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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: Yates Petroleum Corporation recommended modifications to proposed rule
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 Yates Petroleum Corporation (Yates) concerning the proposed Pit Rule (Case No. 14015). This letter presents Yates'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"). Yates will also submit written comments on the Pit Rule and a written statement at the hearing.

Yates has extensive oil and gas operations within the State of New Mexico that the proposed Pit Rule will substantially impact. The recommended modifications in this letter are an effort to incorporate current science and operational flexibility into the proposed Pit Rule.

Yates supports the Industry Committee that 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. Yates hopes that the Commission will give the recommended modifications of the Industry Committee and Yates 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 from the Division's district offices to the Santa Fe office. Yates believes that this transfer of functions is inappropriate because the local district offices are better staffed with both environmental and inspector personnel 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

Yates has the following specific recommended modifications on the proposed Pit Rule from OCD.

19.15.1.7.B.5 NMAC

Yates 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, Yates 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

Yates proposes that OCD revise the definition of "Closed-loop system" to better specify those operations constituting a closed loop system. Yates 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

Yates 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, Yates 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

Yates 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

Yates proposes that OCD change "liquids" to "fluids" in the definition of "Temporary pit."

19.15.17.9.B NMAC

Yates 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

Yates 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, Yates 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, Yates proposes that reference to manufacturer's recommendations be removed and 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

Yates 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, Yates 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

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

Yates 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

Yates 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

Yates 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, Yates 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, Yates 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

Yates 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

Yates 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, Yates 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

Yates 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, Yates proposes OCD replace "20-mil LLDPE liner" with "12-mil LLDPE liner" in each of these conditions.

19.15.17.12.A.2

Yates 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

Yates 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

Yates 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

Yates recommends that "or material" be added after "other hardware" to give additional options.

19.15.17.12.B.1 NMAC

Yates 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

Yates 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

Yates 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.

Yates 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, Yates 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.

(~~c~~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~~f) ~~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. Yates recommends that the threshold be adjusted from 250 mg/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.

Yates also supports simplifying the requirements addressing a release to make them clearer. These recommendations drop the term "division-prescribed" before soil cover because the specifications are set forth in rule. Finally, Yates 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.

Yates 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 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.

Yates 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

Yates 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 is outside of a 100 mile radius 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. The Industry Committee will demonstrate at the Pit Rule hearing that on-site closure of temporary pits is protective of human health and the environment at the closure site. As a result, Yates supports the Industry Committee's proposal that OCD eliminate 19.15.17.13.F.1.a NMAC in its entirety.

19.15.17.13.F.1.c NMAC

While Yates 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, Yates proposes that OCD replace 19.15.17.13.F.1.c NMAC with the following: (note: because proposals eliminate of 19.15.17.13.F.1.a NMAC in the draft rule, subsection (c) in the draft rule is renumbered to (b)):

> (e~~c~~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 on-site closure or deep trench burial

19.15.17.13.F.1.e-g NMAC

Yates 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. These 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 Yates proposes that OCD eliminate sections (e) through (g) of 19.15.17.13.F.1 NMAC.

19.15.17.13.F.2 NMAC

Yates 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. Yates recommends 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.~~

(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.~~

(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).

(cf) 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.

Yates 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 ~~I~~ 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

Yates 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, Yates 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

Yates 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.

Yates 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, Yates proposes that OCD eliminate 19.15.17.15.A.2 and 3 NMAC in their entirety.

19.15.17.16.A NMAC

Yates proposes that OCD include a time limit for the review of permit applications. Yates 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. Yates 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.

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Yates appreciates the opportunity to comment on the proposed Pit Rule. Please feel free to contact me at (480) 505-3927 if you have any questions or concerns.

Sincerely,

Todd Wear

for Eric L. Hiser
Counsel for Yates Petroleum Corp.

cc: Mark E. Fesmire, Director, OCD