HOLLAND&HART LLP

William F. Carr
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October 29, 2007

HAND DELIVERY

Ms. Florene Davidson
Commission Clerk
Oil Conservation Commission
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: **PRE-HEARING STATEMENT AND EXHIBITS**
Oil Conservation Commission Case No. 14015: Application of the Oil Conservation Division for Repeal of Existing Rule 50 concerning pits and below grade tanks and adoption of a new rule governing pits, below grade tanks, closed loop systems and other alternative methods to the foregoing, and amending other rules to conforming changes, Statewide.

Dear Ms. Davidson:

Pursuant to Oil Conservation Division Rule 19.15.14.1211 NMAC, BP America Production Company, Inc.; Benson-Montin-Greer Drilling Corporation; Boling Enterprises, LTD; Burlington Resources Oil & Gas Company Chesapeake Energy Corporation; Chevron USA Inc.; ConocoPhillips Company; Devon Production Company; Dugan Production Corporation, Energen Resources Corporation; Marathon Oil Company, Marbob Energy Corporation, Merrion Oil and Gas Corporation; Occidental Permian, LTD (including OXY USA, Inc. and OXY USA WTP Limited Partnership); Samson Resources Company; D. J. Simmons, Inc.; Williams Production Company, LLC; XTO Energy, Inc.; Yates Petroleum Corporation ("the New Mexico Industry Committee") files herewith its pre-hearing statement and six copies of the exhibits it will present at the November 5, 2007 Oil Conservation Commission hearing on the above-referenced application. By copy of this letter, I am providing this pre-hearing statement and exhibits to all parties of record in this case.

Very truly yours,

William F. Carr
Attorney for the New Mexico Industry Committee

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HOLLAND&HART LLP

Enclosures
cc: Parties of record

David K. Brooks, Esq.
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources

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

IN THE MATTER OF THE APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION FOR REPEAL OF EXISTING RULE 50 CONCERNING PITS AND BELOW GRADE TANKS AND ADOPTION OF A NEW RULE GOVERNING PITS, BELOW GRADE TANKS, CLOSED LOOP SYSTEMS AND OTHER ALTERNATIVE METHODS TO THE FOREGOING, AND AMENDING OTHER RULES TO CONFORMING CHANGES, STATEWIDE.

CASE NO. 14015

PRE-HEARING STATEMENT

This Pre-Hearing Statement is submitted on behalf of the New Mexico Industry Committee by Holland & Hart LLP as required by Oil Conservation Division Rule 19.15.14.1204.B NMAC.

APPEARANCES OF PARTIES

APPLICANT

New Mexico Oil Conservation Division

ATTORNEY

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OPPOSITION

The New Mexico Industry Committee

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JOINT COUNSEL FOR THE NEW MEXICO INDUSTRY COMMITTEE

STATEMENT OF CASE

APPLICANT OIL CONSERVATION DIVISION:

The hearing concerns the repeal of existing Oil Conservation Division Rule 50 concerning pits and below grade tanks and the adoption of new rules governing pits, below grade tanks, closed loop systems ("Pit Rules") and other alternative methods addressing these issues. The Division also proposes to amend other rules to make them conform with the proposed new Pit Rules.

CONOCOPHILLIPS:

On October 22, 2007, the New Mexico Industry Committee filed with the Commission Clerk specific modifications to the proposed rules. Copies of these proposed amendments are attached to this Pre-hearing Statement. The Committee will present testimony and call expert witnesses to review the proposed rules and to present testimony in support of their recommended modifications. The testimony will also address the impact of these rules on oil and gas operators in New Mexico.

PROPOSED EVIDENCE

The New Mexico Industry Committee will present the following witnesses and evidence:

WITNESSES:	ESTIMATED TIME	NUMBER OF EXHIBITS
Daniel B. Stephens (Soil Scientist)	**2 Hours**	**4 Exhibits** (One exhibit consists of a power point presentation containing approximately 33 slides)

Dr. Stephens will address the fate and transport of chloride mass from pits used in conjunction with oil and gas operations. He will testify that the natural deep percolation and recharge rates in New Mexico are low, especially in vegetated areas. Dr. Stephens' testimony in regard to on-site closure by deep trench burial and composite samples of the contents of the drying pad will show using vadose zone and ground water modeling that 1) 3500 mg/L chloride in is protective of groundwater, and 2) volatile organic compounds (VOCs) will volatilize with the mixing of soil and as the pit dries prior to encapsulation.

Exhibit 1 to this Pre-hearing Statement is a description of Dr. Stephens' education and experience.

Exhibit 2 contains copies of each exhibit Dr. Stephens plans to offer as evidence in this hearing.

Exhibit 3 is a summary of Dr. Stephens' testimony.

Bruce A. Buchanan (Soil Scientist)	**2 Hours**	**3 Exhibits** (One exhibit consists of a power point presentation containing approximately 19 slides)

Dr. Buchanan will address the movement of salts in natural forming soils and how these natural processes relate to salt migration in reconstructed soils associated with pit reclamation. he will discuss processes of flow and redistribution of water in arid and semi-arid soils and the conditions required for salt movement. Specific data representing salt distribution in New Mexico soils will be discussed.

Testimony will include examples of soil redistribution in reclaimed mine soils and reclaimed drilling pits. Dr. Buchanan will testify that under the conditions where reconstructed soils are well-drained, soils do not migrate to or accumulate at the soil surface.

Dr. Buchanan will recommend that four (4) feet of cover soil be applied for pit closure. this application will prevent salt migration of the drilling material to the surface and be sufficient to establish and maintain a sustainable vegetative community.

Exhibit 4 to this Pre-hearing Statement is a description of Dr. Buchanan's education and experience.

Exhibit 5 contains copies of each exhibit Dr. Buchanan plans to offer as evidence in this hearing.

Exhibit 6 is summary of Dr. Buchanan's testimony.

Ben Thomas (Soil Scientist)	**2 Hours**	**3 Exhibits** (One exhibit consists of a power point presentation containing approximately 48 slides)

Dr. Ben Thomas is a health and environmental consultant from Houston, Texas and an Adjunct Professor at the University of Texas Health and Science Center at Houston. Trained in pathology and toxicology, he is internationally known as an expert on the value of considering risk as a basis for making decisions. In his testimony, he will discuss the underlying risk basis of the proposed Pit Rule. He will review the sampling programs conducted by the industry and by OCD to identify the constituents that are present in drilling pits from various parts of New Mexico, and will discuss which of those constituents should be the focus of regulatory attention. He will discuss OCD's approach as it relates to the pit constituents, and the unstated risk consequences of their approach.

Exhibit 7 to this Pre-hearing Statement is a description of Dr. Thomas' education and experience.

Exhibit 8 contains copies of each exhibit Dr. Thomas plans to offer as evidence in this hearing.

Exhibit 9 is summary of Dr. Thomas' testimony.

PROCEDURAL MATTERS

The New Mexico Industry Committee requests that after the hearing is called and opening statements presented the Commission hold a scheduling meeting to determine the order of witness presentation and the estimated time for each witness's testimony.

William F. Carr
Eric L. Hiser

Attorneys for the New Mexico Industry Committee:
BP America Production Company, Inc.; Benson-Montin-Greer Drilling Corporation; Boling Enterprises, LTD; Burlington Resources Oil & Gas Company Chesapeake Energy Corporation; Chevron USA Inc.; ConocoPhillips Company; Devon Production Company; Dugan Production Corporation, Energen Resources Corporation; Marathon Oil Company, Marbob Energy Corporation, Merrion Oil and Gas Corporation; Occidental Permian, LTD (including OXY USA, Inc. and OXY USA WTP Limited Partnership); Samson Resources Company; D. J. Simmons, Inc.; Williams Production Company, LLC; XTO Energy, Inc.; Yates Petroleum Corporation.

CERTIFICATE OF SERVICE

I certify that on October 29, 2007 I served a copy of the foregoing document to the following by U.S. Mail, postage prepaid, Hand Delivery or by Facsimile:

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ATTORNEY FOR THE NEW MEXICO OIL & GAS ACCOUNTABILITY PROJECT

William F. Carr

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 1 GENERAL PROVISIONS AND DEFINITIONS

* * * *

19.15.1.7 DEFINITIONS:
19.15.1.7 DEFINITIONS:

* * * *

B. Definitions beginning with the letter "B".

* * * *

(5) Below-grade tank ~~shall~~ means a vessel, excluding sumps ~~and~~ or pressurized pipeline drip traps, placed so that any part of the vessel's sidewalls is covered with soils such that the condition and integrity of the tank cannot be visually inspected~~where a portion of the tank's sidewalls is below the ground surface and not visible~~.

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

19.15.17.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.17.1 NMAC N, //07]

19.15.17.2 SCOPE: 19.15.17 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.17.2 NMAC N, //07]

19.15.17.3 STATUTORY AUTHORITY: 19.15.17 NMAC is adopted pursuant to the Oil and Gas Act, NMSA 1978, Section 7026, Section 70211 and Section 70212.
[19.15.17.3 NMAC N, //07]

19.15.17.4 DURATION: Permanent.
[19.15.17.4 NMAC N, //07]

19.15.17.5 EFFECTIVE DATE: _____, 2007, unless a later date is cited at the end of a section.
[19.15.17.5 NMAC N, //07]

19.15.17.6 OBJECTIVE: To regulate pits, closed-loop systems, below-grade tanks and sumps used in connection with oil and gas operations for the protection of public health, welfare and the environment.
[19.15.17.6 NMAC N, //07]

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. "Closed- loop system" means the use of portable tanks and mechanical and/or chemical systems for managing drilling/completion fluids and solids~~a system that uses above-ground steel tanks for the management of drilling or workover fluids without using below-grade tanks or pits~~.

C. "Division-approved facility" means a division permitted surface waste management or injection facility, a small landfarm registered pursuant to 19.15.36.16 NMAC, a facility permitted pursuant to 20.6.2 NMAC, a facility approved pursuant to 19.15.9.712 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.

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

E. "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.

F. "~~Restore~~Site Restoration" 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.

G. "Re-vegetate" means to seed or plant a site with plant species that are predominantly native in a quantity that controls erosion.

H. "Sump" means an impermeable vessel, or a collection device incorporated within a secondary containment system, with a capacity less than 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.

I. "Temporary pit" means a pit, including a drilling or workover pit, which is constructed with the intent that the pit will hold ~~liquids~~ fluids for less than six months and will be closed in less than one year.

[19.15.17.7 NMAC Rp, 19.15.2.7 NMAC, //07]

19.15.17.8 PERMIT 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_____, 200_ [effective date], 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 other 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.

[19.15.17.8 NMAC Rp, 19.15.2.50 NMAC, //07]

19.15.17.9 PERMIT APPLICATION:

A. An operator shall apply to the division for a permit to construct or use a pit, closed-loop system, below-grade tank or other proposed alternative method to which 19.15.17 NMAC applies, using form C-144, submitted either separately or as an attachment to a permit application for a facility with which the pit, closed-loop system, below-grade tank or other 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).

B. The permit application shall include ~~a detailed~~an engineering design plan.

(1) Permanent pits. A registered professional engineer shall certify engineering design plans for permanent pits. The engineering design 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 H_2S;

(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 permit application for a temporary pit shall include a design plan for the construction and operation of the temporary pit meeting the applicable requirements of 19.15.17.11

NMAC and shall includes a closure plan meeting the applicable requirements of 19.15.17.13 NMAC~~An engineering design plan for a temporary pit shall use appropriate engineering principles and practices and follow applicable manufacturers' recommendations. The engineering design plan shall include operating and maintenance procedures, a closure plan and 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 appropriate division district office to evaluate the actual and potential effects on soils, surface water and ground water. An engineering design 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~~.

(3) Closed-loop systems. An engineering design plan for a closed-loop system shall use appropriate engineering principles and practices ~~and follow applicable manufacturers' recommendations~~. The engineering design plan shall include operating and maintenance procedures and a closure plan. An engineering design 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.

(4) Below-grade tanks. An engineering design plan for a below-grade tank shall use appropriate engineering principles and practices and follow applicable manufacturers' recommendations. The engineering design plan shall include operating and maintenance procedures, a closure plan and 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 appropriate division district office to evaluate the actual and potential effects on soils, surface water and ground water. An engineering design plan for 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.

C. Closure plans. A closure plan that an operator submits in an engineering design plan, 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) 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 Subparagraph (d) of Paragraph (2) of 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, permitted or registered permanent pit, or an existing lined or unlined, permanent pit not permitted or registered, 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 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 to the appropriate division district office.

~~(4) An operator shall include in the permit application an engineering design plan with an attached closure plan.~~

D. Filing of permit application.

(1) Permanent pits and exceptions requested pursuant to 19.15.17.15 NMAC. An operator shall file an application, form C144, 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 19.15.17.15 NMAC and shall provide a copy to the appropriate division district office.

(2) Temporary 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, an operator shall file an application, form C144, and all required attachments with the appropriate division district office.

[19.15.17.9 NMAC Rp, 19.15.2.50 NMAC, //07]

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 below-grade tank:

(a) where ground water is less than 50 feet below the bottom of the temporary pit or below-grade tank;

(b) within ~~300~~ 100 feet of ~~a continuously flowing watercourse, or 200 feet of any other~~ any watercourse, lakebed, sinkhole or playa lake. Temporary pits adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression. ~~(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 ground water will be protected~~;

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

(d) within 500 horizontal feet of a public or private, domestic fresh water well or spring ~~that less than five households~~ used for domestic or stock watering purposes~~, or within 1000 horizontal 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 3273, as amended, unless the municipality specifically approves;

(f) within 500 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 subsurface integrity will not be compromised;

(h) within an unstable area, unless the operator demonstrates that it has incorporated engineering measures into the design to ensure that the 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 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 watercourse, lakebed, sinkhole or playa lake (measured from the ordinary highwater 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 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 horizontal feet of a private, domestic fresh water well or spring less than five households use for domestic or stock watering purposes, or within 1000 horizontal 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 3273, 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 subsurface integrity will not be compromised;

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

(i) within a 100-year floodplain.

(3) An operator shall not locate material excavated from the construction of the pit:

(a) within ~~300~~ 100 feet of ~~a continuously flowing watercourse, or 200 feet of any other~~ any watercourse, lakebed, sinkhole or playa lake. Excavated material from the construction of the pit adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression. ~~(measured from the ordinary highwater mark), unless the division approves an alternative distance based upon the operator's demonstration that surface and ground water will be protected~~;

(b) within 500 feet of a wetland; or

(c) within a 100year floodplain.

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 ground water is less than 50 feet below the bottom of the waste;

(2) within ~~300~~ 100 feet of ~~a continuously flowing watercourse, or 200 feet of any other~~ any watercourse, lakebed, sinkhole or playa lake. An onsite closure adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression. ~~(measured from the ordinary highwater mark), unless the division approves an alternative distance based upon the operator's demonstration that surface and ground water will be protected~~;

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

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

(5) within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3273, as amended, unless the municipality specifically approves;

(6) within 500 feet of a wetland;

(7) 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;

(8) within an unstable area, 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

(9) within a 100year floodplain.

[19.15.17.10 NMACRp, 19.15.2.50 NMAC, //07]

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 well site that the operator controls. The operator shall post the sign in a manner and location such that a person can 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 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 operations, the operator is not required to fence the edge of the pit adjacent to the drilling rig.

(2) The operator shall fence or enclose a pit or below-grade tank located within 1000 feet of a 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 operations, the operator is not required to fence the edge of the temporary pit adjacent to the drilling rig.

(3) The operator shall fence any other pit or below-grade tank to exclude wildlife and livestock, with at least four strands of barbed wire in the interval between one foot and ~~five~~ 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.

E. Netting. The operator shall ensure that a permanent pit or a permanent open top tank is screened, netted or otherwise rendered non-hazardous to wildlife, including migratory birds. Where netting is not feasible, the operator shall routinely inspect for and 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 oil, ~~gas~~ or water to prevent uncontrolled 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 slope does not place undue stress upon the liner and is consistent with angle of repose. ~~The operator shall construct a temporary pit so that the slopes are no steeper than two horizontal feet to one vertical foot (2H:1V). The appropriate division district office may approve an alternative to the slope requirement if the operator demonstrates that it can construct and operate the temporary pit in 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~~12-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 seams where possible. The operator shall overlap liners four to six inches before seaming, 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.

(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 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 rig is not required to have run-on protection if the operator is using the temporary pit to collect liquids escaping from the rig.

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

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

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 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. A stabilized air pressure of 35 psi, plus or minus one percent, shall be maintained for at least five minutes. The operator shall overlap liners four to six inches before seaming, 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 lower and upper 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 cleanout 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 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 size of a permanent pit shall not exceed 10 acrefeet, 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. 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 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 so as to include the following:

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

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

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

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

(1) The below-grade tank's side walls, where the tank's bottom is below-grade, shall be open for visual inspection for leaks. The below-grade tank's bottom shall be equipped with an underlying mechanism to divert leaked liquid to a location that can be visually inspected. A below-grade tank not meeting these conditions shall be in a vault or have a double wall that will contain any leaked liquids.

(2) A below-grade tank shall have secondary containment and leak detection. A tank with double-walls is exempt from the secondary containment requirement.

(3) The operator of a below-grade tank constructed prior to _____, 200_ [effective date] that does not have secondary containment and leak detection shall test its integrity annually. If the existing below-grade tank does not demonstrate integrity, the operator shall promptly install a below-grade tank that complies with Paragraph (2) of Subsection I of 19.15.17.11 NMAC. In any event, the operator shall equip or retrofit such below-grade tank with secondary containment and leak detection, or close it, within five years after _____, 200_ [effective date].

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

(5) 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.

(6) A below-grade tank system shall consist of either a double wall system with the capability to detect leaks or a tank placed within a geomembrane lined collection system, or an alternative system that the appropriate division district office approves based upon the operator's demonstration that an alternative provides equivalent or better protection.

(7) The operator shall design and construct a below-grade tank system in accordance with the following requirements, if the below-grade tank system consists of a tank placed within a geomembrane lined collection system.

(a) The operator shall install a geomembrane liner upon the constructed foundation, specified in Paragraph (5) of Subsection I of 19.15.17.11 NMAC, prior to the placement of the collection system and tank. The installed geomembrane liner shall extend above the existing grade. The liner shall consist of 30mil flexible PVC or 60mil 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 SW846 method 9090A.

(b) The operator shall install slotted or perforated drainage pipe (lateral) on the geomembrane liner with the drainage pipe sloped at least one inch per 10 feet towards the collection system. The drainage pipe shall be at least one inch in diameter.

(c) The operator shall cover the drainage pipe with sand, gravel or other material with sufficient permeability to convey fluids to the drainage pipe.

(d) The operator shall install the tank upon the lined collection system and connect a riser pipe to the collection system. The riser pipe shall be at least two inches in diameter.

(e) The operator shall secure the secondary liner to the tank above the ground surface in a manner that prevents rainwater from entering the space between the tank and liner.

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

~~**J.** On-site deep trenches for closure. The operator shall design and construct an on-site deep trench for closure, specified in Paragraph (2) of Subsection B of 19.15.17.13 NMAC or Paragraph (2) of Subsection D 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 (e) of Paragraph (2) 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 Paragraphs (2) and (3)~~

~~of Subsection G of 19.15.17.13 NMAC.~~

~~(2) An on-site deep 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 deep trench shall be constructed with a geomembrane liner. The geomembrane shall consist of a 20mil 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 ultraviolet light. Liner compatibility shall comply with EPA SW846 method 9090A.~~

~~(5) The operator shall minimize liner seams and orient them up and down, not across a slope. The operator shall use factory seams where possible. The operator shall overlap liners four to six inches before seaming, 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.~~

~~(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 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 excavated 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 20mil 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 SW846 method 9090A.~~

[19.15.17.11 NMACRp, 19.15.2.50 NMAC, //07]

19.15.17.12 OPERATIONAL REQUIREMENTS:

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

(1) The operator shall operate and maintain a pit, 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 ~~all~~ drilling fluids as reasonably possible. Where fluids cannot be recycled, reused or reclaimed, then they shall be disposed at a facility approved by the Division. All fluid management shall be done in a manner 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 as defined by 20.4.1 NMAC in a pit, closed-loop system, below-grade tank or sump.

(4) If the integrity of the pit liner 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 and repair the damage or replace the liner.

(5) If a lined pit develops a leak, or if any penetration of the liner occurs below the liquid's surface, then the operator shall remove all liquid above the damage or leak line from the pit within 48 hours and repair the damage or replace the liner.

~~(6) The operator shall install a level measuring device in a lined pit containing fluids to monitor the level of the fluid surface, so that the operator may recognize unanticipated change in volume of fluids.~~

(~~7~~6) The injection or withdrawal of liquids from a lined pit shall be accomplished through a header, diverter or other hardware or material that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.

(~~8~~7) The operator shall operate and install a pit, below-grade tank or sump to prevent the collection of surface water run-on.

(98) 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 used or generated during the drilling 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 to contain hydrocarbon - based drilling fluids that the appropriate division district office approves. Immediately after cessation of a drilling or workover operation, the operator shall remove any visible ~~or~~ and measurable layer of oil from the surface of a drilling or workover pit.

(2) The operator shall maintain at least two feet of freeboard for a temporary pit.

(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 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 free liquids from a drilling pit within 30 days from the date that the operator releases the drilling rig. The appropriate division district office may grant an extension of up to three months.~~

~~**(5)** The operator shall remove all free liquids from a workover pit within 15 days from the date that the operator releases the workover rig. The appropriate division district office may grant an extension of up to three months.~~

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

(1) The operator shall maintain at least three feet of freeboard for a permanent pit.

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

D. Below-grade tanks. The operator shall not allow a below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.

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

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

(2) An operator shall test a sump that can be removed from its emplacement by visual inspection. The operator shall test other sumps by appropriate mechanical means.

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

[19.15.17.12 NMACRp, 19.15.2.50 NMAC, //07]

19.15.17.13 CLOSURE REQUIREMENTS:

A. Time requirements for closure. An operator shall close a pit, closed-loop system or below-grade tank within the 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 existing unlined, permitted or registered permanent pit shall be closed within two years after _____[the effective date of 19.15.17 NMAC].

(2) An existing lined or unlined, permanent pit not permitted or registered shall be closed within 60 days after_____, 200_ [effective date].

(3) An existing unlined, temporary pit shall be closed within three months after_____, 200_ [effective date].

(4) An existing below-grade tank that is not equipped with secondary containment and leak detection shall be closed within five years after_____, 200_ [effective date], if not retrofitted with secondary containment and leak detection in accordance with Subsection I of 19.15.17.11 NMAC.

(5) Any other permitted permanent pit shall be closed 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.

(6) Any other permitted temporary pit shall be closed within six months from the date the operator releases the rig. The appropriate division district office may grant an extension not to exceed three

months.

(7) A closed-loop system permitted under 19.15.17 NMAC or in operation on _____, 200_ [effective date], shall be closed within six months from the date the operator releases the rig. The appropriate division district office may grant an extension not to exceed six months.

(8) A permitted below-grade tank shall be closed within 60 days 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.

B. Closure methods for temporary pits. The operator of a temporary pit shall ~~remove all liquids from the temporary pit prior to implementing a closure method 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 removing all free liquids and excavating all contents and~~, if applicable,~~ synthetic pit liners, if applicable, 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. The operator shall collect, at a minimum, a five point, composite sample and field analyze for chlorides to demonstrate that the chlorides concentration does not exceed 5000 mg/kg, or the background concentration, whichever is greater, as determined by EPA method 300.1 or other EPA method that the division approves. The operator shall notify the division of its results on form C-141, and the division may require additional delineation. ~~; collect individual grab samples from any hot spot; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW846 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 C141. The division may require additional delineation upon review of the results.~~

(c) The operator may propose alternative testing of the soils beneath the pit to determine whether a release has occurred based on site-specific hydrogeology, and propose alternative site closure standards for district approval. The operator shall notify the division of its results on form C-141, and the division may require additional information to protect public health and the environment.

(d) If records show that there is no useable ground water below the pit or no hydraulic connection between the pit and useable ground water, no testing is required.

(e) If the operator or the division determines that a release has occurred and there is a reasonable possibility to impact useable ground water, then the operator shall comply with 19.15.3.116 NMAC and 19.15.1.19 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~~ The operator shall backfill the ~~temporary pit~~ excavation with compacted, nonwaste containing, earthen material; construct a ~~division-prescribed~~ soil cover; and re-vegetate the site. The ~~division-prescribed~~ soil cover and re-vegetation ~~requirements~~ shall comply with the applicable Paragraphs ~~(1) and (3)~~ of Subsection G of 19.15.17.13 NMAC and Subsection H of 19.15.17.13 NMAC.

(2) Closure In Place. The operator must meet siting requirements in Section 19.15.17.10 A. (1). The following requirements and standards shall apply if the closure method involves closure in place.

(a) If ground water is greater than 50 feet below the pit and chloride concentration in the geotechnically stabilized pit contents do not exceed 3,500 mg/l based on EPA Methods 1312 and 300.1, the operator shall remove all free liquids from the pit, shall add inert materials to make the pit contents geotechnically stable, cover the pit contents with compacted earthen material, and revegetate.

(b) If records show that there is no useable ground water below the pit or no hydraulic connection between the pit and useable ground water, the operator shall remove all free liquids from the pit, shall add inert materials to make the pit contents geotechnically stable, cover the pit contents with compacted earthen material, and revegetate.

(23) ~~On-site~~D ~~deep~~ Ttrench Bburial. The operator shall demonstrate and comply with 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 deep trench burial.

(34) 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 hot spot; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW846 methods 8021B 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 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 C141. 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 19.15.3.116 NMAC and 19.15.1.19 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; and re-vegetate the site. The division-prescribed soil cover and re-vegetation requirements shall comply with Paragraphs (1) and (3) of Subsection G of 19.15.17.13 NMAC and Subsection H 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 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.

(2) On-site deep trench burial. The operator shall demonstrate and comply with 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 deep trench 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 all 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 on-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 hot spot; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW846 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 C141. 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 19.15.3.116 NMAC and 19.15.1.19 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; and re-vegetate the site. The division-prescribed soil cover and re-vegetation requirements shall comply with Paragraphs (1) and (3) of Subsection G of 19.15.17.13 NMAC and Subsection H 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 deep trench burial, or an alternative closure method pursuant to Paragraph (3) of Subsection D of 19.15.17.13 NMAC or Paragraph (~~3~~4) of Subsection B of 19.15.17.13 NMAC and Subsection B of 19.15.17.15 NMAC.

(1) General requirements. ~~**(a)** The operator shall demonstrate, at the time of initial application for the permit, that the site where the operator proposes to implement an on-site closure method is not located within a 100 mile radius of a division-approved facility or an out-of-state waste management facility. If the operator demonstrates that neither a division-approved facility nor an out-of-state waste management facility is available within the prescribed distance, then the operator may pursue the on-site closure method.~~

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

(~~e~~b) ~~The operator shall obtain the surface owner's written consent to the operator's proposal of an on-site closure method. The operator shall attach the original, signed consent to the permit application.~~ The operator shall notify the surface owner of the temporary pit and, if applicable, the deep trench burial.

(~~d~~c) The operator shall comply with the closure requirements and standards of Paragraph (2) 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 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 involves on-site deep trench 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 19.15.17.15 NMAC.

~~**(e)** The operator shall test the soils beneath the drying pad associated with a closed-loop system or temporary pit after excavation 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 hot spot; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW846 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 C141. The division may require additional delineation upon review of the results.~~

~~(f) If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Subparagraph (e) of Paragraph (1) of Subsection F of 19.15.17.13 NMAC, then the operator shall backfill the excavation with compacted, nonwaste containing earthen material; construct a division-prescribed soil cover; and re-vegetate the site. The division-prescribed soil cover and re-vegetation shall comply with Paragraphs (1) and (3) of Subsection G of 19.15.17.13 NMAC and Subsection H of 19.15.17.13 NMAC.~~

~~(g) If the operator or the division determines that a release has occurred, then the operator shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.~~

(2) ~~On-site deep trench burial~~ Deep Trench Burial (DTB). The following requirements and standards shall apply if the closure method involves DTB.

(a) The operator shall demonstrate and comply with the provisions of Paragraph (1) of Subsection F of 19.15.17.13 NMAC.

~~(b) The operator shall use a separate on-site deep trench for closure of each drying pad associated with a closed-loop system or temporary pit.~~

(~~e~~b) Unless the contents of the drying pad associated with a closed-loop system or temporary pit and associated waste meet the closure standards of Subparagraph (~~d~~c) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC, the operator shall propose a method to treat the contents and associated waste. Any proposed treatment method shall optimize waste minimization and reduce contaminant concentrations in order to protect fresh water, public health and the environment. Proposed treatment methods shall stabilize or solidify the contents to a bearing capacity sufficient to support the final cover.

(~~d~~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 after treatment, if treatment is required, 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~~ 5000 mg/kg. Using EPA SW846 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 ~~5,000~~ 3500 mg/l ~~and that the concentrations of the water contaminants specified in Subsections A and B of 20.6.2.3103 NMAC as determined by appropriate EPA methods do not exceed the standards specified in Subsections A and B of 20.6.2.3103 NMAC, unless otherwise specified above~~.

(~~e~~d) 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 following design and construction requirements.

(i) The operator shall 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 Paragraphs (2) and (3) of Subsection G of 19.15.17.13 NMAC.

(ii) An on-site deep 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

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

(iv) An on-site deep trench shall be constructed with a geomembrane liner. The geomembrane shall consist of a 12-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 ultraviolet light. Liner compatibility shall comply with EPA SW846 method 9090A.

(v) The operator shall minimize liner seams and orient them up and down, not across a slope. The operator shall use factory seams where possible. The operator shall overlap liners four to six inches before seaming, 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.

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

liner.

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

(viii) 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.

(ix) The operator shall install a geomembrane cover over the excavated 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.

(x) The geomembrane cover shall consist of a 12-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 SW846 method 9090A.

~~specified in Paragraphs (1) through (8) of Subsection J of 19.15.17.11 NMAC.~~

(e) The operator shall remove liquids from the pit, shall add inert materials to make the pit contents geotechnically stable, excavate and transfer all contents and synthetic pit liners to the lined trench. The excavated materials shall pass the paint filter liquids test (EPA SW-846, method 9095).

(f) The operator shall test the soils beneath the pit to determine whether a release has occurred. The operator shall collect, at a minimum, a five point, composite sample and field analyze for chlorides to demonstrate that the chlorides concentration does not exceed 5000 mg/kg, or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141, and the division may require additional delineation.

(g) The operator may propose alternative testing of the soils beneath the pit to determine whether a release has occurred based on site-specific hydrogeology, and proposed alternative site closure standards for district approval. The operator shall notify the division of its results on form C-141, and the division may require additional information to protect public health and the environment.

(h) If records show that there is no useable ground water below the pit, no testing is required.

~~(f) 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 (d) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC.~~

(gi) If the operator or the division determines that a release has occurred and there is a reasonable possibility to impact useable ground water, then the operator shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate. The operator may propose to transfer the excavated, contaminated soil into the lined trench.

(hj) 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)~~ (2)(d) of Subsection J of 19.15.17.~~11~~13 NMAC.

(ik) The operator shall cover the geomembrane lined and covered, filled, deep trench with compacted, nonwaste containing, earthen material; construct a division-prescribed soil cover; and re-vegetate the site. The division-prescribed soil cover and revegetation shall comply with Paragraphs (2) and (3) of Subsection G of 19.15.17.13 NMAC and Subsection H of 19.15.17.13 NMAC.

G. Soil cover designs.

(1) The soil cover for closures where the operator has removed 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.

(2) The soil cover for ~~on-site~~ deep trench burial or closure in place shall consist of a minimum of four feet of compacted, nonwaste 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.

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

H. Revegetation requirements:

(1) Upon completion of closure, the operator shall substantially restore the impacted surface

area to a similar ~~the~~ condition to that existing ~~that existed~~ prior to oil and gas operations, by placement of the soil cover and revegetation of the site~~, and maintain the cover established by revegetation, which shall not include noxious weeds, through two successive growing seasons~~.

(2) The operator may propose an alternative to the revegetation requirement if the operator demonstrates that the proposed alternative effectively prevents erosion, and protects fresh water, human health and the environment. The operator shall seek the surface owner's agreement to the proposed alternative ~~shall be agreed upon by the surface owner~~. If the surface owner agrees, t~~T~~he operator shall submit the proposed alternative, with written documentation that the surface owner agrees to the alternative, to the division ~~for approval~~. If the surface owner does not agree to the alternative, the operator may submit the alternative to the appropriate district office. The submission must include evidence demonstrating the proposed alternative effectively prevents erosion, and protects fresh water, public health and the environment. The surface owner may submit written objections to the alternative method to the division. The appropriate district office may reject the proposal, after notice and an opportunity for hearing, if it finds that the proposed alternative does not prevent erosion, protect fresh water, human health and the environment.

I. 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.

(2) 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.

(3) 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.

J. Closure report. Within 60 days of closure completion, the operator shall submit a closure report on form C144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; a plot plan; and details on backfilling, 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.

[19.15.17.13 NMACRp, 19.15.2.50 NMAC, //07]

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, 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 protect 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 a so-called "emergency pit". 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.
[19.15.17.14 NMACRp, 19.15.2.50 NMAC, //07]

19.15.17.15 EXCEPTIONS:

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 closure requirement of Subparagraph (c) of Paragraph (1) of Subsection F of 19.15.17.13 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 other 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 70223, 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 other proposed alternative is, or will be, located, and to such other persons as the environmental bureau in the division's Santa Fe office may direct by certified mail, return receipt requested, and issue public notice. 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 other proposed alternative will be located. Required written and public notices require the environmental bureau in the division's Santa Fe office's approval. The environmental bureau in the division's Santa Fe office may grant the exception administratively if either the operator files with the environmental bureau in the division's Santa Fe office written waivers from all persons to whom notice is required or the environmental bureau in the division's Santa Fe office receives no objection within 30 days of the time the applicant gives notice. If the environmental bureau in the division's Santa Fe office receives an objection and the director determines that the objection has 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 19.15.14.1206 through 19.15.14.1215 NMAC.~~

~~(3) If the director does not determine that a hearing is necessary due to an objection's 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 an objection. 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 an objection to the proposed exception.~~

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 provides equivalent or better protection of fresh water, public health and the environment.

(2) The operator shall remove all liquids prior to implementing a closure method and dispose of the liquids in a divisionapproved 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 of satisfaction 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 as approved by the environmental bureau in the division's Santa Fe office: waste minimization; treatment using best demonstrated available technology; reclamation; reuse; recycling; or reduction in available contaminant concentration; and such conditions as the environmental bureau in the division's Santa Fe office deems relevant 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.

[19.15.17.15 NMACRp, 19.15.2.50 NMAC, //07]

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~~ shall approve, deny or approve an application with conditions within sixty (60) days of receipt. 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 NMAC, then the division shall notify the applicant by certified mail, return receipt requested, and shall set the matter for hearing if the applicant so requests within 10 days after receipt of such notification. If the division does not approve, deny, or approve with conditions an application within 60 days of receipt, the matter will be set for the next commission hearing.

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 other 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 other 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. 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 70223, as amended.

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

[19.15.17.16 NMACRp, 19.15.2.50 NMAC, //07]

19.15.17.17 TRANSITIONAL PROVISIONS:

A. After_____, 200_ [effective date], unlined temporary pits are prohibited.

B. An operator of an existing operation that is required to close pursuant to Paragraphs (1), (2), (3) 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 30 days after_____, 200_ [effective date].

C. An operator of an existing lined, permitted or registered, permanent pit shall comply with the construction requirements of 19.15.17 NMAC within two years after_____, 200_ [effective date]. Prior to complying with the construction requirements of 19.15.17 NMAC, an operator of an existing lined, permitted, permanent pit shall request a modification pursuant to Subsection E of 19.15.17.16 NMAC; and an operator of an existing lined, registered, permanent pit shall apply to the division for a permit pursuant to 19.15.17 NMAC.

D. An operator of an existing below-grade tank shall comply with the permitting requirements of 19.15.17 NMAC within 90 days after_____, 200_ [effective date]. Prior to complying with the construction requirements of 19.15.17 NMAC, an operator of an existing below-grade tank shall request a permit modification pursuant to Subsection E of 19.15.17.16 NMAC.

E. An operator of an existing pit or below-grade tank permitted prior to_____, 200_, [effective date of 19.15.17 NMAC] 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 NMAC.

(2) An operator of an existing permitted or registered, temporary pit shall comply with the operational and closure requirements of 19.15.17 NMAC.

(3) An operator of an existing below-grade tank shall comply with the operational and closure requirements of 19.15.17 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 NMAC into compliance with those requirements or close it within five years after _____, 200_ [effective date].

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 NMAC.

[19.15.17.17 NMACRp, 19.15.2.50 NMAC, //07]

NEW MEXICO INDUSTRY COMMITTEE

A Consortium of New Mexico Oil and Gas Operators

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110 N. Guadalupe, Suite 1
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October 22, 2007

Ms. Florene Davidson, Commission Clerk
New Mexico Oil Conservation Commission
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Industry Committee recommended modifications to proposed rule change
Case No. 14015 (19.15.17 NMAC, Pit Rule amendments)

Dear members of the Oil Conservation Commission:

Pursuant to Order No. R-12819 and 19.15.14.1204 NMAC, we are submitting this letter on behalf the Industry Committee concerning the proposed Pit Rule (Case No. 14015). This letter presents the Industry Committee's recommended modifications to the Oil Conservation Division (OCD) September 21, 2007 draft of a new rule governing pits, below grade tanks, closed loop systems and other alternative methods to the foregoing, and amending other rules to make conforming changes (collectively, the "Pit Rule"). This letter is accompanied with a redlined version of the proposed Pit Rule incorporating the Industry Committee's recommended modifications in accordance with 19.15.14.1204.C NMAC.

The Industry Committee is comprised of representatives of BP America Production Company, Inc., Benson-Montin-Greer Drilling Corporation, Boling Enterprises, Ltd., Burlington Resources Oil & Gas Company, LP, Chesapeake Energy Corporation, Chevron USA, Inc., ConocoPhillips Company, D.J. Simmons, Inc., Devon Energy Production Company, Dugan Production Corp., Energen Resources, Marathon Oil Company, Marbob Energy Corporation, Merrion Oil and Gas Corp., Occidental Permian, Ltd, OXY USA, Inc., OXY USA WTP Limited Partnership, Samson Resources, Company, Williams Production Company, LLC, XTO Energy, Inc. and Yates Petroleum Corporation, plus others who have assisted, but not yet formally joined, all of whom have extensive oil and gas operations within the State of New Mexico. These recommended modifications are an effort to incorporate current science and operational flexibility into the proposed Pit Rule. The Industry Committee, made up of the listed oil and gas companies, has multiple facilities and operations that the revised regulations will substantially impact.

At hearing, the Industry Committee will demonstrate that the OCD's proposed amendments to the existing Pit Rule are unnecessary, harmful to the environment OCD purports to protect, arbitrary and capricious, and harmful to the industry that both the OCD and this Commission are charged with stewardship over in the interests of all the people of New Mexico. At hearing, the Industry Committee will elicit expert, industry and other witness testimony in support of its contentions and in support of the recommended modifications contained in this letter. The Industry Committee hopes that the Commission will give its recommended modifications due consideration.

General Comments

- **Pit application and alternative approvals should be retained at the district office level.** The proposed rule proposes a wholesale transfer of pit application and pit alternative approval authority form the Division's district offices to the Santa Fe office. The Industry Committee believes that this transfer of functions is inappropriate because the local district office are better staffed with both environmental and inspector personnal and are more familiar with the proposed pit locations and hence better able to investigate a site should it be necessary. In addition, given the large volume of pit applications that would be required under the proposed rule, it is unlikely that the Santa Fe office staff would be able to process applications in a timely fashion.
- **The proposed pit rule improperly attempts to adjust the contractual relations between operator and surface owner.** The Surface Owner Protection Act and surface damage agreements provide the appropriate legal framework for the relationship between operators and surface owners. As written, however, the regulation provides the surface owner with veto power over certain operator activities and operators are provided no recourse in the event of a veto. Whether the surface owner agrees or not to a proposed operator alternative rarely, if ever, addresses a risk to human health, fresh water and the environment. The proposed rule is merely an attempt to realign the property interests between industry and surface owners from that established by the legislature and is beyond the Commission's mandate.
- **All references to "liquids" in the rule should be replaced with "fluids" to conform to general industry practice.** A review of standard industry publications confirms that, in general, materials handled in pits, below-grade tanks and closed-loop systems are referred to as "fluids." Use of liquids introduces confusion at the operations level. Therefore, use of the standard industry term "fluids" is preferable.

Specific Comments

The Industry Committee has the following specific recommended modifications on the proposed Pit Rule from OCD.

19.15.1.7.B.5 NMAC

The Industry Committee proposes that the definition of "Below-grade tanks" be revised to exclude those tanks whose sidewalls can be visually inspected. As a result of OCD's previous Pit Rule revision, many operators constructed steel tanks in depressions or vaults below the natural elevation of the ground to allow for gravity flow and reduce freezing and breakage of lines. These tanks should be excluded from regulation. Consequently, the Industry Committee proposes the definition of below-grade tank be revised as follows:

> (5) Below-grade tank ~~shall~~ means a vessel, excluding sumps ~~and~~ or pressurized pipeline drip traps, placed so that any part of the vessel's sidewalls is covered with soils such that the condition and integrity of the tank cannot be visually inspected ~~where a portion of the tank's sidewalls is below the ground surface and not visible~~.

19.15.17.7.B NMAC

The Industry Committee proposes that OCD revise the definition of "Closed-loop system" to better specify those operations constituting a closed loop system. The Industry Committee recommends the definition be revised as follows:

> **B.** "Closed-loop system" means the use of portable tanks and mechanical and/or chemical systems for managing drilling/completion fluids and solids ~~a system that uses above ground steel tanks for the management of drilling or workover fluids without using below-grade tanks or pits~~.

19.15.17.7.C NMAC

The Industry Committee proposes that OCD revise the definition of "Division-approved facility" to include small landfarms registered pursuant to 19.15.36.16 NMAC. Later closure requirements in the proposed Pit Rule allow an operator to transfer materials to a division approved facility. The regulations should allow an operator to utilize a registered small landfarm in addition to permitted surface waste management facilities. Thus, the Industry Committee proposes that OCD revise the Pit Rule as follows:

> **C.** "Division-approved facility" means a division permitted surface waste management or injection facility, a small landfarm registered pursuant to 19.15.36.16 NMAC, a facility permitted pursuant to 20.6.2 NMAC, a facility approved pursuant to 19.15.9.712 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.

19.15.17.7.F NMAC

The Industry Committee proposes that OCD change "Restore" to "Site Restoration" to clarify that this definition specifically applies to a site governed by this regulation.

19.15.17.7.I NMAC

The Industry Committee proposes that OCD change "liquids" to "fluids" in the definition of "Temporary pit."

19.15.17.9.B NMAC

The Industry Committee proposes that OCD replace "a detailed engineering design plan" with "an engineering design plan." The details of the design plan are enumerated in the condition and providing the designated information provides the requisite specificity.

19.15.17.9.B.2 NMAC

The Industry Committee proposes that this condition be revised to remove reference to "applicable manufacturer's recommendations" because there are not manufacturers of temporary pits. A hydrogeologic report as described in this condition is overly burdensome and expensive for a temporary pit. In total, the Industry Committee proposes that OCD revise this condition as follows:

> (2) Temporary pits. The permit application for a temporary pit shall include a design plan for the construction and operation of the temporary pit meeting the applicable requirements of 19.15.17.11 NMAC and shall include a closure plan meeting the applicable requirements of 19.15.17.13 NMAC. ~~An engineering design plan for a temporary pit shall use appropriate engineering principles and practices and follow applicable manufacturers' recommendations. The engineering design plan shall include operating and maintenance procedures, a closure plan, and 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 appropriate division district office to evaluate the actual and potential effects on soils, surface water and ground water. An engineering design 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.~~

19.15.17.9.B.3 NMAC

As with permit applications for temporary pits described above, the Industry Committee proposes that reference to manufacturer's recommendations be removed. The Industry Committee proposes that this condition be revised as follows:

> (3) Closed-loop systems. An engineering design plan for a closed-loop system shall use appropriate engineering principles and practices ~~and follow applicable manufacturers' recommendations~~. The engineering design plan shall include operating and maintenance procedures and a closure plan. An engineering design 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.

19.15.17.9.C.4 NMAC

The Industry Committee proposes that OCD delete this condition because the requirement to attach a closure plan to the engineering design plan in the permit application is required elsewhere in the Pit Rule.

19.15.17.10.A.1.b, 19.15.17.10.A.3.a, & 19.15.17.10.C.2 NMAC

In parts of New Mexico, especially the Northwest, small dry watercourses are so numerous that it is unrealistic to attempt to locate all temporary pits, excavated materials, or on-site closure methods more than 200 feet from them. For this reason, the Industry Committee recommends that OCD retain the siting requirements in the current rule and revise the proposed rule as follows:

19.15.17.10.A.1.b NMAC

(b) within ~~30~~1000 feet of ~~a continuously flowing watercourse, or 200 feet of any other in~~ any watercourse, lakebed, sinkhole or playa lake. Temporary pits adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression. ~~(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 ground water will be protected~~;

19.15.17.10.A.3.a NMAC

~~(a)~~ within 100~~300~~ feet of ~~a continuously flowing watercourse, or 200 feet of any other in~~ any watercourse, lakebed, sinkhole or playa lake. Excavated material from the construction of the pit adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression. ~~(measured from the ordinary highwater mark), unless the division approves an alternative distance based upon the operator's demonstration that surface and ground water will be protected~~;

19.15.17.10.C.2 NMAC

(2) within 100~~300~~ feet of ~~a continuously flowing watercourse, or 200 feet of any other in~~ any watercourse, lakebed, sinkhole or playa lake. An onsite closure adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression. ~~(measured from the ordinary highwater mark), unless the division approves an alternative distance based upon the operator's demonstration that surface and ground water will be protected~~;

19.15.17.10.A.1.d NMAC

The Industry Committee proposes that this condition be revised because it currently provides greater protection for public wells or springs. The Industry Committee proposes that the siting requirements be revised to prohibit temporary pits or below grade tanks from being within 500 feet of freshwater sources. Thus, the Industry Committee proposes the regulation be revised as follows:

> **(d)** within 500 horizontal feet of a pubic or private, domestic fresh water well or spring ~~that less than five households~~ used for domestic or stock watering purposes~~, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application~~

19.15.17.10.C.4 NMAC

As discussed above, this condition should be revised because it currently provides greater protection for public wells or springs. The Industry Committee proposes that OCD revise this condition as follows:

> **(4)** within 500 horizontal feet of a public or private, domestic fresh water well or spring ~~less than five households~~ used for domestic or stock watering purposes ~~or within 1000 horizontal feet of any other fresh water well or spring, existing at the time the operator files the application for exception~~

19.15.17.11.D.3 NMAC

The Industry Committee proposes that OCD replace "five feet" with "four feet" in this condition. Standard fence height is four feet and establishing a five foot condition would require operators to purchase and install non-standard height fencing at great additional time and expense.

19.15.17.11.F.1 NMAC

The Industry Committee recommends that F.(1) be revised as follows, because gas is not designed to be confined by these units:

> (1) The operator shall design and construct a temporary pit to ensure the confinement of oil~~, gas~~ or water to prevent uncontrolled releases.

19.15.17.11.F.2 NMAC

The Industry Committee proposes that OCD remove reference to the 2H:1V slope requirements because it unnecessarily increases the pit size. The increase in pit size is particularly undesirable to many of the industry's landowners. Instead, the Industry Committee recommends that slope be established to avoid undue stress on the liner system and not to exceed the angle of repose. Also, the additional surface area above the pit area limits an operator's ability to place heavy equipment over the center of the pit making closure more difficult and less effective. This problem is exacerbated with the time limitations for closure limiting the time for evaporation and compaction. Thus, the Industry Committee proposes that OCD revise the condition as follows:

> **(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 slope does not place undue stress upon the liner and is consistent with angle of repose. ~~The operator shall construct a temporary pit so that the slopes are no steeper than two horizontal feet to one vertical foot (2H:1V). The appropriate~~

~~division district office may approve an alternative to the slope requirement if the operator demonstrates that it can construct and operate the temporary pit in safe manner to prevent contamination of fresh water and protect public health and the environment.~~

19.15.17.11.F.3 NMAC

The OCD has not provided any scientific rationale for replacing the requirement to use a 12-mil LLDPE liner agreed to at the Pit Rule Task Force meetings with a requirement to use a 20-mil LLDPE liner. With the new siting, design, and operational requirements the Pit Rule requires, a 12-mil LLDPE liner is protective of human health and the environment. For this reason, this condition should be revised to replace "20-mil LLDPE liner" with "12-mil LLDPE liner."

19.15.17.11.F.9 NMAC

The Industry Committee recommends that the berming requirement be revised as follows to allow proper site contouring to address run-on requirements:

> (9) The operator shall design and construct a temporary pit to prevent the run-on of surface water. A berm, ditch, proper sloping, or other diversion shall prevent run-on of surface water.

19.15.17.11.I.2 NMAC

The Industry Committee recommends that double-walled below-grade tanks located in a pit be exempt from the secondary containment requirement because the double wall will contain any leak and the operator can visually observe if a release has occurred. As a result, the Industry Committee proposes that OCD add the sentence "A tank with double-walls is exempt from the secondary containment requirement" to the end of this condition.

19.15.17.11.I.4, NMAC

The Industry Committee recommends that paragraph (4) be revised as follows:

> **(4)** The operator shall ensure that a below-grade tank is constructed of materials ~~resistant~~ compatible to the below-grade tank's particular contents and resistant to damage ~~from~~ by prolonged exposure to sunlight.

The proposed changes clarify compatibility requirements and make it clear that damage by sunlight is only a design consideration if the tanks will be exposed for prolonged periods.

19.15.17.11.J NMAC

The design and construction requirements for deep trench burial should be moved from the design and construction specifications of 19.15.17.11 NMAC to the deep trench burial closure requirements of 19.15.17.13.F.2.a NMAC because these requirements only

come into play if an operator will utilize on-site deep trench burial. In addition, these design requirements are only cited in 19.15.17.13.F.2.a NMAC.

19.15.17.11.J.4 & 10 NMAC

As discussed above, OCD has not provided any scientific rationale for requiring 20-mil LLDPE liners rather than the 12-mil LLDPE liners the parties agreed upon during the task force meeting. As a result, the Industry Committee proposes OCD replace "20-mil LLDPE liner" with "12-mil LLDPE liner" in each of these conditions.

19.15.17.12.A.2

The Industry Committee recommends that the recycling and handling of drilling fluids be addressed by a revised operating requirement, as follows:

> (2) The operator shall recycle, reuse, or reclaim drilling fluids as reasonably possible. Where fluids cannot be recycled, reused or reclaimed, then they shall be disposed at a facility approved by the Division. All fluid management shall be done in a manner to prevent the contamination of fresh water and protect public health and the environment.

19.15.17.12.A.3 NMAC

The Industry Committee requests that OCD include the regulatory citation for hazardous waste in this condition as follows:

> **(3)** The operator shall not discharge into or store any hazardous waste as defined by 20.4.1 NMAC in a pit, closed-loop system, below-grade tank or sump.

19.15.17.12.A.6 NMAC

The Industry Committee proposes that OCD eliminate the requirement to install a pit level monitoring device because such a unit is ineffective and expensive. During drilling, the level of fluids in a reserve pit is constantly changing. Thus, monitoring would be both confusing and would provide little useful information.

19.15.17.12.A.7 NMAC

The Industry Committee recommends that "or material" be added after "other hardware" to give additional options.

19.15.17.12.B.1 NMAC

The Industry Committee recommends that the Commission replace "or" with "and" in the phrase "visible and measurable layer of oil" as a layer that is only one or the other is not removable.

19.15.17.12.B.4 & 5 NMAC

The Industry Committee proposes that OCD eliminate these two conditions. Removal of free liquids in such a short period means that no evaporation will occur. In addition, the Pit Rule's closure provisions require an operator close temporary pits within

6 months of rig release and prohibit the pits from having any free liquids at the time of closure. Thus, this portion of the Pit Rule is unnecessary and forces operators to haul free liquids twice after rig release.

19.15.17.13.B NMAC

The Industry Committee proposes that OCD revise this section to reflect current science and the true risks associated with closing temporary pits. The rationale for each suggested change to the closure standard is set forth below.

The Industry Committee recommends 19.15.17.13.B be revised as follows:

> **B.** Closure methods for temporary pits. The operator of a temporary pit shall ~~remove all liquids from the temporary pit prior to implementing a closure method 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.

All liquids must be removed from the pit in any event, but the timing and handling of the removal will vary by the nature of the closure option selected. The use, reuse and disposal of produced water is handled under other rules and need not be repeated here. Thus, the Industry Committee recommends that the closure process be addressed in each substantive option only, rather than in the introductory language and repeated in each substantive option.

> **(1)** Waste excavation and removal.
>
> **(a)** The operator shall close the temporary pit by removing all free liquids and excavating all contents and~~, if applicable,~~ synthetic pit liners, if applicable, 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. The operator shall collect, at a minimum, a five point, composite sample and field analyze for chlorides to demonstrate that the chlorides concentration does not exceed 5000 mg/kg, or the background concentration, whichever is greater, as determined by EPA method 300.1 or other EPA method that the division approves. The operator shall notify the division of its results on form C-141, and the division may require additional delineation. ~~; collect individual grab samples from any hot spot; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW846 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 C141. The division may require additional delineation upon review of the results.~~
>
> (c) The operator may propose alternative testing of the soils beneath the pit to determine whether a release has occurred based on site-specific

hydrogeology, and propose alternative site closure standards for district approval. The operator shall notify the division of its results on form C-141, and the division may require additional information to protect public health and the environment.

(d) If records show that there is no useable ground water below the pit or no hydraulic connection between the pit and useable ground water, no testing is required.

(ee) If the operator or the division determines that a release has occurred and there is a reasonable possibility to impact useable ground water, then the operator shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

(df) ~~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~~ The operator shall backfill the ~~temporary pit~~ excavation with compacted, nonwaste containing, earthen material; construct a ~~division-prescribed~~ soil cover; and re-vegetate the site. The ~~division-prescribed~~ soil cover and re-vegetation ~~requirements~~ shall comply with the applicable Paragraphs ~~(1) and (3)~~ of Subsection G of 19.15.17.13 NMAC and Subsection H of 19.15.17.13 NMAC.

As stated in the surface waste management hearing, chloride is the most conservative of the various compounds and a good indicator of whether a leak from the pit has occurred. Screening for chloride will thus provide the best indicator of a potential leak. The Industry Committee recommends that the threshold be adjusted from 250mg/kg, which has no apparent basis, and replace it with 5000 mg/kg, which the Industry Committee previously demonstrated, and will demonstrate again, is fully protective of ground water. This approach will eliminate the need for an extensive background sampling program at each pit, which is not necessary when a chloride surrogate provides a more than adequate assurance. If chloride is found in excess of 5000 mg/kg, additional delineation for chloride and other compounds would likely be appropriate.

The Industry Committee has also simplified the requirements addressing a release to make them clearer. The Industry Committee has dropped the term "division-prescribed" before soil cover because the specifications are set forth in rule. Finally, the Industry Committee has added a provision that no testing is required if there is no useable groundwater that could be affected.

(2) Closure In Place. The operator must meet siting requirements in Section 19.15.17.10 A. (1). The following requirements and standards shall apply if the closure method involves closure in place.

(a) If ground water is greater than 50 feet below the pit and chloride concentration in the geotechnically stabilized pit contents do not exceed 3,500 mg/l based on EPA Methods 1312 and 300.1, the operator shall remove all free liquids from the pit, shall add inert materials to make the pit contents geotechnically stable, cover the pit contents with compacted earthen material, and revegetate.

(b) If records show that there is no useable ground water below the pit or no hydraulic connection between the pit and useable ground water, the operator shall remove all free liquids from the pit, shall add inert materials to make the pit contents geotechnically stable, cover the pit contents with compacted earthen material,

and revegetate.

The Industry Committee recommends that the proposed rule be modified to include a provision for closure in place for pits that either contain limited chloride levels (e.g., <3500 mg/l, which have been demonstrated not to be of groundwater concern) or no groundwater below them. Chloride migration for such pits is controlled by a minor change to paragraph G, providing for a minimum of a four foot cover. This closure in place scenario is equally protective as deep trench burial where the initial chloride concentration is 3500 mg/l or less.

(~~2~~3) D~~-~~deep T~~t~~rench B~~b~~urial. The operator shall demonstrate and comply with 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 deep trench burial.

The Industry Committee recommends that this method be called deep trench burial and not on-site disposal so as to minimize confusion between the closure in place and deep trench burial options.

(~~3~~4) 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.

19.15.17.13.F.1.a NMAC

The Industry Committee proposes that OCD remove the language of this condition that limits the use of on-site closure methods to those situations in which the location of the proposed pit outside of a 100 miles of a division approved facility or an out-of-state waste management facility. The 100 mile limit is without any environmental or other justification and, as a flow control measure, is in violation of the Commerce Clause of the United States Constitution and hence beyond the power of the Commission to adopt. As the Industry Committee will demonstrate at the Pit Rule hearing, on-site closure of temporary pits is protective of human health and the environment at the closure site. As a result, the Industry Committee proposes that OCD eliminate 19.15.17.13.F.1.a NMAC in its entirety.

19.15.17.13.F.1.c NMAC

While the Industry Committee agrees that the operator must notify the landowner of the pit location and that the operator will utilize on-site closure or deep trench burial, there is no reason for the operator to receive surface owner approval. Adherence to the regulatory requirements for site closure is protective of human health and the environment and thus there is no reason for a surface owner to provide approval. Expanding the requirement beyond notice is merely an attempt by this Commission to alter the legislature's balance of rights between operators and surface holders and is beyond the Commission's mandate and, in fact, may result in waste in violation of the

Commission's mandate. For this reason, the Industry Committee proposes that OCD replace 19.15.17.13.F.1.c NMAC with the following: (note: because the Industry Committee proposes elimination of 19.15.17.13.F.1.a NMAC in the draft rule, subsection (c) in the draft rule is renumbered to (b)):

> **(eb)** ~~The operator shall obtain the surface owner's written consent to the operator's proposal of an on-site closure method. The operator shall attach the original, signed consent to the permit application.~~ The operator shall notify the surface owner of the temporary pit and, if applicable, the on-site closure or deep trench burial

19.15.17.13.F.1.e-g NMAC

The Industry Committee proposes that OCD eliminate sections (e) through (g) from Paragraph (1) of Subsection F of 19.15.17.13 NMAC. These provisions set forth soil testing requirements for on-site closure of a temporary pit, deep trench burial, or an alternate closure method. The Industry Committee's proposed changes to the Pit Rule place soil testing methods to determine whether a release has occurred within the temporary pit closure section, 19.15.17.13.B.1 NMAC, and the deep trench burial closure section, 19.15.17.13.F.2 NMAC (also applicable to alternate closure methods). Thus, these general requirements are no longer necessary and the Industry Committee proposes that OCD eliminate sections (e) through (g) of 19.15.17.13.F.1 NMAC.

19.15.17.13.F.2 NMAC

The Industry Committee proposes that OCD revise the portion of the Pit Rule governing on-site deep trench burial. An explanation accompanies each major division of the proposed replacement language. The Industry Committee recommends the the proposed rule 19.15.17.13.F NMAC be revised as follows:

> **(2)** ~~On-site deep trench burial~~ Deep Trench Burial (DTB). The following requirements and standards shall apply if the closure method involves DTB.
>
> **(a)** The operator shall demonstrate and comply with the provisions of Paragraph (1) of Subsection F of 19.15.17.13 NMAC.
>
> ~~**(b)** The operator shall use a separate on-site deep trench for closure of each drying pad associated with a closed-loop system or temporary pit.~~
>
> **(eb)** Unless the contents of the drying pad associated with a closed-loop system or temporary pit and associated waste meet the closure standards of Subparagraph (~~d~~c) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC, the operator shall propose a method to treat the contents and associated waste. Any proposed treatment method shall optimize waste minimization and reduce contaminant concentrations in order to protect fresh water, public health and the environment. Proposed treatment methods shall stabilize or solidify the contents to a bearing capacity sufficient to support the final cover.
>
> **(dc)** 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 after treatment, if treatment is required, 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~~ 5000 mg/kg. Using EPA SW846 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 ~~5,000~~ 3500 mg/l ~~and that the concentrations of the water contaminants specified in Subsections A and B of 20.6.2.3103 NMAC as determined by appropriate EPA methods do not exceed the standards specified in Subsections A and B of 20.6.2.3103 NMAC, unless otherwise specified above~~.

(ed) 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 following design and construction requirements.

(i) The operator shall 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 Paragraphs (2) and (3) of Subsection G of 19.15.17.13 NMAC.

(ii) An on-site deep 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

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

(iv) An on-site deep trench shall be constructed with a geomembrane liner. The geomembrane shall consist of a 12-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 ultraviolet light. Liner compatibility shall comply with EPA SW846 method 9090A.

(v) The operator shall minimize liner seams and orient them up and down, not across a slope. The operator shall use factory seams where possible. The operator shall overlap liners four to six inches before seaming, 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.

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

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

(viii) 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.

(ix) The operator shall install a geomembrane cover over the excavated 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.

(x) The geomembrane cover shall consist of a 12-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 SW846 method 9090A.

~~specified in Paragraphs (1) through (8) of Subsection J of 19.15.17.11 NMAC.~~

(be) The operator shall remove all free ~~liquids~~fluids from the pit, shall add inert materials to make the pit contents geotechnically stable, excavate and transfer all contents and synthetic pit liners to the lined trench. The excavated materials shall pass the paint filter liquids test (EPA SW-846, method 9095).

(ef) The operator shall test the soils beneath the pit to determine whether a release has occurred. The operator shall collect, at a minimum, a five point, composite sample and field analyze for chlorides to demonstrate that the chlorides concentration does not exceed 5000 mg/kg, or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141, and the division may require additional delineation.

The Industry Committee recommends that the proposed rule be modified to include a provision for closure in place for pits that either contain limited chloride levels (e.g., <5000 mg/kg, which have been demonstrated not to be of groundwater concern) or no groundwater below them. Chloride migration for such pits is controlled by a minor change to paragraph G, providing for a minimum of a four foot cover.

(dg) The operator may propose alternative testing of the soils beneath the pit to determine whether a release has occurred based on site-specific hydrogeology, and proposed alternative site closure standards for district approval. The operator shall notify the division of its results on form C-141, and the division may require additional information to protect public health and the environment.

(eh) If records show that there is no useable ground water below the pit, no testing is required.

No testing is necessary if there is no useable groundwater below the pit because surficial concerns are addressed by paragraphs G and H. If there is no groundwater and no risk to the surface, there is no basis for testing. The same is true for the suggested change to (g) below.

~~(f) 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 (d) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC.~~

(gi) If the operator or the division determines that a release has occurred and there is a reasonable possibility to impact useable ground water, then the operator shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate. The operator may propose to transfer the excavated, contaminated soil into the lined trench.

(hj) 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)~~ (2)(d)of Subsection ~~J~~ F of 19.15.17.~~11~~13NMAC.

(ik) The operator shall cover the geomembrane lined and covered, filled, deep trench with compacted, nonwaste containing, earthen material; construct a division-prescribed soil cover; and re-vegetate the site. The division-prescribed soil cover

and revegetation shall comply with Paragraphs (2) and (3) of Subsection G of 19.15.17.13 NMAC and Subsection H of 19.15.17.13 NMAC.

19.15.17.13.G.2 NMAC

The Industry Committee proposes that OCD revise this condition to specify that these soil cover requirements also apply to closure in place. There is also a proposed change for consistency in nomenclature. As a result, the Industry Committee proposes that OCD revise the condition as follows:

(2) The soil cover for ~~on-site~~ deep trench burial or closure in place shall consist of a minimum of four feet of compacted, nonwaste 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.

19.15.17.13.H.1 NMAC

The Industry Committee recommends that the revegetation standard be consistent with the surface waste management rule:

(1) Upon completion of closure, the operator shall substantially restore the impacted surface area to a similar ~~the~~ condition to that existing ~~that existed~~ prior to oil and gas operations, by placement of the soil cover and re-vegetation of the site~~, and maintain the cover established by re-vegetation, which shall not include noxious weeds, through two successive growing seasons~~.

19.15.17.13.H.2 NMAC

This section provides operators a mechanism to propose an alternative to the "general" revegetaton requirement if the operator demonstrates that the proposed alternative effectively prevents erosion, protects fresh water, public health and the environment. As written, however, the regulation provides the surface owner with veto power over the proposed alternative and operators are provided no recourse in the event of a veto. As stated above, whether the surface owner agrees or not does not address the risk to human health, fresh water and the environment. It is merely an attempt to realign the property interests between industry and surface owners from that established by the legislature and is beyond the Commission's mandate. The regulation should include a mechanism for objection to a proposed alternative if the proposed alternative does not prevent erosion or protect human health, fresh water, public health and the environment. The OCD should revise this section as follows:

(2) The operator may propose an alternative to the revegetation requirement if the operator demonstrates that the proposed alternative effectively prevents erosion, and protects fresh water, human health and the environment. The operator shall seek the surface owner's agreement to the proposed alternative ~~shall be agreed upon by the surface owner~~. If the surface owner agrees, t~~T~~he operator shall submit the proposed alternative, with written documentation that the surface owner agrees to the alternative, to the division ~~for approval~~. If the surface owner does not agree to the alternative, the operator may submit the alternative to the appropriate district office. The submission must include evidence demonstrating the proposed

> alternative effectively prevents erosion, and protects fresh water, public health and the environment. The surface owner may submit written objections to the alternative method to the division. The appropriate district office may reject the proposal, after notice and an opportunity for hearing, if it finds that the proposed alternative does not prevent erosion, protect fresh water, human health and the environment.

19.15.17.15.A.2 & 3 NMAC.

The Industry Committee proposes that OCD eliminate the requirement for public notice in 19.15.17.15.A NMAC. If an operator has otherwise complied with all applicable regulations, the OCD has the knowledge to determine whether an exception is appropriate. The public notice requirement is an additional procedural step that will not provide additional protection for human health or the environment. As a result, the Industry Committee proposes that OCD eliminate 19.15.17.15.A.2 and 3 NMAC in their entirety.

19.15.17.16.A NMAC

The Industry Committee proposes that OCD include a time limit for the review of permit applications. The Industry Committee recommends that if a permit application is not acted upon within 60 days from its receipt, the matter will be set for the next commission hearing. In this way, the operator gains assurance that the application will be acted upon at the hearing. The Industry Committee proposes that OCD revise the condition as follows:

> **A.** The division shall review all applications to permit facilities subject to 19.15.17 NMAC, and ~~may~~ shall approve, deny or approve an application with conditions within sixty (60) days of receipt. 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 NMAC, then the division shall notify the applicant by certified mail, return receipt requested, and shall set the matter for hearing if the applicant so requests within 10 days after receipt of such notification. If the division does not approve, deny, or approve with conditions an application within 60 days of receipt, the matter will be set for the next commission hearing.

* * * *

The Industry Committee appreciates the opportunity to comment on the proposed Pit Rule. Please feel free to contact me at (505) 988-4421 if you have any questions or concerns.

Sincerely,

William F. Carr
Joint Counsel
New Mexico Industry Committee

Enclosure
Industry Committee proposed amendments

cc: Mark E. Fesmire, Director, OCD