

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION**

APPLICATION OF THE NEW MEXICO OIL AND GAS ASSOCIATION FOR AMENDMENT OF CERTAIN PROVISIONS OF TITLE 19, CHAPTER 15 OF THE NEW MEXICO ADMINISTRATIVE CODE CONCERNING PITS, CLOSED-LOOP SYSTEMS, BELOW GRADE TANKS AND SUMPS AND OTHER ALTERNATIVE METHODS RELATED TO THE FOREGOING MATTERS, STATEWIDE.

CASE NO. 14784

**NOTICE OF NMOGA'S MODIFICATIONS TO
TITLE 19, CHAPTER 15, PART 17**

The New Mexico Oil and Gas Association (NMOGA), the applicant in the above referenced matter, hereby files the attached proposed modifications to Title 19, Chapter 15, Part 17 for consideration by the New Mexico Oil Conservation Commission (Commission). These proposed modifications replace the proposed amendments filed with NMOGA's Application For Rulemaking in this matter and are provided in both a redline/strikeout format (Attachment A) and a clean version (Attachment B) for ease of review. NMOGA submits these proposed modifications to Title 19, Chapter 15, Part 17 for the following reasons:

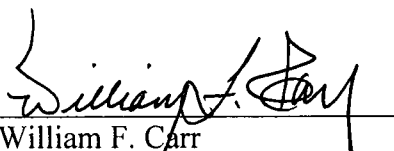
- A. To address general grammatical errors and formatting issues in the version of the rule changes presented with NMOGA's Application;
- B. To adopt many of the modifications filed by the New Mexico Oil Conservation Division on January 6, 2012, including the Division's proposed modifications to 19.15.17.15 NMAC providing for the granting of exceptions and variances; and

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C. To take into account the comments on the proposed rule changes filed to date with the Commission.

NMOGA believes that these proposed modifications to Title 19, Chapter 15, Part 17, as well as the proposed changes to the definition of "below grade tank," eliminate ambiguities; remove unnecessary impediments to the development of New Mexico's oil and gas resources, thereby preventing waste and protecting correlative rights; and meet the statutory obligation of the Commission to assure a reasonable level of protection to the fresh water supplies designated by the state engineer, the public health, and the environment.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on this 16th day of April 2012, I served a copy of the foregoing **Notice of NMOGA'S Modifications to Title 19, Chapter 15, and Part 17** upon the following counsel of record via Hand Delivery; Electronic Mail, and U.S. Mail, postage pre-paid to:

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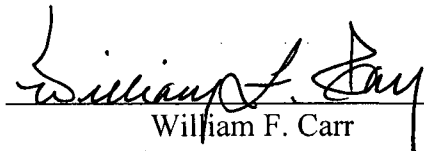
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**TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS**

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.

19.15.17.2 SCOPE: 19.15.17 NMAC applies to persons engaged in oil and gas development and production within New Mexico.

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.

19.15.17.4 DURATION: Permanent.

19.15.17.5 EFFECTIVE DATE: June 16, 2008, Thirty days after publication of the final rule in the New Mexico Register unless a later date is cited at the end of a section.

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 public health, welfare and the environment.

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 500 gallon 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.

BC. "Closed-loop system" means a system that uses above ground steel tanks for the management of drilling or workover fluids ~~without using below-grade tanks or pits.~~

D. "Confined ground water" means water contained within soil or rock below the land surface that is saturated with water where there are layers of impermeable material both above and below and the water is under pressure so that when penetrated by a well, the ground water will rise.

E. "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 and 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.

GF. "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.

DG. "Emergency pit" means a pit that is constructed as a precautionary matter to contain a spill in the event of a release.

H. "Floodplain" means US Army Corps of Engineers or FEMA documented 100-year floodplain.

I. "Low Chloride fluids" means fluids that contain less than 15,000 mg/liter of chlorides determined by analysis or process knowledge.

J. "Measureable" means a layer of oil greater than a sheen that is measurable by color cutting or other acceptable method.

K. "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 are not governed under the Surface Waste Management Rule 19.15.36 NMAC and may not be used for the disposal of drilling or completion 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 identified in the pit permit are completed. Any fresh water containment structure, such as a pond, pit, or other impoundment, is not included in this definition.

L. "Life-form ratio" is the relative percentage of plants in each of the following classifications: shrubs, forbs and grasses.

EM. "Permanent pit" means a pit, including 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 or a pit governed under the Surface Waste Management Rule 19.15.36 NMAC.

N. "Playa lake" means a dry, barren area in the lowest part of an undrained natural desert basin underlain by clay, silt, or sand and commonly soluble salts.

~~F. "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.~~

~~GO. "Significant watercourse" means a watercourse with a defined bed and bank either named on a USGS 7.5 minute quadrangle map or a first order~~ the next lower order tributary with a defined bed and bank of such watercourse.

~~HP. "Sump" means a~~ subgrade impermeable vessel that is partially buried into ground, is in contact with the ground surface, or is a collection device incorporated within a secondary containment system, with a capacity less than or equal to 500 gallons, 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.

~~IQ. "Temporary pit" means a pit, including a drilling or workover pit, which is constructed with the intent that the pit will hold liquids for less than six months and will be closed in less than one year.~~ Temporary pits may be used for one or more wells and located either onsite or offsite of a well drilling location. Any fresh water containment structure, such as a pond, pit, or other impoundment, is not a temporary pit.

~~R. "Unconfined ground water" means ground water whose upper water surface (water table) is at atmospheric pressure and is able to rise and fall.~~

~~S. "Visible" when used with respect to oil on the surface of a pit means any sheen that occupies thirty percent or more of the total pit liquid surface area.~~

19.15.17.8 PERMIT OR REGISTRATION REQUIRED:

A. A person shall not construct or use a pit ~~or below-grade tank~~ except in accordance with a division-issued permit. Only an operator may apply for a division-issued permit. Facilities permitted pursuant to 19.15.36 NMAC or WQCC rules are exempt from 19.15.17 NMAC. After June 16, 2008, an unlined permanent pit is prohibited and the division shall not issue a permit for an unlined permanent pit.

~~B. In lieu of using a pit or below-grade tank in accordance with 19.15.17 NMAC, an operator may use a closed-loop system or other division-approved alternative method.~~ However, an operator may not conduct operations using a closed-loop system or proposed alternative method except in accordance with ~~a~~ **division-issued** permit. An operator requesting a permit for a closed-loop system that uses a temporary pit shall comply with the requirements for temporary pits specified in 19.15.17 NMAC.

B. C. The division may issue a single permit for all pits, ~~below-grade tanks,~~ ~~closed-loop systems~~ or division-approved alternative methods associated with a single application for permit to drill.

C. All below-grade tanks must be registered with the appropriate division district office. The operator may file a single registration for all below-grade tanks.

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

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, ~~closed-loop system, or to register a~~ below-grade tank ~~or proposed alternative method~~ to which 19.15.17 NMAC applies. 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, ~~closed-loop system~~, below-grade tank or proposed alternative method will be associated. For upstream facilities, the operator may submit form C-144 separately or as an attachment to an application for a well permit (form C-101 or C-103). An operator shall use a C-101, C-103 or applicable BLM form to notify the appropriate division district office of construction or use of a closed-loop system. A closed-loop system shall use appropriate engineering principles and practices and follow applicable manufacturers' requirements or the equivalent thereto.

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 environmental bureau in 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 a temporary pit shall use appropriate engineering principles and practices and follow applicable liner manufacturers' requirements. The plan 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 ~~the actual and potential effects on soils, surface water and ground water and 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.

~~(3) Closed-loop systems. The plan for a closed-loop system shall use appropriate engineering principles and practices and follow applicable manufacturers' requirements. The plan shall include operating and maintenance procedures and a closure plan. The plan for a closed-loop system may incorporate by reference a standard design for multiple projects that the operator files with the application or has previously filed with the appropriate division district office. If the operator proposes to bury the contents of a drying pad associated with a closed-loop system in an on-site trench, the operator shall provide 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 the actual and potential effects on soils, surface water and ground water and compliance with the siting criteria of 19.15.17.10 NMAC~~

~~(43) Below-grade tanks. The plan for a~~ A registered below-grade tank shall use appropriate engineering principles and practices and follow applicable manufacturers' requirements. The plan registration shall include operating and maintenance procedures, a closure plan and a hydrogeologic report that demonstrates compliance 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 the actual and potential effects on soils, surface water and ground water and 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 ~~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.

(4) Multi-well fluid management pits. The plan for a multi-well fluid management pit shall use appropriate engineering principles and practices and follow applicable liner manufacturers' requirements. The plan 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 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 submitted by the operator and approved by the appropriate division district office.

C. Closure plans. A closure plan that an operator submits in ~~a plan~~ an application or registration required in 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.

(1) Closure plans for a multi-well fluid management pit 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.

(2) Closure plans shall be filed with the appropriate division district office and in accordance with 19.15.17.13 NMAC.

~~(1) If the operator proposes an on-site closure method, the operator shall also propose other methods to be used if the initial method does not satisfy the on-site closure standards specified in Subsection F of 19.15.17.13 NMAC or, if applicable, other on-site closure standards that the environmental bureau in the division's Santa Fe office approves.~~

~~(2) An operator of an existing unlined permanent pit that is permitted by or registered with the division, or an existing, lined or unlined, permanent pit not permitted by or registered with the division, identified under Paragraphs (1) or (2) of Subsection A of 19.15.17.13 NMAC, shall submit the respective closure plan required under the transitional provisions of Subsection B of 19.15.17.17 NMAC to the environmental bureau in the division's Santa Fe office.~~

~~(3) An operator of an existing unlined, temporary pit or an unpermitted and/or unregistered existing below grade tank, identified under Paragraphs (3) or (4) of Subsection A of 19.15.17.13 NMAC, shall submit the respective closure plan required under the transitional provisions of Subsection B of 19.15.17.17 NMAC.~~

D. Filing of permit application.

(1) Permanent pits ~~and exceptions requested pursuant to 10.15.17.15 NMAC.~~ An operator shall file an application, form C-144, and all required attachments with the environmental bureau in the division's Santa Fe office to request approval to use or construct a permanent pit ~~or request an exception pursuant to 10.15.17.15 NMAC~~ and shall provide a copy to the appropriate division district office.

(2) Temporary pits, and multi-well fluid management pits, ~~closed-loop systems and below-grade tanks.~~ To request approval to use or construct a temporary pit, ~~closed-loop system or below-grade tank,~~ or multi-well fluid management pit an operator shall file an application, form C-144, ~~and all 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.

19.15.17.10 SITING REQUIREMENTS:

A. Except as otherwise provided in 19.15.17 NMAC.

(1) An operator shall not locate a temporary pit or a multi-well fluid management pit: ~~or below-grade tank:~~

(a) Where unconfined ground water is less than ~~50~~ 25 feet below the bottom of the ~~temporary pit or below-grade tank,~~ that contains only low chloride fluid; otherwise where unconfined ground water is less than 50 feet below the bottom of the pit, unless the operator is using the pit solely to cavitate a coal bed methane well and the appropriate division district office finds based upon the operator's demonstration that the operator's proposed operation will protect unconfined ground water during the ~~temporary~~ pit's use.

(b) within ~~300~~100 feet of any a continuously flowing watercourse where only low chloride fluids are used, otherwise 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 appropriate division district office approves an alternative distance based upon the operator's demonstration that surface and unconfined ground water will be protected;

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

(d) within ~~500~~ 100 feet of a private, domestic fresh water well or spring used ~~by less than five households~~ for domestic or stock watering purposes where only low chloride fluids are used, otherwise within ~~4000~~ 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~~ well head protection area, as defined by NMAC 19.15.2.7, 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 where only low chloride fluids are used, otherwise within ~~500~~ 300 feet of a wetland;

(g) within the area overlying a subsurface mine, unless the appropriate division district office specifically approves the proposed location based upon the operator's demonstration that the ~~temporary~~ pit's ~~or below-grade tank's~~ construction and use will not compromise the subsurface integrity;

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

(i) within a 100-year floodplain.

(2) An operator shall not locate a permanent pit:

(a) where unconfined 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 environmental bureau in the division's

Santa Fe office approves an alternative distance based upon the operator's demonstration that surface and unconfined 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 private, domestic fresh water well or spring used ~~by less than five households~~ for domestic or stock watering purposes, or within 1000 feet of any other fresh water well or spring, 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 environmental bureau in the division's Santa Fe office specifically approves the proposed location based upon the operator's demonstration that the permanent 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 permanent pit's integrity is not compromised; or

(i) within a 100-year floodplain.

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

(a) within ~~300~~ 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), unless the division approves an alternative distance based upon the operator's demonstration that surface and unconfined ground water will be protected;

(b) within ~~500~~ 100 feet of a wetland; or

(c) within a 100-year floodplain.

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

(a) within 100 feet of a continuously flowing watercourse or any other significant watercourse or lakebed, sinkhole or playa lake (measured from the ordinary high-water mark), unless the appropriate division district office approves an alternative distance based upon the operator's demonstration that surface and unconfined ground water will be protected;

(b) within 100 feet of a private, domestic fresh water well or spring used for public or livestock consumption;

(c) within 100 feet of a wetland; or

(d) where depth to unconfined ground water is less than 10 feet below the bottom of the tank.

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

C. An operator shall not implement an on-site closure method:

(1) where unconfined ground water is less than ~~50~~ 25 feet below the bottom of the buried waste;

~~(2) where ground water is between 50 and 100 feet below the bottom of the buried waste, unless the operator buries the waste in place and the treated or stabilized waste, which shall not be combined with soil or other material at a mixing ratio of more than 3:1 soil or other material to waste, does not exceed the criteria in Subparagraph (c) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC;~~

~~(3) where ground water is more than 100 feet below the bottom of the buried waste, unless the operator buries the waste in place and the treated or stabilized waste, which shall not be combined with soil or other material at a mixing ratio of more than 3:1 soil or other material to waste, does not exceed the criteria in Subparagraph (d) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC;~~

~~(4) where ground water is more than 100 feet below the bottom of the buried waste, unless the operator buries the waste in a trench and the treated or stabilized waste, which shall not be combined with soil or other material at a mixing ratio of more than 3:1 soil or other material to waste, does not exceed the criteria listed in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC;~~

(2) for wastes that exceed the concentration limits set forth in 19.15.17.13 NMAC;

~~(53) within 300 100 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), unless the division approves an alternative distance based upon the operators's demonstration that surface and ground water will be protected;~~

~~(64) within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence at the time of initial application;~~

~~(75) within 500 300 feet of a private, domestic fresh water well or spring used by less than five households for domestic or stock watering purposes or within 1000 feet of any other fresh water well or spring, existing at the time the operator files the application for exception;~~

~~(86) within incorporated municipal boundaries or within a defined municipal fresh water well field well head protection area, as defined in NMAC 19.15.2.7, covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended, unless the municipality specifically approves;~~

~~(97) within 500 300 feet of a wetland;~~

| (408) 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;

| (449) within an unstable, unless the operator demonstrates that it has incorporated engineering measures into the design to ensure that the on-site closure method will prevent contamination of fresh water and protect public health and the environment; or

| (4210) within a 100 year floodplain.

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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 and prevent contamination of fresh water and protect public health and the environment.

B. Stockpiling of topsoil. Prior to constructing a ~~pit or closed-looped system~~, 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, closed-loop system or below-grade tank~~, unless the ~~pit, closed-loop system 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 ~~prevents-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 ~~or below-grade tank~~ 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 on-site. 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. ~~The appropriate division district office may approve an alternative to this requirement if the operator demonstrates that an alternative provides equivalent or better protection.~~ The appropriate division district office may impose additional fencing requirements for protection of wildlife in particular areas.

(4) The appropriate division district office shall approve alternatives to these requirements if the operator demonstrates that the alternatives provide equivalent or better protections to livestock, wildlife or human safety.

E. Netting. The operator shall ensure that a permanent pit, a multi-well fluid management pit, or an permanent 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 unauthorized 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).~~ do not place undue stress upon the liner and are consistent with the angle of repose. 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 and orient 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 seaming. The operator shall weld field 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 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, unconfined 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 environmental bureau in the division's Santa Fe office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1×10^{-9} cm/sec. 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 environmental bureau in the division's Santa Fe office may approve other liner media if the operator demonstrates to the satisfaction of the environmental bureau in the division's Santa Fe office that the alternative liner protects fresh water, public health, safety 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 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. There shall be no horizontal seams within five feet of the slope's toe. Qualified personnel shall perform field seaming.

(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 1×10^{-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 environmental bureau in the division's Santa Fe office approves.

(8) The operator shall notify the environmental bureau in 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 19.15.17 NMAC 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 ~~C~~closed-loop systems.

~~(1) The operator shall design and construct a closed-loop system to ensure the confinement of oil, gas or water to prevent uncontrolled releases.~~

~~(2) An operator of a closed-loop system that uses temporary pits for solids management shall comply with the requirements for temporary pits specified in 19.15.17 NMAC.~~

~~(3)~~ An operator of a closed-loop system with drying pads shall design and construct the drying pads to include the following:

(a1) appropriate liners that prevent the contamination of fresh water and protect public health and the environment;

(b2) sumps to facilitate the collection of liquids derived from drill cuttings; and

(c3) 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 ~~system~~ 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 or alarm 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 1×10^{-9} cm/sec. 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.

(b) All ~~other~~ 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 below-grade tank constructed and installed prior to June 16, 2008 the effective date of this amendment that has the side walls open for visual inspection and does not meet all the requirements in Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC ~~and is not included in Paragraph (6) 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 remove that below-grade tank from service and comply with the closure requirements of 19.15.17.13 NMAC. and install a below-grade tank that complies with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC. The operator shall comply with the operational requirements of 19.15.17.12 NMAC.

~~(6) The operator of a below-grade tank constructed and installed prior to June 16, 2008 that is single walled 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, if the tank does not demonstrate integrity, within five years after June 16, 2008. If the existing below-grade tank does not demonstrate integrity, the operator shall promptly remove that below-grade tank and install a below-grade tank that complies with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC. The operator shall comply with the operational requirements of 19.15.17.12 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 unauthorized releases.

(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. The operator shall construct a pit so that the slope does not place undue stress upon the liner and is consistent with the angle of repose. 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 safe manner to prevent contamination of fresh water and protect public health and the environment.

(3) The operator shall design and construct the pit with a geomembrane liner and leak detection system. 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 and orient 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 seaming. The operator shall weld field 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.

(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 pit.

(9) The operator shall design the leak detection system to adequately detect any leak from the primary liner.

(10) The operator shall design and construct the pit to prevent run-on of surface water. A berm, ditch, proper sloping or other diversion shall surround the pit to prevent run-on of surface water.

~~JK. On-site~~ Burial trenches for closure. The operator shall design and construct a ~~an on-site~~ trench for closure, specified in ~~Paragraph (2) of Subsection B of 19.15.17.13 NMAC and or Paragraph (2) of Subsection FD of 19.15.17.13 NMAC,~~ in accordance with the following requirements:

(1) The operator shall locate the trench to satisfy the siting criteria specified in Subsection C of 19.15.17.10 NMAC and ~~Subparagraph (d) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC~~ and excavate to an appropriate depth that allows for the installation of the ~~geomembrane bottom liner, geomembrane liner cover~~ and the division-prescribed soil cover required pursuant to Subsection H-F(2) of 19.15.17.13 NMAC.

(2) ~~An on-site~~ 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.

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

(4) ~~An on-site~~ 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. ~~The liner material shall be resistant to 19.15.17 NMAC ultraviolet light.~~ Liner compatibility shall comply with EPA SW-846 method 9090A.

(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. 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 seaming. The operator shall weld field liner seams.

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

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

(8) The operator shall fold the outer edges of the trench liner to overlap the waste material in the trench prior to the installation of the geomembrane cover.

~~(9) The operator shall install a geomembrane cover over the waste material in the lined trench. The operator shall install the geomembrane cover in a manner that prevents the collection of infiltration water in the lined trench and on the geomembrane cover after the soil cover is in place.~~

~~(10) 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. [19.15.17.11 NMAC - Rn, 19.15.2.50 NMAC & A, 6/16/08XXX; A, 12/1/08; A, 7/16/09]~~

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 or reclaim or dispose of all drilling fluids in a manner, approved by division rules, that prevents the contamination of fresh water and protects public health and the environment.

(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 any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then the operator shall ~~notify the appropriate division district office within 48 hours of the discovery~~ initiate repair of the damage or replacement of the liner within 48 hours of discovery or seek a variance from the appropriate district office.

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

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

(1) Only fluids or solids used or 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. ~~The operator shall use a tank made of steel or other material, which the appropriate division district office approves, to contain hydrocarbon-based drilling fluids.~~ Immediately after cessation of a drilling or workover operation, the operator shall remove any visible ~~or measurable~~ layer of oil from the surface of a drilling or workover pit.

(2) Under normal operating circumstances ~~the~~ the operator shall maintain at least two feet of freeboard for a temporary pit.

(3) The operator shall inspect a temporary pit containing drilling fluids at least daily while the drilling or workover rig is on-site. Thereafter, the operator shall inspect the temporary pit ~~weekly~~ monthly 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. ~~The operator shall file a copy of the log with the appropriate division district office when the operator closes the temporary pit.~~

(4) ~~The operator shall remove all~~ All free liquids from the surface of a temporary pit ~~shall be removed within 30-60~~ days 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 upon well or workover completion. The appropriate division district office may grant an extension of up to three months.

(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.
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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 ~~visible or measurable~~ layer of oil from the fluid surface of a below-grade tank.

(3) The operator shall inspect the below-grade tank for leakage at least monthly. The operator shall document the integrity of each tank such inspections at least annually and maintain a written record of the integrity tests this documentation 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 ~~constructed and installed prior to June 16, 2008 that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC~~ 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, ~~and install a below-grade tank that complies with the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.~~

(6) The operator of a below-grade tank ~~constructed and installed prior to June 16, 2008 that does not comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC~~ 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 demonstrate to the division whether the evidence of contamination wet or discolored soil exceeds the standards set forth in Table I of 19.15.17.13 NMAC. ~~indicates that an imminent threat to fresh water, public health, safety or the environment exists.~~ If the wet or discolored soil exceeds any of the standards set forth in Table I of 19.15.17.13 NMAC, ~~division determines that the contamination does not pose an imminent threat to fresh water, public health, safety or the environment, the operator shall complete the retrofit or the replacement of the below-grade tank. If the operator or division determines that the contamination poses an imminent threat to fresh water, public health, safety or the environment,~~ then the operator shall proceed with ~~close the existing below-grade tank pursuant to~~ 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. 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 two 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) Stimulation fluids may remain in the pit until the operator ceases all stimulation operations as identified in the pit permit.

19.15.17.13 CLOSURE AND SITE RECLAMATION REQUIREMENTS:

A. 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, drying pads and tanks associated with closed loop systems and below grade tanks 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 excavating and/or removing all contents and, if applicable, synthetic liners and transferring those materials to a division approved facility.

(3) The operator of a multi-well fluid management pit is not required to sample under the liner system if no leaks are detected in the leak-detection system during the use of the pit. In all other circumstances, the operator shall test the soils beneath the pit or below grade tank as follows:

(a) A five point composite sample shall be taken under the liner or the below grade tank and that sample shall be analyzed for the constituents in Table I of 19.15.17.13.NMAC.

(b) If the results exceed any of 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 complete closure.

(c) If the results do not exceed any of the parameters in Table I of 19.15.17.13 NMAC, then the operator can proceed to backfill the pit, pad, or excavation associated with the below grade tank with non-waste containing earthen material. Recontouring and revegetation of closed pits, drying pads and below grade tanks is addressed in Section F of 19.15.17.13 NMAC.

B. Closure where wastes are destined for burial in place or into nearby Division approved pits or trenches. This section applies to temporary pits as well as drying pads and tanks associated with closed loop systems in which the wastes are either intended for in place disposal in the existing temporary pit or -for disposal at a nearby temporary pit or burial trench that is not a permitted commercial facility regulated under 19.15.36 NMAC.

(1) Notwithstanding the following, the operator shall not commence closure of a temporary pit or drying pad and tank associated with a closed loop system without first obtaining approval of the closure plan submitted with the permit application.

(2) The operator shall demonstrate and comply with the siting criteria in Subsection C of 19.15.17.10 NMAC and the closure requirements under Subsection B of 19.15.17.13 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 close loop system and dispose of such liquids at a Division approved facility.

(4) Prior to closure of the existing pit or 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 contents to a bearing capacity sufficient to support the pit or trenches final cover. 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).

(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 stabilized waste does not exceed the criteria in Table II of 19.15.17.13 NMAC or a division approved alternative concentration limit.

(6) If the contents from a temporary pit or drying pad and tank associated with a closed loop system do not exceed any of the constituent concentrations shown in Table II of 19.15.17.13 NMAC the operator can either proceed to dispose of wastes in an existing temporary pit or construct a burial trench for disposal of these wastes. Both the temporary pit and the burial trench must be designed and constructed in accordance with the requirements specified in Subsections F and K of 19.15.17.11 NMAC.

(7) Upon achieving all applicable waste stabilization and transfer of the wastes to the temporary pit or burial trench, the operator shall cover the pit/trench with non-waste containing earthen materials and construct a soil cover prescribed by the Division in paragraph 2 of Subsection F of 19.15.17.13 NMAC.

(8) If 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 exceed any of the constituent concentrations shown in Table II of 19.15.17.13 NMAC, then closure must proceed in accordance with subsection A of 19.15.17.13. NMAC.

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

(a) A five point composite sample shall be taken analyzed for the constituents in Table I of 19.15.17.13.NMAC.

(b) If the results exceed any of 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 complete closure.

(c) If the results do not exceed any of the parameters 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 earthen material.

~~B. — Closure methods for temporary pits. The operator of a temporary pit shall remove all liquids from the temporary pit prior to closure and dispose of the liquids in a division approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves. The operator shall close the temporary pit by one of the following methods.~~

~~(1) — Waste excavation and removal.~~

~~(a) — The operator shall close the temporary pit by excavating all contents and, if applicable, synthetic pit liners and transferring those materials to a division approved facility.~~

~~(b) — The operator shall test the soils beneath the temporary pit to determine whether a release has occurred.~~

~~(i) — For temporary Pits where ground water is between 50 and 100 feet below the bottom of the temporary pit or for cavitation pits allowed pursuant to Subparagraph (a) of Paragraph (1) of Subsection A of 19.15.17.10 NMAC, the operator shall collect, at a minimum, a five point, composite sample; 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, as determined by EPA SW-846 method 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; TPH, as determined by EPA SW-846 method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 500 mg/kg or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results.~~

~~(ii) — For temporary pits where ground water is more than 100 feet below the bottom of the temporary pit, the operator shall collect, at a minimum, a five point, composite sample; 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, as determined by EPA SW-846 method 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021B or 8260B or other method that the division approves, does not exceed 50 mg/kg; the ORO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; the TPH, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 1000 mg/kg or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results.

(c) — If the operator or the division determines that a release has occurred, then the operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.

(d) — If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Subparagraph (b) of Paragraph (1) of Subsection B of 19.15.17.13 NMAC, then the operator shall backfill the temporary pit excavation with compacted, non-waste containing earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

(2) — On-site burial. The operator shall demonstrate and comply with the siting requirements in Subsection C of 19.15.17.10 NMAC and the closure requirements and standards of Subsection F of 19.15.17.13 NMAC if the proposed closure method of a temporary pit involves on-site burial.

(3) — Alternative closure methods. If the environmental bureau in the division's Santa Fe office grants an exception approving a closure method for a specific temporary pit other than as specified in Paragraphs (1) or (2) of Subsection B of 19.15.17.13 NMAC, then the operator shall close that temporary pit by the method that the environmental bureau in the division's Santa Fe office approves.

C. — Closure method for permanent pits.

(1) — The operator shall remove all liquids and BS&W from the permanent pit prior to implementing a closure method and shall dispose of the liquids and BS&W in a division-approved facility.

(2) — The operator shall remove the pit liner system, if applicable, and dispose of it in a division-approved facility. If there is on-site equipment associated with permanent pit, the operator shall remove the equipment, unless the equipment is required for some other purpose.

(3) — The operator shall test the soils beneath the permanent pit to determine whether a release has occurred. The operator shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021 B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021 B or 8260B or other EPA method that the division approves, does not

exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results.

(4) — If the operator or the division determines that a release has occurred, then the operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.

(5) — If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (3) of Subsection C of 19.15.17.13 NMAC, then the operator shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

D. — Closure methods for closed-loop systems. An operator of a closed-loop system that uses a temporary pit, in lieu of a drying pad, shall comply with the closure requirements for temporary pits specified in Subsection B of 19.15.17.13 NMAC. The operator of a closed-loop system that uses a drying pad shall close the system by one of the following methods.

(1) — Waste removal.

(a) — The operator shall transfer the waste and the drying pad liner to a division-approved facility.

(b) — The operator shall substantially restore and re-vegetate the impacted area's surface in accordance with Subsections G, H and I of 19.15.17.13 NMAC.

(2) — On-site burial. The operator shall demonstrate and comply with the siting requirements of Subsection C of 19.15.17.10 NMAC and the closure requirements and standards of Subsection F of 19.15.17.13 NMAC if the proposed closure method of a drying pad associated with a closed-loop system involves on-site burial.

(3) — Alternative closure methods. If the environmental bureau in the division's Santa Fe office grants an exception approving a closure method for a specific closed-loop system other than as specified in Paragraphs (1) or (2) of Subsection D of 19.15.17.13 NMAC, then the operator shall close that drying pad associated with a closed-loop system by the method the environmental bureau in the division's Santa Fe office approves.

E. — Closure method for below-grade tanks.

(1) — 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.

(2) — 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.

~~(3) — If there is any one-site equipment associated with a below-grade tank, then the operator shall remove the equipment, unless the equipment is required for some other purpose.~~

~~(4) — The operator shall test the soils beneath the below-grade tank to determine whether a release has occurred. The operator shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or S260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results.~~

~~(5) — If the operator or the division determines that a release has occurred, then the operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.~~

~~(6) — If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then the operator shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.~~

~~F. — On-site closure methods. The following closure requirements and standards apply if the operator proposes a closure method for a drying pad associated with a closed-loop system or a temporary pit pursuant to Paragraph (2) of Subsection D of 19.15.17.13 NMAC or Paragraph (2) of Subsection B of 19.15.17.13 NMAC that involves on-site burial, or an alternative closure method pursuant to Paragraph (3) of Subsection D of 19.15.17.13 NMAC or Paragraph (3) of Subsection B of 19.15.17.13 NMAC and Subsection B of 19.15.17.13 NMAC.~~

~~(1) General requirements.~~

~~(a) — Any proposed on-site closure method shall comply with the siting criteria specified in Subsection C of 19.15.17.10 NMAC.~~

~~(b) The operator shall provide the surface owner notice of the operator's proposal of an on-site closure method. The operator shall attach the proof of notice to the permit application.~~

~~(c) — The operator shall comply with the closure requirements and standards of Paragraphs (2) and (3), as applicable, of Subsection F of 19.15.17.13 NMAC if the proposed closure method for a drying pad associated with a closed-loop system or for a temporary pit involves on-site burial pursuant to Paragraph (2) of Subsection D of 19.15.17.13 NMAC or Paragraph (2) of Subsection B of 19.15.17.13~~

~~NMAC, or involves an alternative closure method pursuant to Paragraph (3) of Subsection D of 19.15.17.13 NMAC or Paragraph (3) of Subsection B of 19.15.17.13 NMAC and Subsection B of 19.15.17.15 NMAC.~~

~~(d) — The operator shall place a steel marker at the center of an on-site 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 on-site 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 on-site burial without the appropriate division district office's written approval. A person shall not remove an on-site burial marker without the division's written permission.~~

~~(e) — The operator shall report the exact location of the on-site burial on form C-105 filed with the division.~~

~~(f) — The operator shall file a deed notice identifying the exact location of the on-site burial with the county clerk in the county where the on-site burial occurs.~~

~~(2) — In place burial.~~

~~(a) — Where the operator meets the siting criteria specified in Paragraphs (2) or (3) of Subsection C of 19.15.17.10 NMAC and the applicable waste criteria specified in Subparagraphs (c) or (d) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC, an operator may use in place burial (burial in the existing temporary pit) for closure of a temporary pit or bury the contents of a drying pad associated with a closed-loop system in a temporary pit that the operator constructs in accordance with Paragraphs (1) through (6) and (10) of Subsection F of 19.15.17.11 NMAC for closure of a drying pad associated with a closed-loop system.~~

~~(b) — Prior to closing an existing temporary pit or to placing the contents from a drying pad associated with a closed-loop system into a temporary pit that the operator constructs for disposal, the operator shall stabilize or solidify the contents to a bearing capacity sufficient to support the temporary pit's final cover. 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.~~

~~(c) — where groundwater will be between 50 and 100 feet below the bottom of the buried waste, the operator shall collect at a minimum, a five-point, composite sample of the contents of the drying pad associated with a closed-loop system or the contents of a temporary pit after treatment or stabilization, if treatment or stabilization is required, to demonstrate that benzene, as determined by EPA SW-846 method 8021 B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021 B or 8260B, does not exceed 50 mg/kg; TPH, as determined by EPA SW-846 method 418.1 or other EPA method approved that the division approves, does not exceed 2500 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 500 mg/kg or the background concentration, whichever is greater. The operator may collect the composite sample prior to treatment or stabilization to demonstrate that the contents do~~

not exceed these concentrations. However, if the contents collected prior to treatment or stabilization exceed the specified concentrations the operator shall collect a second five point, composite sample of the contents after treatment or stabilization to demonstrate that the contents do not exceed these concentrations.

(d) — Where the ground water will be more than 100 feet below the bottom of the buried waste, the operator shall collect at a minimum, a five point, composite sample of the contents of the drying pad associated with a closed-loop system or the contents of a temporary pit after treatment or stabilization, if treatment or stabilization is required, to demonstrate that benzene, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 50 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; TPH, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 1000 mg/kg or the background concentration, whichever is greater. The operator may collect the composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed these concentrations. However, if the contents collected prior to treatment or stabilization exceed the specified concentrations the operator shall collect a second five point, composite sample of the contents after treatment or stabilization to demonstrate that the contents do not exceed these concentrations.

(e) — Upon closure of a temporary pit, or closure of a temporary pit that the operator constructs for burial of the contents of a drying pad associated with a closed-loop system, the operator shall cover the geomembrane lined, filled, temporary pit with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

(f) — For burial of the contents from a drying pad associated with a closed-loop system, the operator shall construct a temporary pit, in accordance with Paragraphs (1) through (6) and (10) of Subsection F of 19.15.17.11 NMAC, within 100 feet of the drying pad associated with a closed-loop system, unless the appropriate division district office approves an alternative distance and location. The operator shall use a separate temporary pit for closure of each drying pad associated with a closed-loop system.

(3) — On-site trench burial

(a) — Where the operator meets the siting criteria in Paragraph (4) of Subsection C of 19.15.17.10 NMAC, an operator may use on-site trench burial for closure of a drying pad associated with a closed-loop system or for closure of a temporary pit when the waste meets the criteria in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC. The operator shall use a separate on-site trench for closure of each drying pad associated with a closed-loop system or each temporary pit

(b) — Prior to placing the contents from a drying pad associated with a closed-loop system or from a temporary pit into the trench, the operator shall stabilize or solidify the contents to a bearing capacity sufficient to support the final cover

of the trench burial. 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.

(c) — The operator shall collect at a minimum, a five point, composite sample of the contents of the drying pad associated with a closed-loop system or temporary pit to demonstrate that the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg. Using EPA SW-846 method 1312 or other EPA leaching procedure that the division approves, the operator shall demonstrate that the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does 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 above. The operator may collect the composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed these concentrations. However, if the contents collected prior to treatment or stabilization exceed the specified concentrations the operator shall collect a second five point, composite sample of the contents after treatment or stabilization to demonstrate that the contents do not exceed these concentrations.

(d) — If the contents from a drying pad associated with a closed-loop system or from a temporary pit do not exceed the criteria in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC, the operator shall construct a trench lined with a geomembrane liner located within 100 feet of the drying pad associated with a closed-loop system or temporary pit, unless the appropriate division district office approves an alternative distance and location. The operator shall design and construct the lined trench in accordance with the design and construction requirements specified in Paragraphs (1) through (8) of Subsection J of 19.15.17.11 NMAC.

(e) — The operator shall close each drying pad associated with a closed-loop system or temporary pit by excavating and transferring all contents and synthetic pit liners or liner material associated with a closed-loop system or temporary pit to a lined trench. The excavated materials shall pass the paint filter liquids test (EPA SW-846, method 9095) and the closure standards specified in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC.

(f) — The operator shall test the soils beneath the temporary pit after excavation to determine whether a release has occurred.

(i) — Where ground water is between 50 and 100 feet below the bottom of the temporary pit, the operator shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH, benzene, GRO and DRO combined fraction and chlorides to demonstrate that benzene, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 50 mg/kg; TPH, as determined by EPA SW-846 method 418.1 or other EPA method approved that the division approves, does not exceed 2500 mg/kg; the GRO and DRO combined fraction, as determined by EPA W-846 method 8015M, does not exceed 500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed

~~500 mg/kg or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results. The operator shall notify the division of its results on form C-141.~~

~~(ii) — Where ground water is more than 100 feet below the bottom of the temporary pit, the operator shall collect at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH, benzene, GRO and DRO combined fraction and chlorides to demonstrate that benzene, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021 B or 8260B, does not exceed 50 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; TPH, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 1000 mg/kg or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results.~~

~~(g) — If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC, then the operator shall backfill the excavation with compacted, non-waste containing earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation shall comply with Subsections G, H and I of 19.15.17.13 NMAC.~~

~~(h) — If the operator or the division determines that a release has occurred, then the operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate. The operator may propose to transfer the excavated, contaminated soil into the lined trench.~~

~~(i) — The operator shall install a geomembrane cover over the excavated material in the lined trench. The operator shall design and construct the geomembrane cover in accordance with the requirements specified in Paragraphs (9) and (10) of Subsection J of 19.15.17.11 NMAC.~~

~~(j) — the operator shall cover the geomembrane lined and covered, filled, trench with compacted non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation shall comply with Subsections G, H and I of 19.15.17.13 NMAC.~~

JC. Closure Notice

~~(1) The operator shall notify the surface owner by certified mail, return receipt requested that the operator plans to close a temporary pit, a permanent pit, a below grade tank or where the operator has approval for on-site closure. 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.~~

(21) The operator of a temporary pit or below-grade tank or an operator who is approved for on-site closure shall notify the appropriate division district office verbally or by other means 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.

(32) An operator of a permanent pit shall notify the environmental bureau in the division's 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 environmental bureau in the division's 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 environmental bureau in the division's Santa Fe office shall review the current closure plan for adequacy and inspect the site.

(3) The operator of a multi well fluid management pit shall notify the appropriate division district office verbally or by other means at least 72 hours, but not more than one week, prior to any closure operation.

KD. 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; a plot plan; 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-1 05 within 60 days of closing the temporary pit.

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

AE. 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; ~~provided in 19.15.17.13 NMAC or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.~~

(1) An operator shall cease discharging into an existing unlined permanent pit that is permitted by or registered with the division within two years after June 16, 2008. An operator shall close an existing unlined permanent pit that is permitted by or registered with the division within three years after June 16, 2008.

(2) An operator shall cease discharging into an existing, lined or unlined, permanent pit that is not permitted by or registered with the division on or by June 16, 2008. An operator shall close an existing, lined or unlined, permanent pit that is not permitted by or registered with the division within six months after June 16, 2008.

(3) An operator shall close an existing unlined temporary pit within three months after June 16, 2008.

~~(4) An operator shall close an existing below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.~~

~~(5) An operator shall close an existing below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, prior to any sale or change of operator pursuant to 19.15.9.9 NMAC.~~

(64) An operator shall close any other permitted permanent pit within 60 days of cessation of operation of the permanent pit in accordance with a closure plan that the environmental bureau in the division's Santa Fe office approves.

(75) An operator shall close any other 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.

(86) An operator shall close a drying pad used for a closed-loop system permitted under 19.15.17 NMAC or in operation on June 16, 2008, 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.

(97) An operator shall close a permitted below-grade tank within 60 days ~~six months~~ of cessation of the below-grade tank's operation ~~or as required by the~~

~~transitional provisions of Subsection B of 19.15.17.17 NMAC~~ in accordance with a closure plan that the appropriate division district office approves.

(8) An operator shall close a multi-well fluid management pit within six months from the date that the operator ceases all drilling and 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.

~~G~~F. Reclamation of pit locations, on-site burial locations and drying pad locations.

(1) Site Contouring

~~(4~~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 Subsection ~~H-D(2)~~ 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 Subsection ~~F(3)~~ of 19.15.17.13 NMAC.

~~(2b)~~ The operator may propose an alternative to the re-vegetation or recontouring requirement if the operator demonstrates that the proposed alternative effectively prevents erosion, and protects fresh water, human 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.

~~(H2)~~ Soil cover designs.

~~(4a)~~ The soil cover for closures where the operator has removed the pit contents or remediated the contaminated soil to the division's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

(2b) The soil cover for burial in-place or trench burial shall consist of a minimum of four feet of ~~compacted~~, non-waste containing earthen material. 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.

(3c) The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

(3) 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 contour as near as practicable to achieve erosion control and long-term stability. 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 all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized in such a way as to minimize erosion to the extent practicable, or 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.

(4) Alternative regulatory or contractual requirements. The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies, or imposed by specific agreements with surface owners, shall supersede these provisions and govern the obligations of any operator subject to those provisions.

I. — Re-vegetation.

~~(1) — The first growing season after the operator closes 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 or below grade tank including access roads, the operator shall seed or plant the disturbed areas.~~

~~(2) — The operator shall accomplish seeding by drilling on the contour whenever practical or by other division approved methods. The operator shall obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious~~

weeds, and maintain that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

~~(3) — The operator shall repeat seeding or planting until it successfully achieves the required vegetative cover.~~

~~(4) — When conditions are not favorable for the establishment of vegetation, such as periods of drought, the division may allow the operator to delay seeding or planting until soil moisture conditions become favorable or may require the operator to use additional cultural techniques such as mulching, fertilizing, irrigating, fencing or other practices.~~

~~(5) — The operator shall notify the division when it has seeded or planted and when it successfully achieves re-vegetation.~~

Table I, 19.15.17.13 NMAC
Closure Criteria for Soils Beneath
Pits & Below Grade Tanks

<u>Depth to Unconfined Groundwater less than 10,000 mg/1 TDS</u>	<u>Constituent</u>	<u>Method*</u>	<u>Limit**</u>
<u>≤50 feet</u>	<u>Chloride</u>	<u>EPA 300.1</u>	<u>5,000 mg/kg</u>
	<u>TPH (GRO+DRO)</u>	<u>8015M</u>	<u>100 mg/kg</u>
	<u>BTEX</u>	<u>8021B or 8015M</u>	<u>50 mg/kg</u>
	<u>Benzene</u>	<u>8021B or 8015M</u>	<u>10 mg/kg</u>
<u>>50 feet-100 feet</u>	<u>Chloride</u>	<u>EPA 300.1</u>	<u>10,000 mg/kg</u>
	<u>TPH (GRO+DRO)</u>	<u>8015M</u>	<u>1,000 mg/kg</u>
	<u>BTEX</u>	<u>8021B or 8015M</u>	<u>50 mg/Kg</u>
	<u>Benzene</u>	<u>8021B or 8015M</u>	<u>10 mg/kg</u>
<u>> 100 feet</u>	<u>Chloride</u>	<u>EPA 300.1</u>	<u>20,000 mg/kg</u>
	<u>TPH (GRO+DRO)</u>	<u>8015M</u>	<u>5,000 mg/kg</u>
	<u>BTEX</u>	<u>8021B or 8015M</u>	<u>50 mg/kg</u>
	<u>Benzene</u>	<u>8021B or 8015M</u>	<u>10 mg/kg</u>

*Per EPA SW 846 or other EPA Approved Methods

**Numerical limits or natural background level, whichever is greater

Table II, 19.15.17.13 NMAC
Closure Criteria for Wastes Left in Place
in Temporary Pits & Burial Trenches

<u>Depth to Unconfined Groundwater less than 10,000 mg/1 TDS</u>	<u>Constituent</u>	<u>Method*</u>	<u>Limit**</u>
<u>25-50 feet below trench/pit</u>	<u>Chloride</u>	<u>EPA 300.1</u>	<u>2,500 mg/L</u>
	<u>TPH (GRO+DRO)</u>	<u>8015M</u>	<u>100 mg/kg</u>
	<u>BTEX</u>	<u>8021B or 8015M</u>	<u>50 mg/kg</u>
	<u>Benzene</u>	<u>8021B or 8015M</u>	<u>10 mg/kg</u>
<u>> 50 below trench/pit</u>	<u>Chloride</u>	<u>EPA 300.1</u>	<u>5,000 mg/L</u>
	<u>TPH (GRO+DRO)</u>	<u>8015M</u>	<u>1,000 mg/kg</u>
	<u>BTEX</u>	<u>8021B or 8015M</u>	<u>50 mg/kg</u>
	<u>Benzene</u>	<u>8021B or 8015M</u>	<u>10 mg/kg</u>

*Per EPA SPLP and SW 846 or other EPA Approved Methods

**Numerical limits or natural background level, whichever is greater

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 ~~a pit during an emergency~~ 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.

E. Emergency pits. 19.15.17.14 NMAC does not authorize construction or use of an emergency pit as defined in Subsection ~~FD~~ of 19.15.17.7 NMAC. Construction or use of any such pit requires a permit issued pursuant to 19.15.17 NMAC, unless the pit is described in a spill prevention, control and countermeasure plan the EPA requires, the operator removes all fluids from the pit within 48 hours and the operator has filed a notice of the pit's location with the appropriate division district office.

19.15.17.15 EXCEPTIONS AND VARIANCES:

A. Definitions

1. "Exception" means authorization from the environmental bureau in the division's Santa Fe office to depart from the requirements of 19.15.17 NMAC.

2. "Variance" means authorization from the appropriate division district office to depart from the requirements of 19.15.17 NMAC.

B. Variances.

1. Except as provided below in subparagraph C, an operator may apply to the appropriate division district office for a variance to any of the provisions of 19.15.17 NMAC.

2. If an operator demonstrates to the appropriate division district office that the requested variance provides equal or better protection to fresh water, public health and safety, livestock and the environment, the appropriate division district office shall approve the variance within 60 days.

3. If the appropriate division district office denies the requested variance or fails to grant or deny the requested variance in writing within 60 days of the filing of the request for a variance, then the operator may file an application for hearing with the division clerk. In addition to the information required by Subsection A of 19.15.4.8 NMAC, the application shall include:

a. proof of notification to the surface owner of the location of the requested variance;

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

c. a statement in detail explaining why the applicant believes that the variance will protect fresh water, public health and safety, livestock and the environment.

4. The division clerk will set the application for hearing as soon as practicable.

C. Exceptions.

1. An operator may apply to the environmental bureau in the division's Santa Fe office for an exception to any of the permanent pit requirements of 19.15.17 NMAC.

2. The operator shall give notice of any request for an exception to the surface owner of the location of the requested exception. The division shall send email notice of the filing of the application for exception to persons who have filed a written request to be notified of the filing of such applications.

3. If the operator demonstrates to the environmental bureau in the division's Santa Fe office that the requested exception provides equal or better protection to fresh water, public health and safety, livestock and the environment, the environmental bureau in the division's Santa Fe office shall approve the exception within 60 days.

4. If any person with standing to contest the requested exception files a comment or request for hearing within 30 days after the operator or the division sends notice to such person of the requested exception, and the director determines that a comment or 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.

5. If the environmental bureau of the division's Santa Fe office denies the requested exception or fails to grant or deny the requested exception in writing within 60 days, then the operator may apply for a hearing. In addition to the information required by Subsection A of 19.15.4.8 NMAC, the application shall include:

a. proof of notification to the surface owner of the location of the requested exception,

b. a statement in detail explaining why the applicant wants an exception to 19.15.17 NMAC, and

c. a statement in detail explaining why the applicant believes that the exception will protect fresh water, public health and safety, livestock and the environment.

6. If the director orders a hearing or the operator applies for a hearing, the division clerk shall set the matter for hearing as soon as practicable.

A. General exceptions.

~~(1) The operator may apply to the environmental bureau in the division's Santa Fe office for an exception to a requirement or provision of 19.15.17 NMAC other than the permit requirements of 19.15.17.8 NMAC; the exception requirements of 19.15.17.15 NMAC; or the permit approval, condition, denial, revocation, suspension, modification or transfer requirements of 19.15.17.16 NMAC. The environmental bureau in the division's Santa Fe office may grant an exception from a requirement or provision of 19.15.17 NMAC, if the operator demonstrates to the satisfaction of the environmental~~

~~bureau in the division's Santa Fe office that the granting of the exception provides equivalent or better protection of fresh water, public health and the environment. The environmental bureau in the division's Santa Fe office may revoke an exception after notice to the operator of the pit, closed-loop system, below-grade tank or proposed alternative and to the surface owner, and opportunity for a hearing, or without notice and hearing in event of an emergency involving imminent danger to fresh water, public health or the environment, subject to the provisions of NMSA 1978, Section 70-2-23, if the environmental bureau in the division's Santa Fe office determines that such action is necessary to prevent the contamination of fresh water, or to protect public health or the environment.~~

~~(2) The operator shall give written notice by certified mail, return receipt requested, to the surface owner of record where the pit, closed-loop system, below-grade tank or proposed alternative is, or will be, located; to surface owners of record within one-half mile of such location; to the county commission of the county where the pit, closed-loop system, below-grade tank or proposed alternative is, or will be, located; to the appropriate city officials if the pit, closed-loop system, below-grade tank 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; to affected federal or tribal or pueblo governmental agencies; and to such other persons as the environmental bureau in the division's Santa Fe office may direct. Additionally, the operator shall issue public notice by publication one time in a newspaper of general circulation in the county where the pit, closed-loop system, below-grade tank or proposed alternative, is, or will be located. Required written and public notices require the environmental bureau in the division's Santa Fe office's approval. The division shall distribute notice of the application to persons who have requested notification and shall post notice of the application on the division's website.~~

~~(3) Any person wishing to comment on an application for an exception may file comments or request a hearing within 30 days after the later of the date when the applicant mails the notice required by Paragraph (2) of Subsection A of 19.15.17.15 NMAC or when the division distributes or posts the notice provided in Paragraph (2) of Subsection A of 19.15.17.15 NMAC. In a request for hearing, the person shall set forth the reasons why the division should hold a hearing.~~

~~(4) The environmental bureau in the division's Santa Fe office may grant the exception administratively if the environmental bureau in the division's Santa Fe office receives no comments or requests for hearing within the time for commenting established in Paragraph (3) of Subsection A of 19.15.17.15 NMAC. If the environmental bureau in the division's Santa Fe office receives a request for hearing and the director determines that the request presents issues that have technical merit or that there is significant public interest then the director may set the application for hearing. The director, however, may set any application for hearing. If the environmental bureau in the division's Santa Fe office schedules a hearing on an application, the hearing shall be conducted according to the procedures in 19.15.4 NMAC.~~

~~_____ (5) If the director does not determine that a hearing is necessary due to technical merit, significant public interest or otherwise then the environmental bureau in the division's Santa Fe office may grant the exception without a hearing notwithstanding the filing of a request for hearing. If, however, the environmental bureau in the division's Santa Fe office determines to deny the exception, then it shall notify the operator of its determination by certified mail, return receipt requested, and if the operator requests a hearing within 10 days after receipt of such notice shall set the matter for hearing, with notice to the operator and to any party who has filed a comment or requested a hearing.~~

~~_____ B. Alternative closure methods. The operator of a temporary pit or a closed-loop system may apply to the environmental bureau in the division's Santa Fe office for an exception to the closure methods specified in Paragraphs (1) and (2) of Subsection B of 19.15.17.13 NMAC or Paragraphs (1) and (2) of Subsection D of 19.15.17.13 NMAC. The environmental bureau in the division's Santa Fe office may grant the proposed exception if all of the following requirements are met.~~

~~_____ (1) The operator demonstrates that the proposed alternative method protects fresh water, public health and the environment.~~

~~_____ (2) The operator shall remove liquids prior to implementing a closure method and dispose of the liquids in a division-approved facility or recycle or reuse the liquids in a manner that the environmental bureau in the division's Santa Fe office approves.~~

~~_____ (3) The operator demonstrates to the satisfaction of the environmental bureau in the division's Santa Fe office that any proposed alternative closure method will implement one or more of the following practices: waste minimization; treatment using best demonstrated available technology; reclamation; reuse; recycling; or reduction in available contaminant concentration; and subject to such conditions as the environmental bureau in the division's Santa Fe office deems necessary in order to protect fresh water, public health and the environment.~~

~~_____ (4) The provisions of Subsection A of 19.15.17.15 NMAC shall apply to applications for exceptions pursuant to Subsection B of 19.15.17.15 NMAC.~~

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

A. The division shall review all applications ~~and variances~~ to permit facilities subject to 19.15.17 NMAC, and may approve, deny or approve an application with conditions within 30 days of receipt of an administratively complete application. If the Division does not take action within 30 days of receipt of an administratively complete application, then the application shall be deemed approved. If the division denies an application or approves the application subject to conditions not expressly provided by the Oil and Gas Act or in 19.15.17 NMAC, then the division shall notify the applicant by certified mail, return receipt requested, of the cause for the denial or additional conditions and shall set the matter for hearing if the applicant so requests within 10 days after receipt of such notification.

B. Rule of completeness. Within 10 business days of receipt of application the appropriate division district office will rule the application administratively complete or provide written notice of deficiencies to the applicant's signatory. The application will be considered complete if written notice is not provided by the appropriate division district office within the 10 working day evaluation period. Deficiencies corrected by operator shall be considered administratively complete.

B. Granting of permit.

~~The division shall issue a permit upon finding that an operator has filed an acceptable application and that the proposed construction, operation and closure of a pit, closed-loop system, below-grade tank or proposed alternative will comply with applicable statutes and rules and will not endanger fresh water, public health, safety or the environment.~~

C. Conditions. The division may impose conditions or requirements that it determines are necessary and proper for the protection of fresh water, public health, safety or the environment. The division shall incorporate such additional conditions or requirements into the permit.

D. Denial of application. The division may deny 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, closed-loop system, below-grade tank or proposed alternative without detriment to fresh water, public health, safety or the environment.

E. Revocation, suspension or modification of a permit. The operator may apply to the division for a modification of the permit pursuant 19.15.17 NMAC. The operator shall demonstrate that the proposed modification complies with the applicable provisions of 19.15.17 NMAC. Any modification that is equivalent to an exception of any paragraph of 19.15.17 NMAC shall be subject to the notice and approval procedures required for an exception. 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. 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, safety 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. Except for existing below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, the division's approval of an application to transfer a well or other facility with which a permitted pit, below-grade tank or closed-loop system is associated shall constitute approval of the transfer of the permit for the pit, below-grade tank or closed-loop system. ~~The operator of a below-grade tank constructed and installed prior to June 16, 2008 shall close the existing below-grade tank pursuant to the closure requirements of 19.15.17.13 NMAC or complete the retrofit of the existing below-grade tank to comply with the Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC prior to any sale or change of operator pursuant to 19.15.9.9 NMAC. In all other cases, the operator and the transferee shall apply for approval to transfer the permit to the division office to which permit applications for the type of facility involved are directed.~~

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.

H. If the division schedules a hearing on an application, the hearing shall be conducted according to 19.15.14.1206 through 19.15.14.1215 NMAC.

~~19.15.17.17 TRANSITIONAL PROVISIONS:~~

~~A. — After June 16, 2008, the division shall not accept applications for permits for unlined temporary pits.~~

~~B. — An operator of an existing operation that is required to close pursuant to Paragraphs (2) or (3) of Subsection A of 19.15.17.13 NMAC shall submit a closure plan pursuant to Subsection C of 19.15.17.9 NMAC to the division not later than 30 days after June 16, 2008. An operator of an existing operation that is required to close pursuant to Paragraphs (1) or (4) of Subsection A of 19.15.17.13 NMAC shall submit a closure plan pursuant to Subsection C of 19.15.17.9 NMAC to the division not later than six months after June 16, 2008.~~

~~C. — Within 180 days after June 16, 2008, an operator of an existing lined permitted permanent pit shall request a modification pursuant to Subsection E of 19.15.17.16 NMAC. Within 180 days after June 16, 2008, an operator of an existing lined registered permanent pit shall apply to the division for a permit pursuant to 19.15.17 NMAC. An operator of an existing lined, permitted or registered, permanent pit shall comply with the construction requirements of 19.15.17.11 NMAC within 18 months after permit modification or issuance.~~

~~D. — An operator of an existing below-grade tank shall apply for a permit or permit modification pursuant to 19.15.17 NMAC within 90 days after June 16, 2008. An operator of an existing below-grade tank shall comply with the construction requirements of 19.15.17.11 NMAC within one year of permit issuance.~~

~~E. — An operator of an existing pit or below-grade tank permitted prior to June 16, 2008, may continue to operate in accordance with such permits or orders, subject to the following provisions.~~

~~(1) — An operator of an existing lined, permitted or registered, permanent pit shall comply with the operational and closure requirements of 19.15.17.12 NMAC and 19.15.17.13 NMAC.~~

~~(2) — An operator of an existing, permitted or registered, temporary pit shall comply with the operational and closure requirements of 19.15.17.12 NMAC and 19.15.17.13 NMAC.~~

~~(3) — An operator of an existing below-grade tank shall comply with the operational and closure requirements of 19.15.17.12 NMAC and 19.15.17.13 NMAC.~~

~~(4) — The operator shall bring an existing below-grade tank that does not comply with the design and construction requirements of 19.15.17.11 NMAC into compliance with those requirements or close it within five years after June 16, 2008.~~

~~F. — The operator may continue to operate an existing closed-loop system without applying for a permit, but the operator shall close such system in accordance with the closure requirements of 19.15.17.13 NMAC.~~

~~G. — An operator of an existing sump shall comply with the operational requirements of 19.15.17.12 NMAC.~~

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.

19.15.17.2 SCOPE: 19.15.17 NMAC applies to persons engaged in oil and gas development and production within New Mexico.

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.

19.15.17.4 DURATION: Permanent.

19.15.17.5 EFFECTIVE DATE: Thirty days after publication of the final rule in the New Mexico Register unless a later date is cited at the end of a section.

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 public health, welfare and the environment.

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 500 gallon 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 or workover fluids.

D. "Confined ground water" means water contained within soil or rock below the land surface that is saturated with water where there are layers of impermeable material both above and below and the water is under pressure so that when penetrated by a well, the ground water will rise.

E. "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 and 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.

F. "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.

G. "Emergency pit" means a pit that is constructed as a precautionary matter to contain a spill in the event of a release.

H. "Floodplain" means US Army Corps of Engineers or FEMA documented 100-year floodplain.

I. "Low Chloride fluids" means fluids that contain less than 15,000 mg/liter of chlorides determined by analysis or process knowledge.

J. "Measureable" means a layer of oil greater than a sheen that is measurable by color cutting or other acceptable method.

K. "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 are not governed under the Surface Waste Management Rule 19.15.36 NMAC and may not be used for the disposal of drilling or completion 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 identified in the pit permit are completed. Any fresh water containment structure, such as a pond, pit, or other impoundment, is not included in this definition.

L. "Life-form ratio" is the relative percentage of plants in each of the following classifications: shrubs, forbs and grasses.

M. "Permanent pit" means a pit, including 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 or a pit governed under the Surface Waste Management Rule 19.15.36 NMAC.

N. "Playa lake" means a dry, barren area in the lowest part of an undrained natural desert basin underlain by clay, silt, or sand and commonly soluble salts.

O. "Significant watercourse" means a watercourse with a defined bed and bank either named on a USGS 7.5 minute quadrangle map or the next lower order tributary with a defined bed and bank of such watercourse.

P. "Sump" means a subgrade impermeable vessel that is partially buried into ground, is in contact with the ground surface or is a collection device incorporated within a secondary containment system, with a capacity less than or equal to 500 gallons, 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.

Q. "Temporary pit" means a pit, including a drilling or workover pit, which is constructed with the intent that the pit will hold liquids and will be closed in less than one year. Temporary pits may be used for one or more wells and located either onsite or offsite of a well drilling location. Any fresh water containment structure, such as a pond, pit, or other impoundment, is not a temporary pit.

R. "Unconfined ground water" means ground water whose upper water surface (water table) is at atmospheric pressure and is able to rise and fall.

S. "Visible" when used with respect to oil on the surface of a pit means any sheen that occupies thirty percent or more of the total pit liquid surface area.

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. Facilities permitted pursuant to 19.15.36 NMAC or WQCC rules are exempt from 19.15.17 NMAC. After June 16, 2008, an unlined permanent pit is prohibited and the division shall not issue a permit for an unlined permanent 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 must be registered with the appropriate division district office. The operator may file a single registration for all below-grade tanks.

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

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 to which 19.15.17 NMAC applies. 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. For upstream facilities, the operator may submit form C-144 separately or as an attachment to an application for a well permit (form C-101 or C-103). An operator shall use a C-101, C-103 or applicable BLM form to notify the appropriate division district office of construction or use of a closed-loop system. A closed-loop system shall use appropriate engineering principles and practices and follow applicable manufacturers' requirements or the equivalent thereto.

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 environmental bureau in 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 a temporary pit shall use appropriate engineering principles and practices and follow applicable liner manufacturers' requirements. The plan 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.

(3) Below-grade tanks. A registered below-grade tank shall use appropriate engineering principles and practices and follow applicable manufacturers' requirements. The registration 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.

(4) Multi-well fluid management pits. The plan for a multi-well fluid management pit shall use appropriate engineering principles and practices and follow applicable liner manufacturers' requirements. The plan 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 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 submitted by the operator and approved by the appropriate division district office.

C. Closure plans. A closure plan that an operator submits in an application or registration required in 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.

(1) Closure plans for a multi-well fluid management pit 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.

(2) Closure plans shall be filed with the appropriate division district office and in accordance with 19.15.17.13 NMAC.

D. Filing of permit application.

(1) Permanent pits. An operator shall file an application, form C-144, and all required attachments with the environmental bureau in 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. To request approval to use or construct a temporary pit or multi-well fluid management pit an operator shall file an application, form C-144 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.

19.15.17.10 SITING REQUIREMENTS:

A. Except as otherwise provided in 19.15.17 NMAC.

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

(a) Where unconfined ground water is less than 25 feet below the bottom of the pit that contains only low chloride fluid; otherwise where unconfined ground water is less than 50 feet below the bottom of the pit, unless the operator is using the pit solely to cavitate a coal bed methane well and the appropriate division district office finds based upon the operator's demonstration that the operator's proposed operation will protect unconfined ground water during the pit's use;

(b) within 100 feet of any a continuously flowing watercourse where only low chloride fluids are used, otherwise 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 appropriate division district office approves an alternative distance based upon the operator's demonstration that surface and unconfined ground water will be protected;

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

(d) within 100 feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes where only low chloride fluids are used, otherwise within 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 well head protection area, as defined by NMAC 19.15.2.7, 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 where only low chloride fluids are used, otherwise within 300 feet of a wetland;

(g) within the area overlying a subsurface mine, unless the appropriate division district office specifically approves the proposed location based upon the operator's demonstration that the pit's construction and use will not compromise the 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.

(2) An operator shall not locate a permanent pit:

(a) where unconfined 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 environmental bureau in the division's Santa Fe office approves an alternative distance based upon the operator's demonstration that surface and unconfined 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 private, domestic fresh water well or spring used for domestic or stock watering purposes, or within 1000 feet of any other fresh water well or spring, 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 environmental bureau in the division's Santa Fe office specifically approves the proposed location based upon the operator's demonstration that the permanent 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 permanent pit's integrity is not compromised; or

(i) within a 100-year floodplain.

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

(a) 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), unless the division approves an alternative distance based upon the operator's demonstration that surface and unconfined ground water will be protected;

(b) within 100 feet of a wetland; or

(c) within a 100-year floodplain.

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

(a) within 100 feet of a continuously flowing watercourse or any other significant watercourse or lakebed, sinkhole or playa lake (measured from the ordinary high-water mark), unless the appropriate division district office approves an alternative distance based upon the operator's demonstration that surface and unconfined ground water will be protected;

(b) within 100 feet of a private, domestic fresh water well or spring used for public or livestock consumption;

(c) within 100 feet of a wetland; or

(d) where depth to unconfined ground water is less than 10 feet below the bottom of the tank.

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

C. An operator shall not implement an on-site closure method:

- waste;
 - (1) where unconfined ground water is less than 25 feet below the bottom of the buried
- (2) for wastes that exceed the concentration limits set forth in 19.15.17.13 NMAC;
- (3) within 100 feet of a continuously flowing watercourse;
- (4) within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence at the time of initial application;
- (5) within 300 feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes;
- (6) within incorporated municipal boundaries or within a defined municipal well head protection area, as defined in NMAC 19.15.2.7, covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended, unless the municipality specifically approves;
- (7) within 300 feet of a wetland;
- (8) 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;
- (9) within an unstable, unless the operator demonstrates that it has incorporated engineering measures into the design to ensure that the on-site closure method will prevent contamination of fresh water and protect public health and the environment; or
- (10) within a 100 year floodplain.

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 and 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 on-site. 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. The appropriate division district office may impose additional fencing requirements for protection of wildlife in particular areas.

(4) The appropriate division district office shall approve alternatives to these requirements if the operator demonstrates that the alternatives provide equivalent or better protections to livestock, wildlife or human safety.

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 unauthorized 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 do not place undue stress upon the liner and are consistent with the angle of repose. 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 and orient 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 seaming. The operator shall weld field 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 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, unconfined 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 environmental bureau in the division's Santa Fe office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1×10^{-9} cm/sec. 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 environmental bureau in the division's Santa Fe office may approve other liner media if the operator demonstrates to the satisfaction of the environmental bureau in the division's Santa Fe office that the alternative liner protects fresh water, public health, safety 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 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. There shall be no horizontal seams within five feet of the slope's toe. Qualified personnel shall perform field seaming.

(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 1×10^{-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 environmental bureau in the division's Santa Fe office approves.

(8) The operator shall notify the environmental bureau in 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 19.15.17 NMAC 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. An operator of a closed-loop system with drying pads shall design and construct the drying pads to include the following:

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

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

(3) 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 or alarm 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 1×10^{-9} cm/sec. 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.

(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 below-grade tank constructed and installed prior to the effective date of this amendment that has the side walls open for visual inspection and 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 remove that below-grade tank 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 unauthorized releases.

(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. The operator shall construct a pit so that the slope does not place undue stress upon the liner and is consistent with the angle of repose. 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 safe manner to prevent contamination of fresh water and protect public health and the environment.

(3) The operator shall design and construct the pit with a geomembrane liner and leak detection system. 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 and orient 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 seaming. The operator shall weld field 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.

(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 pit.

(9) The operator shall design the leak detection system to adequately detect any leak from the primary liner.

(10) The operator shall design and construct the pit to prevent run-on of surface water. A berm, ditch, proper sloping or other diversion shall surround the pit to prevent run-on of surface water.

K. Burial trenches for closure. The operator shall design and construct a trench for closure, specified in Subsection B of 19.15.17.13 NMAC and Subsection F of 19.15.17.13 NMAC, in accordance with the following requirements:

(1) The operator shall locate the trench to satisfy the siting criteria specified in Subsection C of 19.15.17.10 NMAC and excavate to an appropriate depth that allows for the division-prescribed soil cover required pursuant to Subsection F(2) of 19.15.17.13 NMAC.

(2) 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.

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

(4) 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.

(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. 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 seaming. The operator shall weld field liner seams.

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

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

(8) The operator shall fold the outer edges of the trench liner to overlap the waste material in the trench prior to the installation of the geomembrane cover.

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 or reclaim or dispose of all drilling fluids in a manner, approved by division rules, that prevents the contamination of fresh water and protects public health and the environment.

(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 any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then the operator shall initiate repair of the damage or replacement of the liner within 48 hours of discovery or seek a variance from the appropriate 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 the discovery, notify the appropriate division district 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.

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

(1) Only fluids or 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) Under normal operating circumstances the operator shall maintain at least two feet of freeboard for a temporary pit.

(3) The operator shall inspect a temporary pit containing drilling fluids at least daily while the drilling or workover rig is on-site. Thereafter, the operator shall inspect the temporary pit monthly 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) All free liquids from the surface of a temporary pit shall be removed within 60 days 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 upon well or workover completion. The appropriate division district office may grant an extension of up to three months.

(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.

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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 at least monthly. The operator shall document the integrity of each tank at least annually and maintain a written record of the integrity tests 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 demonstrate to the division whether the wet or discolored soil exceeds the standards set forth in Table I of 19.15.17.13 NMAC. If the wet or discolored soil exceeds any of the standards 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. 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 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 two 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) Stimulation fluids may remain in the pit until the operator ceases all stimulation operations as identified in the pit permit.

19.15.17.13 CLOSURE AND SITE RECLAMATION REQUIREMENTS:

A. 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, drying pads and tanks associated with closed loop systems and below grade tanks 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 excavating and/or removing all contents and, if applicable, synthetic liners and transferring those materials to a division approved facility.

(3) The operator of a multi-well fluid management pit is not required to sample under the liner system if no leaks are detected in the leak-detection system during the use of the pit. In all other circumstances, the operator shall test the soils beneath the pit or below grade tank as follows:

(a) A five point composite sample shall be taken under the liner or the below grade tank and that sample shall be analyzed for the constituents in Table I of 19.15.17.13.NMAC.

(b) If the results exceed any of 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 complete closure.

(c) If the results do not exceed any of the parameters in Table I of 19.15.17.13 NMAC, then the operator can proceed to backfill the pit, pad, or excavation associated with the below grade tank with non-waste containing earthen material. Recontouring and revegetation of closed pits, drying pads and below grade tanks is addressed in Section F of 19.15.17.13 NMAC.

B. Closure where wastes are destined for burial in place or into nearby Division approved pits or trenches. This section applies to temporary pits as well as drying pads and tanks associated with closed loop systems in which the wastes are either intended for in place disposal in the existing temporary pit or

for disposal at a nearby temporary pit or burial trench that is not a permitted commercial facility regulated under 19.15.36 NMAC.

(1) Notwithstanding the following, the operator shall not commence closure of a temporary pit or drying pad and tank associated with a closed loop system without first obtaining approval of the closure plan submitted with the permit application.

(2) The operator shall demonstrate and comply with the siting criteria in Subsection C of 19.15.17.10 NMAC and the closure requirements under Subsection B of 19.15.17.13 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 close loop system and dispose of such liquids at a Division approved facility.

(4) Prior to closure of the existing pit or 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 contents to a bearing capacity sufficient to support the pit or trenches final cover. 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).

(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 stabilized waste does not exceed the criteria in Table II of 19.15.17.13 NMAC or a division approved alternative concentration limit.

(6) If the contents from a temporary pit or drying pad and tank associated with a closed loop system do not exceed any of the constituent concentrations shown in Table II of 19.15.17.13 NMAC the operator can either proceed to dispose of wastes in an existing temporary pit or construct a burial trench for disposal of these wastes. Both the temporary pit and the burial trench must be designed and constructed in accordance with the requirements specified in Subsections F and K of 19.15.17.11 NMAC.

(7) Upon achieving all applicable waste stabilization and transfer of the wastes to the temporary pit or burial trench, the operator shall cover the pit/trench with non-waste containing earthen materials and construct a soil cover prescribed by the Division in paragraph 2 of Subsection F of 19.15.17.13 NMAC.

(8) If 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 exceed any of the constituent concentrations shown in Table II of 19.15.17.13 NMAC, then closure must proceed in accordance with subsection A of 19.15.17.13. NMAC.

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

(a) A five point composite sample shall be taken analyzed for the constituents in Table I of 19.15.17.13.NMAC.

(b) If the results exceed any of 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 complete closure.

(c) If the results do not exceed any of the parameters 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 earthen material.

C. Closure Notice.

(1) The operator of a temporary pit or below-grade tank or an operator who is approved for on-site closure shall notify the appropriate division district office verbally or by other means 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.

(2) An operator of a permanent pit shall notify the environmental bureau in the division's 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 environmental bureau in the division's 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 environmental bureau in the division's Santa Fe office shall review the current closure plan for adequacy and inspect the site.

(3) The operator of a multi well fluid management pit shall notify the appropriate division district office verbally or by other means at least 72 hours, but not more than one week, prior to any closure operation.

D. 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; a plot plan; 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-105 within 60 days of closing the temporary pit.

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

E. 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 cease discharging into an existing unlined permanent pit that is permitted by or registered with the division within two years after June 16, 2008. An operator shall close an existing unlined permanent pit that is permitted by or registered with the division within three years after June 16, 2008.

(2) An operator shall cease discharging into an existing, lined or unlined, permanent pit that is not permitted by or registered with the division on or by June 16, 2008. An operator shall close an existing, lined or unlined, permanent pit that is not permitted by or registered with the division within six months after June 16, 2008.

(3) An operator shall close an existing unlined temporary pit within three months after June 16, 2008.

(4) An operator shall close any other permitted permanent pit within 60 days of cessation of operation of the permanent pit in accordance with a closure plan that the environmental bureau in the division's Santa Fe office approves.

(5) An operator shall close any other 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.

(6) An operator shall close a drying pad used for a closed-loop system permitted under 19.15.17 NMAC or in operation on June 16, 2008, 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.

(7) An operator shall close a permitted below-grade tank within six months of cessation of the below-grade tank's operation in accordance with a closure plan that the appropriate division district office approves.

(8) 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 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.

F. Reclamation of pit locations, on-site 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 Subsection D(2) 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 Subsection F(3) of 19.15.17.13 NMAC.

(b) The operator may propose an alternative to the re-vegetation or recontouring requirement if the operator demonstrates that the proposed alternative effectively prevents erosion, and protects 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.

(a) The soil cover for closures where the operator has removed the pit contents or remediated the contaminated soil to the division's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

(b) The soil cover for burial in-place or trench burial shall consist of a minimum of four feet of non-waste containing earthen material. 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.

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

(3) 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 contour as near as practicable to achieve erosion control and long-term stability. 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 all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized in such a way as to minimize erosion to the extent practicable, or 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.

(4) Alternative regulatory or contractual requirements. The re-vegetation and reclamation obligations imposed by other applicable federal or tribal agencies, or imposed by specific agreements with surface owners, shall supersede these provisions and govern the obligations of any operator subject to those provisions.

**Table I, 19.15.17.13 NMAC
Closure Criteria for Soils Beneath
Pits & Below Grade Tanks**

Depth to Unconfined Groundwater less than 10,000 mg/1 TDS	Constituent	Method*	Limit**
≤50 feet	Chloride	EPA 300.1	5,000 mg/kg
	TPH (GRO+DRO)	8015M	100 mg/kg
	BTEX	8021B or 8015M	50 mg/kg
	Benzene	8021B or 8015M	10 mg/kg
>50 feet-100 feet	Chloride	EPA 300.1	10,000 mg/kg
	TPH (GRO+DRO)	8015M	1,000 mg/kg
	BTEX	8021B or 8015M	50 mg/Kg
	Benzene	8021B or 8015M	10 mg/kg
> 100 feet	Chloride	EPA 300.1	20,000 mg/kg
	TPH (GRO+DRO)	8015M	5,000 mg/kg
	BTEX	8021B or 8015M	50 mg/kg
	Benzene	8021B or 8015M	10 mg/kg

*Per EPA SW 846 or other EPA Approved Methods

**Numerical limits or natural background level, whichever is greater

**Table II, 19.15.17.13 NMAC
Closure Criteria for Wastes Left in Place
in Temporary Pits & Burial Trenches**

Depth to Unconfined Groundwater less than 10,000 mg/1 TDS	Constituent	Method*	Limit**
25-50 feet below trench/pit	Chloride	EPA 300.1	2,500 mg/L
	TPH (GRO+DRO)	8015M	100 mg/kg
	BTEX	8021B or 8015M	50 mg/kg
	Benzene	8021B or 8015M	10 mg/kg
> 50 below trench/pit	Chloride	EPA 300.1	5,000 mg/L
	TPH (GRO+DRO)	8015M	1,000 mg/kg
	BTEX	8021B or 8015M	50 mg/kg
	Benzene	8021B or 8015M	10 mg/kg

*Per EPA SPLP and SW 846 or other EPA Approved Methods

**Numerical limits or natural background level, whichever is greater

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.

E. Emergency pits. 19.15.17.14 NMAC does not authorize construction or use of an emergency pit as defined in Subsection F of 19.15.17.7 NMAC. Construction or use of any such pit requires a permit issued pursuant to 19.15.17 NMAC, unless the pit is described in a spill prevention, control and countermeasure plan the EPA requires, the operator removes all fluids from the pit within 48 hours and the operator has filed a notice of the pit's location with the appropriate division district office.

19.15.17.15 EXCEPTIONS AND VARIANCES:

A. Definitions

1. "Exception" means authorization from the environmental bureau in the division's Santa Fe office to depart from the requirements of 19.15.17 NMAC.

2. "Variance" means authorization from the appropriate division district office to depart from the requirements of 19.15.17 NMAC.

B. Variances.

1. Except as provided below in subparagraph C, an operator may apply to the appropriate division district office for a variance to any of the provisions of 19.15.17 NMAC.

2. If an operator demonstrates to the appropriate division district office that the requested variance provides equal or better protection to fresh water, public health and safety, livestock and the environment, the appropriate division district office shall approve the variance within 60 days.

3. If the appropriate division district office denies the requested variance or fails to grant or deny the requested variance in writing within 60 days of the filing of the request for a variance, then the operator may file an application for hearing with the division clerk. In addition to the information required by Subsection A of 19.15.4.8 NMAC, the application shall include:

a. proof of notification to the surface owner of the location of the requested variance;

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

c. a statement in detail explaining why the applicant believes that the variance will protect fresh water, public health and safety, livestock and the environment.

4. The division clerk will set the application for hearing as soon as practicable.

C. Exceptions.

1. An operator may apply to the environmental bureau in the division's Santa Fe office for an exception to any of the permanent pit requirements of 19.15.17 NMAC.

2. The operator shall give notice of any request for an exception to the surface owner of the location of the requested exception. The division shall send email notice of the filing of the application for exception to persons who have filed a written request to be notified of the filing of such applications.

3. If the operator demonstrates to the environmental bureau in the division's Santa Fe office that the requested exception provides equal or better protection to fresh water, public health and safety, livestock and the environment, the environmental bureau in the division's Santa Fe office shall approve the exception within 60 days.

4. If any person with standing to contest the requested exception files a comment or request for hearing within 30 days after the operator or the division sends notice to such person of the requested exception, and the director determines that a comment or 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.

5. If the environmental bureau of the division's Santa Fe office denies the requested exception or fails to grant or deny the requested exception in writing within 60 days, then the operator may apply for a hearing. In addition to the information required by Subsection A of 19.15.4.8 NMAC, the application shall include:

a. proof of notification to the surface owner of the location of the requested exception,

b. a statement in detail explaining why the applicant wants an exception to 19.15.17 NMAC, and

c. a statement in detail explaining why the applicant believes that the exception will protect fresh water, public health and safety, livestock and the environment.

6. If the director orders a hearing or the operator applies for a hearing, the division clerk shall set the matter for hearing as soon as practicable.

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, and may approve, deny or approve an application with conditions within 30 days of receipt of an administratively complete application. If the Division does not take action within 30 days of receipt of an administratively complete application, then the application shall be deemed approved. If the division denies an application or approves the application subject to conditions not expressly provided by the Oil and Gas Act or in 19.15.17 NMAC, then the division shall notify the applicant by certified mail, return receipt requested, of the cause for the denial or additional conditions and shall set the matter for hearing if the applicant so requests within 10 days after receipt of such notification.

B. Rule of completeness. Within 10 business days of receipt of application the appropriate division district office will rule the application administratively complete or provide written notice of

deficiencies to the applicant's signatory. The application will be considered complete if written notice is not provided by the appropriate division district office within the 10 working day evaluation period. Deficiencies corrected by operator shall be considered administratively complete.

C. Conditions. The division may impose conditions or requirements that it determines are necessary and proper for the protection of fresh water, public health, safety or the environment. The division shall incorporate such additional conditions or requirements into the permit.

D. Denial of application. The division may deny 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, closed-loop system, below-grade tank or proposed alternative without detriment to fresh water, public health, safety or the environment.

E. Revocation, suspension or modification of a permit. The operator may apply to the division for a modification of the permit pursuant 19.15.17 NMAC. The operator shall demonstrate that the proposed modification complies with the applicable provisions of 19.15.17 NMAC. Any modification that is equivalent to an exception of any paragraph of 19.15.17 NMAC shall be subject to the notice and approval procedures required for an exception. 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 addition conditions, and the operator shall have 10 days after receipt of notification to request a hearing. 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, safety 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. Except for existing below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, the division's approval of an application to transfer a well or other facility with which a permitted pit, below-grade tank or closed-loop system is associated shall constitute approval of the transfer of the permit for the pit, below-grade tank or closed-loop system.

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.

H. If the division schedules a hearing on an application, the hearing shall be conducted according to 19.15.14.1206 through 19.15.14.1215 NMAC.