

## EXHIBIT A TO APPLICATION

### 19.15.1.7 DEFINITIONS:

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W. Definitions beginning with the letter "W".

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(4) Watercourse shall mean any ~~river, creek, canyon lake bed, or gully,~~ draw, ~~stream bed, or~~ wash, ~~arroyo,~~ or any other channel having definite banks and beds with visible evidence of the occasional flow of water natural or human-made channel through which water flows or has flowed.

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(7) Wellhead protection area shall mean the area within 200 horizontal feet of any private, domestic fresh water well or spring used by less than five households for domestic or stock watering purposes or within 1000 horizontal feet of any other fresh water well or spring. Wellhead protection areas shall not include areas around water wells drilled after an existing oil or natural gas waste storage, treatment, or disposal site, or pit, was established.

### 19.15.4.202 PLUGGING AND PERMANENT ABANDONMENT

A. Notice of Plugging

(1) Notice of intention to plug must be filed with the Division on Form C-103, Sundry Notices and Reports on Wells, by the operator prior to the commencement of plugging operations, which notice must provide all of the information required by Rule 1103 including operator and well identification and proposed procedures for plugging said well, and in addition the operator shall provide a well-bore diagram showing the proposed plugging procedure. Twenty-four hours notice shall be given prior to commencing any plugging operations. In the case of a newly drilled dry hole, the operator may obtain verbal approval from the appropriate District Supervisor or his representative of the method of plugging and time operations are to begin. Written notice in accordance with this rule shall be filed with the Division ten (10) days after such verbal approval has been given.

B. Plugging

(1) Before any well is abandoned, it shall be plugged in a manner which will permanently confine all oil, gas and water in the separate strata in which they are originally found. This may be accomplished by using mud-laden fluid, cement and plugs singly or in combination as approved by the Division on the notice of intention to plug.

(2) The operator shall mark the exact location of a plugged and abandoned wells with a steel marker not less than four inches (4") in diameter set in cement and extending at least four feet (4') above mean ground level. The marker shall display the operator's name, lease name, and well number, A.P.I. number and location, including unit letter, footages, section, township and range, shall be in raised letters, at least one inch high, welded, onto stamped or otherwise permanently engraved into the metal of the marker. No permanent structures preventing access to the wellhead shall be built over a plugged and abandoned well without written approval of the OCD. No plugged and abandonment marker shall be removed without the written permission of the OCD.

(3) As soon as practical, but no later than ~~one year~~ six months after the completion of plugging operations (unless the division extends the time for good cause), the operator shall:

(a) ~~fill~~ close all pits, in accordance with subsection F of 19.15.3.50 NMAC;

(b) ~~level the location~~;

~~(e)~~ remove deadmen and all other junk; and

~~(d)(c)~~ take such other measures as are necessary or required by the Division to remediate contamination, restore the location to a safe and clean condition, contour the surface to prevent erosion and effectively re-vegetate the site.

(4) Upon completion of plugging and clean up restoration operations as required, the operator shall contact the appropriate district office to arrange for an inspection of the well and location.

(5) Below-ground plugged and abandonment markers ~~can~~ may be used only with written permission of the OCD division, when an above-ground marker would interfere with agricultural endeavors. The below-ground marker shall have a steel plate welded onto the surface or conductor pipe of the abandoned well and shall be at least 3 feet below the ground surface, ~~and of sufficient size so that a~~ All the information required by Section 103 of 19.15.3 NMAC ~~can~~ shall be ~~stenciled into the steel or~~ welded onto the surface of the steel plate. The OCD division may require a re-survey of the well location.

#### C. Reports

(1) The operator shall file Form C-105, Well Completion or Recompletion Report and Log as provided in Rule 1105.

(2) Within thirty ~~(30)~~ days after completing all required restoration work, the operator shall file with the Division, in triplicate, a record of the work done on Form C-103 as provided in Rule 1103.

(3) The Division shall not approve the record of plugging or release any bonds until all necessary reports have been file and the location has been inspected and approved by the Division.

[1-1-50, 7-12-90...2-1-96; A, 3-31-00; 19.15.4.202 NMAC - Rn, 19 NMAC 15.D.202, 12-14-01]

### 19.15.2.50 PITS AND BELOW-GRADE TANKS:

A. Permit required. No person shall construct or use ~~Discharge into, or construction of,~~ any pit or below-grade tank is prohibited absent possession except pursuant to and in accordance with the terms and conditions of a permit issued by the division, unless otherwise herein provided or unless the division grants an exemption pursuant to Subsection G of 19.15.2.50 NMAC. Facilities permitted by the division pursuant to Section ~~711~~ 53 of 19.15.92 NMAC or water quality control commission regulations are exempt from Section 50 of 19.15.2 NMAC.

#### B. Application.

(1) ~~Where filed; application form.~~

~~(a)~~ Downstream facilities. An operator shall apply to the division's environmental bureau for a permit to construct or use a pit or below-grade tank at a downstream facility such as a refinery, gas plant, compressor station, brine facility,

service company, or at a surface waste management facility that is not permitted pursuant to Section ~~71153~~ of 19.15.92 NMAC or water quality control commission regulations. The operator shall use a form C-144, application to discharge into a pit or below-grade tank. The operator may submit the form separately or as an attachment to an application for a discharge permit, best management practices permit, surface waste management facility permit, or other permit.

~~(2) (b) Drilling or production and workover pits. Drilling and workover pits are exempt from the permitting requirements of 19.15.2.50 NMAC, but shall be subject to all other provisions thereof.~~

~~(3) Other pits. An operator shall apply to the appropriate district office of the division, on form C-144, for a permit to for construct or use of a pit or below-grade tank in connection with drilling, production, or other operations not otherwise identified described in Subparagraph (a), Paragraph (1), Ssubsection B of 19.15.2.50 NMAC. The operator shall apply for the permit on the application for permit to drill or on the sundry notices and reports on wells, or electronically as otherwise provided in this chapter. Approval of such form constitutes a permit for all pits and below grade tanks annotated on the form. A separate Corm C 144 is not required.~~

~~(2) General permit; individual permit. An operator may apply for a permit to use an individual pit or below grade tank, or may apply for a general permit applicable to a class of like facilities.~~

~~(3) When filed.~~

~~(a) New pits or new below grade tanks. After April 15, 2004, operators shall obtain a permit before constructing a pit or below grade tank.~~

~~(b) Existing pits or new below grade tanks. For each pit or below-grade tank in existence on April 15, 2004 that has not received an exemption after hearing as allowed by OCC Order R 3221 through R 3221D inclusive, the operator shall submit a notice not later than April 15, 2004 indicating either that use of the pit or below grade tank will continue or that such pit or below grade tank will be closed. If use of a pit or below grade tank is to be discontinued, discharge into the pit or use of the below grade tank shall cease not later than June 30, 2005. If use of a pit or below grade tank will continue, the operator shall file a permit application not later than September 30, 2004. If an operator files a timely, administratively complete application for continued use, use of the pit or below grade tank may continue until the division acts upon the permit application.~~

~~(4) Engineering design. An applicant for a permit for a pit other than a drilling or workover pit shall submit with the permit application a detailed engineering design, including operating and maintenance procedures, a closure plan, and a hydrologic report which provides sufficient information and detail on the site's topography, soils, geology, surface hydrology and ground water hydrology, to enable the division to evaluate the pit's actual and potential effects on soils, surface water and ground water. The plan shall include detailed information on dike protection and structural integrity, leak detection (including an adequate fluid collection and removal system), liner specifications and compatibility, freeboard and overtopping prevention, nuisance and hazardous odors such as H2S, emergency response plan (unless the pit is part of a facility having an integrated contingency plan), type of waste stream (including chemical~~

analysis, climatological factors (including freeze-thaw cycles), monitoring and inspection plan, erosion control and any other pertinent information requested by the division.

(5) Review and approval. The division will review all applications and may approve, disapprove or approve an application with conditions. If the division disapproves an application, or approves the application subject to conditions not expressly provided in 19.15 NMAC, the division shall notify the applicant of such action by certified mail, return receipt requested, and the applicant shall have a period of ten days after receipt of such notification within which to request a formal hearing.

C. Design, construction, and operational standards.

(1) In general. Pits, sumps and below-grade tanks shall be designed, constructed and operated so as to contain liquids and solids to prevent contamination of fresh water and protect public health and the environment.

(2) Special requirements for pits.

(a) Location. No pit shall be located in any watercourse, lakebed, sinkhole, ~~or playa lake, wetland or wellhead protection area.~~ Pits adjacent to any such watercourse or depression shall be located safely above the ordinary high water mark of such watercourse or depression. No pit shall be located in any wetland. The division may require additional protective measures for pits located in groundwater sensitive areas ~~or wellhead protection areas.~~

(b) Liners required.

(i) Drilling pits, and workover pits. Each drilling pit or workover pit shall contain, at a minimum, a single liner appropriate for conditions at the site. The liner shall be designed, constructed, and maintained so as to prevent the contamination of fresh water, and protect public health and the environment. Pits used to vent or flare gas during drilling or workover operations that are designed to allow liquids to drain to a separate pit do not require a liner.

(ii) ~~Disposal and storage~~ Other pits. Each pit other than a drilling or workover pit disposal pit (including, but not limited to, any separator pit, tank drain pit, evaporation pit, blowdown pit used in production activities, pipeline drip pit, or production pit) and each storage pit (including any brine pit, salt water pit, fluid storage pit for an LPG system, or production pit) shall contain, at a minimum, a primary and a secondary liner appropriate to the conditions at the site and shall have a leak detection system between the two liners incorporated into the design. Liners shall be designed, constructed, and maintained so as to prevent the contamination of fresh water, and protect public health and the environment.

~~(iii) Alternative liner media. The division may approve liners that are not constructed in accordance with division guidelines only if the operator demonstrates to the division's satisfaction that the alternative liner protects fresh water, public health, and the environment as effectively as those prescribed in division guidelines.~~

(c) Liner specifications. All liners shall conform to the following requirements:

(i) Liners for all drilling or workover pits shall be at least twelve mils (.012 inches or .305 millimeters) thick, and manufactured from PVC (PolyvinylChloride), or other equivalent material that meets or exceeds the various

ASTM standards for PVC. Liners for all pits other than drilling or workover pits shall be at least thirty mils (.030 inches or .762 millimeters) thick, and manufactured from PVC (Polyvinyl Chloride), or other equivalent equalvalent material that meets or exceeds the various ASTM standards for PVC. All synthetic (geomembrane) liners shall have a hydraulic conductivity no greater than  $1 \times 10^{-9}$  centimeters per second.

(ii) Except as otherwise provided in Subparagraph (c) of Paragraph (2) of Subsection C of 19.15.2.50 NMAC, non-PVC geomembrane liners shall be composed of an impervious, reinforced, synthetic material which is resistant to hydrocarbons, salts, and acidic and alkaline solutions. Liner materials shall be resistant to ultraviolet light, or provision shall be made to protect the material from the sun.

(iii) Liner compatibility shall comply with United States Environmental Protection Agency (EPA) Method 9090A.

(iv) Every pit shall have a properly constructed foundation or firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities, to prevent rupture or tear of the liner, an adequate anchor trench, wall slopes not to exceed 3H:1V. Every pit, except for drilling and workover pits, shall also have an adequate vent design. -Liner seams should be minimized and oriented up and down, not across a slope. Factory seams should be used where possible. All field seaming should be performed by qualified personnel.

(v) At any point of discharge into or suction from the lined pit, the liner shall be protected from the fluid force or mechanical damage.

(vi) Primary liners and single liners shall, in all cases, be constructed of synthetic material.

(vi) A secondary liner may be a synthetic liner or an alternative liner approved by the division and certified by a professional engineer. Secondary liners constructed with compacted soil membranes i.e. natural or processed clay and other soils shall be at least three feet thick, placed in six-inch lifts, and compacted to 95 percent of the material's Standard Proctor Density per ASTM D-698. Compacted soil membranes used in a liner shall undergo permeability testing in conformity with ASTM standards and methods approved by OCD before and after construction. All compacted soil membranes shall have a hydraulic conductivity no greater than  $1 \times 10^{-8}$  centimeters per second. Results of pre-construction testing shall be submitted to the division for approval prior to construction.

(ed) Leak detection. ~~A leak detection system shall be installed between the primary and secondary liner in each disposal or storage pit. The~~ leak detection systems shall be designed, installed, and operated so as to prevent the contamination of fresh water, and protect public health and the environment. The operator shall notify the division at least ~~twenty-four~~ 72 hours prior to installation of the primary liner so that a division representative may inspect the leak detection system before it is covered.

(de) Drilling and workover pits. Each drilling or workover pit shall be of an adequate size to assure that a supply of fluid is available and sufficient to confine oil, natural gas, or water within its native strata. Only produced fluids may be disposed of into the pits. Pits shall be maintained free of miscellaneous solid waste or debris.

Hydrocarbon-based drilling fluids shall be contained in tanks made of steel or other division-approved material. Immediately after cessation of drilling or workover operations, the operator shall remove any visible or measureable layer of oil from the surface of any drilling or workover pit.

~~(ef) Disposal or storage~~ Other pits. No waste other than oilfield waste, exempt pursuant to subtitle C of the federal Resource Conservation and Recovery Act (RCRA), or non hazardous oilfield waste, shall be discharged into, or stored in, any pit. No measurable or visible layer of oil may be allowed to accumulate or remain anywhere on the surface of any pit. Spray evaporation systems shall be operated such that all spray-borne, suspended or dissolved solids remain within the perimeter of the pond's lined portion.

~~(fg) Fencing and netting.~~ All pits shall be fenced or enclosed to prevent access by livestock, and fences shall be maintained in good repair. Any pit located within the corporate limits of any municipality, located within 500 feet of any highway, or located within 1000 feet of any structure used for public or private occupancy, any school, school bus stop, church, hospital, place of public assembly or outdoor public recreational area, shall be fenced or enclosed to prevent access by unauthorized persons. Unless the pit is located on a well site controlled by the operator of the pit, a sign not smaller than 12 inches by 24 inches, with lettering not smaller than 2 inches in height, will be posted in a conspicuous place on the fence surrounding the pit. The sign will be maintained in legible condition and shall identify the operator of the pit, the location of the facility by quarter/quarter section or unit letter, section, township, and range, and provide emergency telephones numbers. Active drilling or workover pits may have a portion of the pit unfenced to facilitate operations. ~~In issuing a permit, the~~ division may impose additional fencing requirements for protection of wildlife in particular areas.

(h) Netting. After July 1, 2006, all tanks exceeding 16 eight feet in diameter, exposed pits, and ponds shall be screened, netted, covered, or otherwise rendered non-hazardous to migratory birds. Drilling and workover pits are exempt from the netting requirement. Immediately after cessation of these operations such pits shall have any visible or measurable layer of oil removed from the surface. Upon written application, the division may grant an exception to screening, netting, or covering requirements upon a showing that an alternative method will adequately protect migratory birds or that the tank or pit is not hazardous to migratory birds.

~~(gih) Unlined pits.~~

~~(i) General prohibition. After June 30, 2005 use of, or discharge into, any newly constructed, unlined pit that has not been previously permitted pursuant to Section 711 of 19.15.9 NMAC or water quality control commission regulations is prohibited, except as otherwise provided in Section 50 of 19.15.2 NMAC. After April 15, 2004, construction of unlined pits is prohibited unless otherwise provided in Section 50 of 19.15.2 NMAC.~~

~~(ii) Discharge into existing, unlined pits shall cease not later than July 1, 2006. Unlined pits exempted by previous order. An operator of an unlined pit existing on April 15, 2004 for which a previous exemption was received after hearing as allowed pursuant to commission Orders No. R-3221 through R-3221D inclusive, shall not be required to reapply for an exemption pursuant to Subparagraph (g), Paragraph (2),~~

~~Subsection C of 19.15.2.50 NMAC provided the operator notifies the division, no later than April 15, 2004, of the existence of each unlined pit it believes is exempted by order, the location of the pit, and the nature and amount of any discharge into the pit. Such order shall constitute a permit for the purpose of Subparagraph (g), Paragraph (2), Subsection C of 19.15.2.50 NMAC. The division may terminate any such permit in accordance with Paragraph (2), Subsection C of 19.15.2.50 NMAC. Any pit constructed after April 15, 2004 shall comply with the permitting, lining and other requirements of Section 50 of 19.15.2 NMAC, notwithstanding any previous order to the contrary.~~

~~(iii) Unlined pits shall be allowed in the following areas provided that the operator has submitted, and the division has approved, an application for permit as provided in Section 50 of 19.15.2 NMAC, and provided that the pit site is not located in fresh water bearing alluvium or in a wellhead protection area: TOWNSHIP 19 SOUTH, RANGE 30 EAST, NMPM Sections 8 through 36; TOWNSHIP 20 SOUTH, RANGE 30 EAST, NMPM Sections 1 through 36; TOWNSHIP 20 SOUTH, RANGE 31 EAST, NMPM Sections 1 through 36; TOWNSHIP 20 SOUTH, RANGE 32 EAST, NMPM Sections 4 through 9, Sections 16 through 21; and Sections 28 through 33; TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM Sections 1 through 36; TOWNSHIP 21 SOUTH, RANGE 30 EAST, NMPM Sections 1 through 36; TOWNSHIP 21 SOUTH, RANGE 31 EAST, NMPM Sections 1 through 36; TOWNSHIP 22 SOUTH, RANGE 29 EAST, NMPM Sections 1 through 36; TOWNSHIP 22 SOUTH, RANGE 30 EAST, NMPM Sections 1 through 36; TOWNSHIP 23 SOUTH, RANGE 29 EAST, NMPM Sections 1 through 3, Sections 10 through 15, Sections 22 through 27, and Sections 34 through 36; TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM Sections 1 through 19; and that area within San Juan, Rio Arriba, Sandoval, and McKinley Counties that is outside the valleys of the San Juan, Animas, Rio Grande, and La Plata Rivers, which are bounded by the topographic lines on either side of the rivers that are 100 vertical feet above the river channels, measured perpendicularly to the river channels, and is outside those areas that lie within 50 vertical feet, measured perpendicularly to the drainage channel, of all perennial and ephemeral creeks, canyons, washes, arroyos, and draws, and is outside the areas between the above named rivers and the Highland Park Ditch, Hillside Thomas Ditch, Cunningham Ditch, Farmers Ditch, Halford Independent Ditch, Citizens Ditch, or Hammond Ditch, provided that no protectable ground water is present or if present, will not be adversely affected; or any area where the discharge into the pit meets New Mexico Water Quality Control Commission ground water standards.~~

(3) ~~Special requirements for b~~Below-grade tanks.

~~(a) All below-grade tanks constructed after April 15, 2004 shall be constructed with secondary containment and leak detection. The operator of any below-grade tank constructed prior to April 15, 2004 that does not have secondary containment and leak detection shall test its integrity annually and shall promptly repair or replace any below-grade tank that does not demonstrate integrity. Any such below-grade tank shall be equipped with leak detection at the time of any major repair not later than December 31, 2008.~~

~~(b) Below-grade tanks shall not be allowed to overflow.~~

(c) Below-grade tanks shall be constructed of materials resistant to the particular contents of the tank and shall be resistant to damage from sunlight.

(4) Sumps. Operators shall test the integrity of all sumps annually, and shall promptly repair or replace any sump that does not demonstrate integrity. Sumps that can be removed from their emplacements may be tested by visual inspection. Other sumps shall be tested by appropriate mechanical means. The operator shall maintain records of sump inspection and testing and make such records available for division review upon request.

D. Emergency actions.

(1) 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.

(2) Construction standards. A pit constructed in an emergency shall be constructed, to the extent possible given the emergency, in a manner that is consistent with the requirements of Section 50 of 19.15.2 NMAC, and that prevents the contamination of fresh water, and protects public health and the environment.

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

(4) Use and duration. The pit may be used only for the duration of the emergency. If the emergency lasts more than forty-eight (48) hours, the operator must seek approval from the division for continued use of the pit. All fluids, solids or wastes must be removed within 24 hours after cessation of use unless the division extends that time period.

(5) "Emergency pits." Subsection D, of 19.15.2.50 NMAC shall not be construed to allow construction or use of so-called "emergency pits," which are pits constructed as a precautionary matter to contain a spill in the event of a release. Construction or use of any such pit shall require a permit issued pursuant to Section 50 of 19.15.2 NMAC unless the pit is described in a spill prevention, control and countermeasure (SPCC) plan required by the United States environmental protection agency, all fluids are removed from the pit within 24 hours, and the operator has filed a notice of the location of the pit with the division.

E. Drilling fluids and drill cuttings. Drilling fluids and drill cuttings shall either be recycled, transferred to a division-approved waste disposal facility or ~~be otherwise~~ disposed of as approved by the division ~~and~~ in a manner to prevent the contamination of fresh water and protect public health and the environment. The operator shall describe the proposed disposal method in the application for permit to drill or the sundry notices and reports on wells.

F. Closure and restoration.

(1) Closure required. Except as otherwise specified in Section 50 of 19.15.2 NMAC, a pit or below-grade tank shall be properly closed within six months after cessation of use; provided that the required closure date for pits in existence on December 31, 2005 which are no longer in use, or for which use ceases prior to July 1, 2007, shall be December 31, 2007, unless the division determines, after notice and opportunity for hearing, that a particular pit must be closed by an earlier date because of an imminent danger to fresh water, public health or the environment. ~~As a condition of a~~

~~permit, the division may require the operator to file a detailed closure plan before closure may commence.~~ The division for good cause shown may grant a six-month extension of time to accomplish closure of any pit.

(2) Notice of intention to commence closure. The operator, prior to pit closure operations, shall notify the surface owner that the pit is to be closed and shall furnish a copy of such notification to the division. The notice shall include the name of the operator and the location of the pit to be closed by unit letter, footages, section, township and range. If the pit is associated with a particular well, the notice shall also include the well's name, number and API number. In addition, the operator shall notify the division's district office at least 72 hours (but not more than one week) before commencement of closure operations, so that division representatives may witness closure operations. As a condition of a permit, the division may require the operator to file a detailed closure plan before closure may commence. ~~The division for good cause shown may grant a six-month extension of time to accomplish closure.~~ Upon completion of closure a closure report (form C-144), or sundry notices and reports on wells shall be submitted to the division. Where the pit's contents will likely migrate and cause ground water or surface water to exceed water quality control commission standards, the pit's contents and the liner shall be removed and disposed of in a manner approved by the division.

(3) Closure requirements.

(a) General closure performance requirements. The operator shall close each pit and below grade tank so that human health and the environment are protected. The operator shall initially determine whether soil or ground water has been contaminated by any release from the pit or below-grade tank. During closure, the operator shall remediate any soil contamination to the division's soil closure standards specified in paragraph 3 of subsection F of 19.15.3.50 NMAC. The division may, after notice and opportunity for hearing, require additional, appropriate remediation or closure activities at any pit or below grade tank in order to protect fresh water, public health, or the environment.

(b) Standard closure methods.

(i) The operator shall close each pit or below grade tank by excavating all contents and synthetic pit liners and transferring them to a division-approved waste disposal facility. The operator shall breach any clay liner left in place to facilitate drainage.

(ii) After removing all pit or tank contents and liner or tank structure, the operator shall test for contamination by collecting, at a minimum, a five-point composite soil sample from the four corners and center of the pit or below grade tank excavation and sampling any obvious soil contamination (*i.e.*, contamination that is easily discernible to the visual or olfactory senses). The operator shall submit the soil samples to an independent laboratory for analysis for benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH) and chlorides. The operator may close a pit or below grade tank without further requirements when the sampling results demonstrate that the soil has not been contaminated by a release of oil field waste at concentrations that exceed the division soil closure standards.

(iii) If contamination has occurred, the operator shall excavate and remove all oil field waste or soil that has been contaminated by oil field waste, unless

on-site remediation of contaminated soils is authorized pursuant to paragraph (3) of subsection G of 19.15.2.50 NMAC. If the operator is unable to practicably excavate and dispose of all oil field waste or contaminated soil, then with prior approval of the division, the operator may close by backfilling the excavation with clean soil and covering the clean backfill with a division-approved cap and soil cover. The cap must be buried at least three feet below grade.

(iv) If the operator determines that ground water has been impacted, then the operator shall comply with 19.15.3.116 and 19.15.1.19 NMAC.

(c) Alternative closure methods. Operators may propose an alternative closure methods, including but not limited to on site soil stabilization/solidification, as requests for exemption pursuant to paragraph (3) of subsection G of 19.15.3.50.

(d) Closure report. Upon completion of closure, the operator shall submit a closure report on form C-144, with necessary attachments to document all closure activities (including but not limited to sampling results, information required by paragraph (3) of subsection F on 19.15.2.50, a plot plan, and details on back-filling, capping and covering, where applicable). In the closure report, the operator shall certify that all information in the report and attachments is correct and that the operator has complied with all closure requirements of 19.15.2.50 NMAC.

(4) Division soil closure standards.

(a) The operator shall excavate and remove contaminated soils as necessary so that the soils remaining in place conform to the standards provided in the table in subparagraph (d) of paragraph 3 of subsection F of 19.15.2.50 NMAC.

(b) General site characteristics. The operator shall determine the following site characteristics when determining the appropriate soil closure concentration standards for pits and below grade tanks:

(i) Depth to ground water. The operator shall determine the depth to the seasonal high water elevation of the ground water beneath the pit or below grade tank. The operator may estimate the depth to ground water using either local water well information, published regional ground water information, data on file with the office of the state engineer, or the vertical distance from adjacent ground water or surface water.

(ii) Distance to water source. The operator shall determine the horizontal distance from all water sources within 1,000 feet of the pit or below grade tank, including private and domestic water sources. Water sources are defined as wells, springs, or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.

(iii) Distance to nearest surface water body. The operator shall determine the horizontal distance to any down-gradient surface water bodies within 1,000 feet of the pit or below grade tank. Surface water bodies are defined as flowing or perennial rivers, streams, creeks; irrigation canals and ditches, lakes, ponds, and playas.

(c) Ranking criteria. The operator shall use the depth to ground water, distance to water sources and distance to nearest surface water body to determine the soil closure standard for a pit or below grade tank. The total ranking score is the sum of all three individual ranking criteria.

(i) Depth to ground water. If the depth to ground water is less than 50 feet below ground surface (bgs), then a ranking score of 20 is assigned; if the depth to

ground water is between 50 and 99 feet bgs, then a ranking score of 10 is assigned; if the depth to ground water is greater than 100 feet bgs, then a ranking score of zero is assigned.

(ii) Distance to water source. If the site is located less than 1000 horizontal feet from a water source other than a private domestic water source, then a ranking score of 20 is assigned; if the site is located less than 200 horizontal feet from a private domestic water source, but not less than 1000 feet from a water source that is not a private domestic water source, then a ranking score of 10 is assigned; if the site does not meet either of the foregoing criteria, then a ranking score of zero is assigned.

(iii) Distance to surface water body. If the site is located less than 200 horizontal feet from a surface water body, then a ranking score of 20 is assigned; if the site is located at least 200 horizontal feet, but less than 1000 horizontal feet from the nearest surface water body, then a ranking score of 10 is assigned; if the site is located more than 1000 horizontal feet from the nearest surface water body, then a ranking score of 0 is obtained.

(d) Soil closure concentration standard. The total ranking score determines the soil closure concentration standard for any given site. The table below lists the soil closure concentration standard for each appropriate total ranking score. The division, after notice to the operator and opportunity for a hearing, may require closure to more stringent concentrations than those specified below if warranted by site specific conditions (i.e. native soil type, location relative to population centers or other appropriate site specific conditions). The division may specify additional constituents and/or requirements for soil, surface water or ground water analysis and/or remediation, depending on site-specific conditions. Where a closure plan is required or has been filed, any material deviations from the approved plans will require prior division approval. The operator shall submit a closure workplan for division approval for any site that the operator contends or the division determines cannot be closed in accordance with the soil closure concentration standards specified below.

The following soil closure concentration standards apply:

| <u>SOIL CLOSURE CONCENTRATION STANDARDS</u>                  |  |                                  |                                  |
|--|--|----------------------------------|----------------------------------|
| <u>Constituents</u>  | <u>Ranking Score<br/>&lt; 10</u>   | <u>Ranking Score<br/>10 - 19</u> | <u>Ranking Score<br/>&gt; 19</u> |
| <u>Benzene</u>   | <u>0.20 mg/kg</u>  | <u>0.20 mg/kg</u>                | <u>0.20 mg/kg</u>                |
| <u>BTEX</u>  | <u>100 mg/kg</u>   | <u>100 mg/kg</u>                 | <u>50 mg/kg</u>                  |
| <u>TPH</u>   | <u>5000 mg/kg</u>  | <u>1000 mg/kg</u>                | <u>100 mg/kg</u>                 |
| <u>Chlorides - if the site is<br/>0.5 acres or less</u>      | <u>5000 mg/kg</u>  | <u>2500 mg/kg</u>                | <u>1000 mg/kg</u>                |
| <u>Chlorides - if the site is<br/>greater than 0.5 acres</u> | <u>site background concentration or 250 mg/kg or site<br/>background concentration, whichever is greater or less than<br/>or equal to site background concentration, whichever is<br/>greater.</u> |                                  |                                  |

(25) Surface restoration. Within one year of the completion of closure of a pit, the operator shall contour the surface where the pit was located to prevent erosion and ponding of rainwater, and shall effectively re-vegetate the site.

G. Exemptions; additional conditions.

(1) The division may attach additional conditions to any permit upon a finding that such conditions are necessary to prevent the contamination of fresh water, or to protect public health or the environment.

(2) The division may grant an exemption from any requirement of Section 50 of 19.15.2.50 if the operator demonstrates that the granting of such exemption will not endanger fresh water, public health or the environment. The division may revoke any such exemption, after notice to the operator of the pit and to the surface owner, and opportunity for a hearing, if the division determines that such action is necessary to prevent the contamination of fresh water, or to protect public health or the environment.

(3) Exemptions may be granted administratively without hearing provided that the operator gives notice to the surface owner of record where the pit is to be located and to such other persons as the division may direct and (a) written waivers are obtained from all persons to whom notice is required, or (b) no objection is received by the division within 30 days of the time notice is given. If any objection is received, and the director determines that the objection has technical merit or that there is significant public interest, the director shall set the application for hearing. The director, however, may set any application for hearing.

H Closed loop systems. In lieu of utilizing pits or below grade tanks in accordance with 19.15.2.50 NMAC, operators may conduct operations using closed loop systems.

[19.15.2.50 NMAC - N, 02/13/04]

**HISTORY OF 19.15.2 NMAC:**

**Pre-NMAC History:** The material in this part was derived from that previously filed with the state records center and archives:

OCC 67-10, Commission Order No. R-3221, Case No. 3551, filed 5/2/67.

OCC 67-10, Amendment No. 1, Commission Order No. R-3221-A, Case No. 3644, filed 8/31/67.

OCC 67-10, Amendment No. 2, Commission Order No. R-3221-B, Case No. 3806, filed 7/31/68.

OCC 67-10, Amendment No. 2, Commission Order No. R-3221-B-1, Case No. 3806, filed 8/20/68.

Order No. R-7940-C, Special Rules and Regulations for the Disposal of Oil and Natural Gas Wastes in the Vulnerable Area in San Juan, McKinley, Rio Arriba and Sandoval Counties, New Mexico, filed 2/10/93.

**History of Repealed Material:**

OCC 67-10, Commission Order No. R-3221, Case No. 3551 (filed 5/2/67), repealed 02/13/04.

Order No. R-7940-C, Special Rules and Regulations for the Disposal of Oil and Natural Gas Wastes in the Vulnerable Area in San Juan, McKinley, Rio Arriba and Sandoval Counties, New Mexico (filed 2/10/93), repealed 02/13/04.

**Other History:**

OCC 67-10, Commission Order No. R-3221, Case No. 3551 (filed 5/2/67) and Order No. R-7940-C, Special Rules and Regulations for the Disposal of Oil and Natural Gas Wastes in the Vulnerable Area in San Juan, McKinley, Rio Arriba and Sandoval Counties, New Mexico, (filed 2/10/93) replaced by 19.15.2 NMAC, General Operating Practices, Wastes Arising from Exploration and Production, effective 02/13/04.