temporary pit weekly so long as liquids remain in the temporary pit. The operator shall maintain a log of such inspections and make the log available for the appropriate division district office's review upon request.

(4) The operator shall remove all free liquids from the surface of a temporary pit within 60 days from the date that the operator releases the last drilling or workover rig associated with the relevant pit permit. The operator shall note the date of the drilling or workover rig's release on form C-105 or C-103 upon well or workover completion. The appropriate division district office may grant an extension of up to two months, not to exceed temporary pit life span under Subsection R of 19.15.17.7 NMAC.

(5) The operator shall remove any liquids from the temporary pit used for cavitation within 48 hours after completing cavitation. The operator may request and receive additional time to remove the liquids from the temporary pit used for cavitation if the operator demonstrates to the appropriate division district office's satisfaction that it is not feasible to access the location within 48 hours.

C. Permanent pits. An operator shall maintain and operate a permanent pit in accordance with the following additional requirements.

(1) The operator shall maintain at least three feet of freeboard for a permanent pit; the operator shall permanently mark such level on the permanent pit.

(2) No oil or floating hydrocarbon shall be present in a permanent pit.

(3) The operator shall inspect the pit weekly while the pit has fluids and document at least monthly until the pit is closed. Inspections will include monitoring of the leak detection system. The operator shall maintain a log of such inspections and make the log available for the appropriate division district office's review upon request.

D. Below-grade tanks. An operator shall maintain and operate a below-grade tank in accordance with the following additional requirements.

(1) The operator shall not allow a below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.

(2) The operator shall remove any measurable layer of oil from the fluid surface of a below-grade tank.

(3) The operator shall inspect the below-grade tank for leakage and damage at least monthly. The operator shall document the integrity of each tank at least annually and maintain a written record of the integrity for five years.

(4) The operator shall maintain adequate freeboard to prevent overtopping of the below-grade tank.

(5) The operator of a below-grade tank who discovers that the below-grade tank does not demonstrate integrity or that the below-grade tank develops any of the conditions identified in Paragraph (5) of Subsection A of 19.15.17.12 NMAC shall repair the damage or close the existing below-grade tank pursuant to the closure requirements of 19.15.17.13 NMAC.

(6) The operator of a below-grade tank who equips or retrofits the existing tank to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC shall visually inspect the area beneath the below-grade tank during the retrofit and document any areas that are wet, discolored or showing other evidence of a release on form C-141. The operator shall measure and report to the division the concentration of contaminants in the wet or discolored soil with respect to the standards set forth in Table I of 19.15.17.13 NMAC. If there is no wet or discolored soil or if the concentration of contaminants in the wet or discolored soil is less than the standard set forth in Table I of 19.15.17.13 NMAC, then the operator shall proceed with the closure requirements of 19.15.17.13 NMAC prior to initiating the retrofit or replacement.

E. Sumps. The operator shall maintain and operate a sump in accordance with the following additional requirements.

(1) The operator shall visually inspect a sump's integrity annually and promptly repair or replace a sump that fails the inspection.

(2) The operator shall maintain records of sump inspections and make the records available for the appropriate division district office's review upon request.

F. Multi-well fluid management pits. An operator shall maintain and operate a multi-well fluid management pit in accordance with the following additional requirements.

(1) No operator shall place any substances in the pit other than stimulation fluids, produced water used for stimulation and drilling, and flow back from multiple wells.

(2) The operator shall remove any visible layer of oil from the surface of the pit.

(3) The operator shall maintain at least three feet of freeboard for the pit.

(4) The operator shall inspect the pit weekly while the pit has fluids and document at least monthly until the pit is closed. Inspections will include monitoring of the leak detection system. The operator shall maintain a log of such inspections and make the log available for the appropriate division district office's review upon request.

(5) The operator shall remove all fluids within 60 days from the date the operator ceases all stimulation operations associated with the pit permit. The appropriate division district office may grant an extension of up to two months.

[19.15.17.12 NMAC - Rp, 19.15.17.12 NMAC, 6/28/13]

19.15.17.13 CLOSURE AND SITE RECLAMATION REQUIREMENTS:

A. Closure plans. A closure plan that an operator submits in an application or registration pursuant to Subsection B of 19.15.17.9 NMAC, or any other closure plan required pursuant to 19.15.17 NMAC, shall describe the proposed closure method and the proposed procedures and protocols to implement and complete the closure.

B. Closure plans for a multi-well fluid management pit shall be filed with the appropriate division district office and shall describe the proposed procedures and protocols for the removal of all unused stimulation liquids and the disposition of liner materials and other pit contents.

C. Closure where wastes are destined for disposal at division approved off-site facilities. This subsection applies to permanent pits, temporary pits, multi-well fluid management pits, drying pads and tanks associated with closed-loop systems and below-grade tanks.

(1) Notwithstanding the following, the operator of any pit or below-grade tank shall not commence closure without first obtaining approval of the closure plan submitted with the permit application or registration pursuant to 19.15.17.9 NMAC.

(2) The operator shall close the pit, drying pad or below-grade tank by first removing all contents and, if applicable, synthetic liners and transferring those materials to a division approved facility.

(3) The operator shall test the soils beneath the pit, drying pad for closed-loop system or below-grade tank as follows.

(a) At a minimum, a five point composite sample to include any obvious stained or wet soils, or other evidence of contamination shall be taken under the liner or the below-grade tank and that sample shall be analyzed for the constituents listed in Table I of 19.15.17.13 NMAC.

(b) If any contaminant concentration is higher than the parameters listed in Table I of 19.15.17.13 NMAC, the division may require additional delineation upon review of the results and the operator must receive approval before proceeding with closure.

(c) If all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, then the operator can proceed to backfill the pit, pad, or excavation with non-waste containing, uncontaminated, earthen material.

D. Closure where wastes are destined for burial in place or into nearby division approved pits or trenches. This subsection applies to waste from temporary pits and closed-loop systems, when such waste may be disposed of in place in the existing temporary pit or disposed of at a nearby temporary pit or burial trench that is not a permitted commercial facility regulated under 19.15.36 NMAC. A nearby temporary pit or burial trench that receives waste from another temporary pit must be onsite within the same lease.

(1) The operator shall not commence closure without first obtaining approval of the closure plan submitted with the permit application.

(2) The operator shall demonstrate and comply with the siting criteria set forth in Subsection C of 19.15.17.10 NMAC.

(3) Prior to closure the operator shall remove all free liquids reasonably achievable from the pit or drying pad and tank associated with a closed-loop system and dispose of such liquids at a division approved facility.

(4) When closing a temporary pit the operator shall stabilize or solidify the remaining temporary pit contents to a capacity sufficient to support the final cover of the temporary pit. When transferring the waste contents from a drying pad and tank associated with a closed-loop system into a temporary pit or burial trench, the operator shall stabilize or solidify the waste contents to a capacity sufficient to support the final cover of the temporary pit or burial trench. The operator shall not mix the contents with soil or other material at a mixing ratio of greater than 3:1, soil or other material to contents. The waste mixture must pass the paint filter liquids test (EPA SW-846, Method 9095 or other test methods approved by the division).

(5) The operator shall collect, at a minimum, a five point composite of the contents of the temporary pit or drying pad/tank associated with a closed-loop system to demonstrate that, after the waste is solidified or stabilized with soil or other non-waste material at a ratio of no more than 3:1 soil or other non-waste material to waste, the concentration of any contaminant in the stabilized waste is not higher than the parameters listed in Table II of 19.15.17.13 NMAC.

(6) If, after appropriate stabilization, the concentrations of all contaminants in the contents from a temporary pit or drying pad and tank associated with a closed-loop system are less than or equal to

the parameters of listed in Table II of 19.15.17.13 NMAC, the operator may either proceed to dispose of wastes in an existing temporary pit or construct a burial trench for disposal of these wastes.

(7) If the concentration of any contaminant in the contents, after mixing with soil or non-waste material to a maximum ratio of 3:1, from a temporary pit or drying pad/tank associated with a closed-loop system is higher than constituent concentrations shown in Table II of 19.15.17.13 NMAC, then closure must proceed in accordance with Subsection C of 19.15.17.13 NMAC.

(8) Upon achieving all applicable waste stabilization in the temporary pit or transfer of stabilized wastes to the temporary pit or burial trench, the operator shall:

(a) fold the outer edges of the trench liner to overlap the waste material in the trench prior to the installation of the geomembrane cover;

(b) install a geomembrane cover over the waste material in the lined trench or temporary pit; the operator shall install the geomembrane cover in a manner that prevents the collection of infiltration water in the lined trench or temporary pit and on the geomembrane cover after the soil cover is in place; the geomembrane cover shall consist of a 20-mil string reinforced LLDPE liner or equivalent cover that the appropriate division district office approves; the geomembrane cover shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions; cover compatibility shall comply with EPA SW-846 Method 9090A;

(c) cover the pit/trench with non-waste containing, uncontaminated, earthen materials and construct a soil cover prescribed by the division in Paragraph (3) of Subsection H of 19.15.17.13 NMAC.

(9) If the operator has removed the wastes and the liner to a burial trench pursuant to this subsection, the operator shall test the soils beneath the temporary pit as follows.

(a) At a minimum, a five point composite sample to include any obvious stained or wet soils, or other evidence of contamination shall be taken under the liner or the below-grade tank and that sample shall be analyzed for the constituents listed in Table I of 19.15.17.13 NMAC.

(b) If any contaminant concentration is higher than the parameters listed in Table I of 19.15.17.13 NMAC, the division may require additional delineation upon review of the results and the operator must receive approval before proceeding with closure.

(c) If all contaminant concentration are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, then the operator can proceed to backfill the pit, pad, or excavation with non-waste containing, uncontaminated, earthen material.

E. Closure notice.

(1) The operator shall notify the surface owner by certified mail, return receipt requested that the operator plans closure operations at least 72 hours, but not more than one week, prior to any closure operation. Notice shall include well name, API number and location. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement.

(2) The operator of a temporary pit, multi-well fluid management pit, below-grade tank or an operator who is approved for onsite closure shall notify the appropriate division district office verbally and in writing at least 72 hours, but not more than one week, prior to any closure operation. The notice shall include the operator's name and the location to be closed by unit letter, section, township and range. If the closure is associated with a particular well, then the notice shall also include the well's name, number and API number.

(3) An operator of a permanent pit shall notify the Santa Fe office at least 60 days prior to cessation of operations and provide a proposed schedule for closure. If there is no closure plan on file with the Santa Fe office applicable to the permanent pit, the operator shall provide a closure plan with this notice. Upon receipt of the notice and proposed schedule, the Santa Fe office shall review the current closure plan for adequacy and inspect the site.

(4) When onsite burial occurs on private land, the operator shall file a deed notice identifying the exact location of the onsite burial with the county clerk in the county where the onsite burial occurs.

F. Closure report and burial identification.

(1) Within 60 days of closure completion, the operator shall submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; and details on back-filling, capping and covering, where applicable. In the closure report, the operator shall certify that all information in the report and attachments

is correct and that the operator has complied with all applicable closure requirements and conditions specified in the approved closure plan. If the operator used a temporary pit, the operator shall provide a plat of the pit location on form C-l 05 within 60 days of closing the temporary pit.

(2) If the operator elects to conduct onsite burial under Subsection D of 19.15.17.13 NMAC, the operator shall report the exact location of the onsite burial on form C-105 filed with the division.

(3) The operator shall place a steel marker at the center of an onsite burial. The steel marker shall be not less than four inches in diameter and shall be cemented in a three-foot deep hole at a minimum. The steel marker shall extend at least four feet above mean ground level and at least three feet below ground level. The operator name, lease name and well number and location, including unit letter, section, township and range, and that the marker designates an onsite burial location shall be welded, stamped or otherwise permanently engraved into the metal of the steel marker. A person shall not build permanent structures over an onsite burial without the appropriate division district office's written approval. A person shall not remove an onsite burial marker without the division's written permission.

G. Timing requirements for closure. An operator shall close a pit, drying pad associated with a closed-loop system or below-grade tank within the following time periods.

(1) An operator shall close a permitted permanent pit within 60 days of cessation of operation of the pit in accordance with a closure plan approved by the appropriate office.

(2) An operator shall close a permitted temporary pit within six months from the date that the operator releases the drilling or workover rig. The operator shall note the date of the drilling or workover rig’s release on form C-105 or C-103, filed with the division, upon the well’s or work-over’s completion. The appropriate division district office may grant an extension not to exceed three months.

(3) An operator shall close a drying pad used for a closed-loop system within six months from the date that the operator releases the drilling or workover rig. The operator shall note the date of the drilling or workover rig’s release on form C-105 or C-103, filed with the division, upon the well’s or work-over’s completion. The appropriate division district office may grant an extension not to exceed six months.

(4) Closure methods for below-grade tanks.

(a) Within 60 days of cessation of operations, the operator shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility.

(b) Within six months of cessation of operations, the operator shall remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. If there is any equipment associated with a below-grade tank, then the operator shall remove the equipment, unless the equipment is required for some other purpose.

(5) An operator shall close a multi-well fluid management pit within six months from the date that the operator ceases all stimulation operations on all wells identified in the permit. The operator shall note the date of the cessation of drilling and stimulation operations on form C-105 or C-103 filed with the division. The appropriate division district office may grant an extension for closure not to exceed six months.

H. Reclamation of pit locations, onsite burial locations and drying pad locations.

(1) Site contouring.

(a) Once the operator has closed a pit or trench or is no longer using a drying pad, below-grade tank or an area associated with a closed-loop system, pit, trench or below-grade tank, the operator shall reclaim the pit location, drying pad location, below-grade tank location or trench location and all areas associated with the 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. The operator shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Paragraph (2) of Subsection H of 19.15.17.13 NMAC, recontour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Paragraph (5) in Subsection H of 19.15.17.13 NMAC.

(b) The operator may propose an alternative to the re-vegetation or recontouring requirement if the operator demonstrates to the appropriate district office that the proposed alternative provides equal or better prevention of erosion, and protection of fresh water, public health and the environment. The proposed alternative shall be agreed upon by the surface owner. The operator shall

submit the proposed alternative, with written documentation that the surface owner agrees to the alternative, to the division for approval.

(c) Areas reasonably needed for production operations or for subsequent drilling operations shall be compacted, covered, paved, or otherwise stabilized and maintained in such a way as to minimize dust and erosion to the extent practicable.

(2) Soil cover designs for drying pads associated with closed-loop systems and below-grade tanks. The soil cover for closures after site contouring, where the operator has removed the below-grade tank or drying pad contents and liner, and if necessary remediated the soil beneath the below-grade tank or drying pad liner to chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, shall consist of the background thickness of topsoil or one foot of suitable material, whichever is greater.

(3) Soil cover designs for reclamation of pit locations and onsite burial locations. The soil cover for burial in-place or trench burial shall consist of a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0. The soil cover shall include either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

(4) The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

(5) Reclamation and re-vegetation.

(a) Reclamation of areas no longer in use. All areas disturbed by the closure of pits and below-grade tanks, except areas reasonably needed for production operations or for subsequent drilling operations, shall be reclaimed as early and as nearly as practicable to their original condition or their final land use and shall be maintained to control dust and minimize erosion to the extent practicable.

(b) Topsoils and subsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns. The disturbed area then shall be reseeded in the first favorable growing season following closure of a pit, drying pad associated with a closed-loop system or below-grade tank.

(c) Reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

(d) Other regulatory requirements. The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies on lands managed by those agencies shall supersede these provisions and govern the obligations of any operator subject to those provisions, provided that the other requirements provide equal or better protection of fresh water, human health and the environment.

(e) The operator shall notify the division when reclamation and re-vegetation are complete.

Table I **Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated with Closed-Loop Systems and Pits where Contents are Removed**			
Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤50 feet	Chloride	EPA 300.0	600 mg/kg
	TPH	EPA SW-846 Method 418.1	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
51 feet-100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
> 100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

*Or other test methods approved by the division
**Numerical limits or natural background level, whichever is greater

Table II **Closure Criteria for Burial Trenches and Waste Left in Place in Temporary Pits**			
Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method*	Limit**
25-50 feet	Chloride	EPA Method 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 418.1	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
	Chloride	EPA Method 300.0	40,000 mg/kg

51-100 feet	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
> 100 feet	Chloride	EPA Method 300.0	80,000 mg/kg
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

*Or other test methods approved by the division
**Numerical limits or natural background level, whichever is greater
[19.15.17.13 NMAC - Rp, 19.15.17.13 NMAC, 6/28/13]

19.15.17.14 EMERGENCY ACTIONS:

A. Permit not required. In an emergency an operator may construct a pit without a permit to contain fluids, solids or wastes, if an immediate danger to fresh water, public health or the environment exists.

B. Construction standards. The operator shall construct an emergency pit, to the extent possible given the emergency, in a manner that is consistent with the requirements for a temporary pit specified in 19.15.17 NMAC and that prevents the contamination of fresh water and protects public health and the environment.

C. Notice. The operator shall notify the appropriate division district office as soon as possible (if possible before construction begins) of the need for such pit's construction.

D. Use and duration. A pit constructed in an emergency may be used only for the emergency's duration. If the emergency lasts more than 48 hours, then the operator shall seek the appropriate division district office's approval for the pit's continued use. The operator shall remove all fluids, solids or wastes within 48 hours after cessation of use unless the appropriate division district office extends that time period.
[19.15.17.14 NMAC - Rp, 19.15.17.14 NMAC, 6/28/13]

19.15.17.15 EXCEPTIONS AND VARIANCES:

A. Variances.

(1) An operator shall demonstrate with a complete application to the appropriate division district office that the requested variance provides equal or better protection of fresh water, public health and the environment. The appropriate division district office shall approve or deny the variance within 60 days of receipt of the complete application.

(2) If the appropriate division district office denies the variance then it shall notify the operator within 60 days of receipt of the complete application for the reasons of denial by certified mail, return receipt requested. If the operator requests a hearing within 10 days after receipt of such notice, the division shall set the matter for hearing, with notice to the operator and the appropriate division district office.

(3) An application for a variance shall include:

(a) a statement in detail explaining why the applicant wants to vary from the requirement of 19.15.17 NMAC, and

(b) a detailed written demonstration that the variance will provide equal or better protection of fresh water, public health and the environment.

(4) If a variance goes to hearing pursuant to Paragraph (2) of Subsection A of 19.15.17.15 NMAC, in addition to the hearing process required by 19.15.4 NMAC, the application for hearing shall include:

(a) a copy of the complete application submitted for a variance under Paragraph (3) of Subsection A of 19.15.17.15 NMAC;

(b) proof of notification to the surface owner of the location of the requested variance.

(5) The division clerk will set the application for hearing as soon as practicable.

B. Exceptions.

(1) An operator may apply to the division's Santa Fe office for an exception that is allowed by a provision of 19.15.17 NMAC.

(2) The operator shall give written notice by certified mail, return receipt requested, to:

(a) the surface owner of record where the exception is requested, or will be located;

(b) surface owners of record within one-half mile of such location;

(c) the county commission of the county where the pit, or proposed alternative is, or will be, located;

(d) the appropriate city official if the pit, or proposed alternative is, or will be, located within city limits, within one-half mile of the city limits or within the city's zoning and planning jurisdiction;

(e) federal agencies managing lands within one-half mile of such location;

(f) affected tribal or pueblo governments; and

(g) such other persons as the division's Santa Fe office may direct.

(3) Receipt of notice that is given pursuant to this sub-part shall not be construed as an indication of standing to request a hearing pursuant to Paragraph (6) of Subsection B of 19.15.17.15 NMAC.

(4) The operator shall issue public notice by publication one time in a newspaper of general circulation in the county where the pit, or proposed alternative, is, or will be located. Required written and public notices require the division's Santa Fe office's approval. The division shall post notice of the application on the division's website.

(5) An operator shall demonstrate with a complete application to the Santa Fe office that the requested exception provides equal or better protection of fresh water, public health and the environment. The Santa Fe office shall approve or deny the exception within 90 days of receipt of the complete application.

(6) Within 30 days after the operator or the division sends notice of the requested exception anyone may submit comments to the director and any person with standing to contest the requested exception may request a hearing. If the director determines that a request for hearing presents issues that have technical merit or there is significant interest from the affected public, then the director may cause the matter to be set for hearing. If the director determines that a hearing is not necessary due to technical merit, significant public interest or otherwise then the Santa Fe office may grant the exception without a hearing. The Santa Fe office may grant the exception administratively if the Santa Fe office receives no comments or requests for hearing within the time for commenting.

(7) If the Santa Fe office denies the exception then it shall notify the operator within 90 days of receipt of the complete application for the reasons of denial by certified mail, return receipt requested. If the operator requests a hearing within 21 days after receipt of such notice, the division shall set the matter for hearing, with notice to the operator and the appropriate division district office.

(8) An application for an exception shall include:

(a) a statement in detail explaining why the applicant wants an exception to the requirement of 19.15.17 NMAC, and

(b) a detailed written demonstration that the exception will provide equal or better protection of fresh water, public health and the environment.

(9) If an exception goes to hearing pursuant to Subsection B of 19.15.17.15 NMAC, in addition to the requirements of 19.15.4 NMAC, the hearing application shall include:

(a) a copy of the complete application submitted for the exception; and

(b) a proof of notification of the hearing application to parties identified in Paragraph (2) of Subsection B of 19.15.17.15 NMAC.

(10) The division clerk will set the application for hearing as soon as practicable.

[19.15.17.15 NMAC - Rp, 19.15.17.15 NMAC, 6/28/13]

19.15.17.16 PERMIT APPROVALS, CONDITIONS, DENIALS, REVOCATIONS, SUSPENSIONS, MODIFICATIONS OR TRANSFERS:

A. The division shall review all applications to permit facilities subject to 19.15.17 NMAC. Within 30 days of receiving an application the division shall make an administrative completeness determination or provide written notice of deficiencies to the application's signatory. The application will be considered complete if written notice is not provided by the division within the 30 day evaluation period.

B. Whether or not the division deems an application to be administratively complete within the 30 day evaluation period, the division shall also have an additional 30 days to approve, deny or approve with conditions an application. If the division does not take action within the 60 days review period, then the application is deemed denied and the operator may file an application for hearing with the division clerk.

C. Conditions. The division may impose conditions or requirements that it determines are necessary and proper for the protection of fresh water, public health, and the environment provided the conditions or requirements are based on the provisions of the Oil and Gas Act 70-2 NMSA or current division regulations. The division shall incorporate such additional conditions or requirements into the permit.

D. Denial of application. The division shall deny, in writing, an application for a permit if it finds that the application and materials that the operator submitted for consideration with the application do not sufficiently demonstrate that the operator can construct, operate and close the proposed pit, or proposed alternative in a manner that is protective of fresh water, public health, and the environment.

E. Revocation, suspension or modification of a permit. The operator may apply to the division for a modification of the permit pursuant to 19.15.17 NMAC. The operator shall demonstrate that the proposed modification complies with the applicable provisions of 19.15.17 NMAC. The division may revoke, suspend or impose additional operating conditions or limitations on a permit at any time, after notice and opportunity for a hearing, if the division determines that the operator or the permitted facility is in material breach of any applicable statutes or rules, or that such action is necessary for the protection of fresh water, public health or the environment. The division shall notify the operator by certified mail, return receipt requested, of any intended revocation, suspension or imposition of additional conditions, and the operator shall have 10 days after receipt of notification to request a hearing pursuant to 19.15.4 NMAC. The division may suspend a permit or impose additional conditions or limitations without hearing in an emergency to forestall an imminent threat to fresh water, public health, or the environment, subject to the provisions of NMSA 1978, Section 70-2-23, as amended.

F. Transfer of a permit. The operator shall not transfer a permit without the division's prior written approval. The division's approval of an application to transfer a well or other facility with which a permitted pit is associated shall constitute approval of the transfer of the permit for the pit.

G. Division approvals. The division shall grant or confirm any division approval authorized by a provision of 19.15.17 NMAC by written statement. Written statements include e-mail.
[19.15.17.16 NMAC - Rp, 19.15.17.16 NMAC, 6/28/13]

HISTORY OF 19.15.17 NMAC:

History of Repealed Material:
19.15.17 NMAC, Pits, Closed-Loop Systems, Below-Grade Tanks and Sumps, filed 5/30/2008 - Repealed effective 6/28/2013.