TESTIMONY REGARDING OCD CASE 12969, CONCERNING THE ADOPTION OF A PIT RULE AND RESCINDING CERTAIN ORDERS.

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INTRODUCTION

The proposed rule is directed toward protection of ground water and surface water. However, the NMEMRD is pledged to protect the environment, not only water. This testimony will focus on the need to protect not only recoverable water, but also the vadose zone, from contaminants, including salts, that may be accumulated or concentrated in pits. I will first present a little background on unsaturated hydrology, and then comment on details of the proposed rule.

BACKGROUND: UNSATURATED HYDROLOGY

Usually, we think of environmental water as either ground water or surface water. However, almost all non-aquatic life, including soil bacteria and plants, depends directly or indirectly on water in the pores of the vadose (unsaturated) zone. I will therefore begin with a short review of water motion and contaminant transport in the unsaturated zone. **Fig. 1** presents an example of the moisture content as measured in dry porous rock. Borehole 1009 was drilled beneath asphalt pavement, which covered and extended beyond a closed evaporation pit. Some 10 or 15 years after an evaporation pit was closed and the surrounding area covered by asphalt, the influence of either the pit or the asphalt can be seen to a depth of 100 ft. This illustrates that a surface disturbance can cause deep, long-lasting hydrologic effects.

Suction. Water in unsaturated ground is held in suction by capillary forces, like water in a sponge, as illustrated in **Fig. 2**. Suction means one must expend energy to force the water out of the porosity of the soil. Technically, *suction* is the energy per unit volume required to extract the water. Suction is expressed in units of pressure, or equivalently, as the negative height (head) of a hypothetical column of water that would generate a pressure of that magnitude.

Potential. Water below the surface of the ground has a *negative* potential energy--that is, one must expend energy to lift the water to ground surface. The total *potential* at any depth in the ground is the energy required to extract a unit volume of water from the pores of the soil, and to lift it to ground surface. Potential is expressed as a negative pressure or negative head, like suction. Water moves toward lower (more negative) potential. In other terms, water in the vadose zone moves according to the combined forces of suction and gravity. In **Fig. 3,** above a depth of 60 feet, water is moving downward toward lower potential. However, in most of the region between 60 and 90 ft of depth, water is moving *upward* toward lower potential. In this region, suction is pulling upward more than gravity is pulling downward.

Impact. As illustrated by **Fig. 3**, moisture flow and the accompanying contaminant transport in the vadose zone is not always predictable unless you make local measurements. In arid regions, most of the precipitation that soaks into the ground is returned to the surface by unsaturated flow and by plants, where it evaporates or

Neeper Exhibit No. 1

transpires to the atmosphere. Unsaturated flow can bring soluble contaminants to the root zone and to the surface. **Fig. 4** shows the accumulation of white salts on the surface of a porous rock in an undisturbed canyon. The lower photo shows similar salts on the surface of porous tuff along a road cut. In these places, the natural white deposits were about 1 mm thick, and would wash away in summer rains, only to form again the following spring if the winter had sufficient snow. Similarly, soluble wastes buried in shallow pits can migrate to the surface and to surrounding soil. The transport rate is just a matter of time and weather.

DISCUSSION OF THE PROPOSED RULE

1. **Sections B3(b)** and **C2(g)(iii)** provide specific exemptions for existing pits. In general, exemptions should be few--all pits should be brought into compliance. If environmental protection requires that pits have liners, it should make no difference whether the pit is old or new.

2. **Section C2(a)** allows pits to be located adjacent to a watercourse so long as some unspecified level of the pit is "safely above the ordinary high-water mark." This is unclear language, very subject to interpretation, particularly if the water "mark" disappears through weathering. This language is in potential conflict with the OCD pit construction guideline, which says "high water level," without the vague term, "*ordinary*." In New Mexico, arroyos and broader valleys are watercourses, but are ordinarily dry. Thus, it can be logically argued that the "*ordinary*" high water mark is the bottom of the watercourse! Pit bottoms should be located above the expected 100-year flood level, especially if wastes are buried in the pits at closure.

3. **Sections C2(b) and (c)** provide for double liners and leak detection in disposal pits, which is an excellent requirement. However, the proposed rule does not specify liner materials and construction, and the pit construction guidelines specify materials in vague terms such as "good resistance to tears and punctures." Liner materials should be specified by performance, such as hydraulic conductivity, tensile strength, puncture strength, and environmental stress cracking. These properties are usually quantifiable by ASTM tests, and are routinely quoted in sales literature of the pond industry. It is better to specify performance properties than to specify exact materials, thereby leaving the selection of particular materials and thicknesses to the operators. For example, the rule could specify permeability by requiring any liner, synthetic or constructed, to have a demonstrated transmission less than the equivalent of a layer one foot thick, with hydraulic conductivity less than 10^{-8} cm/second.

4. **Construction**. The proposed rule ignores pit construction and operating requirements such as freeboard, while the construction guidelines say only that "wave action shall be taken into account." The rule merely specifies construction so as to "prevent contamination" and "protect the environment." Such terms are subject to such wide interpretation as to be unenforceable. Vague terms are unfair to responsible industry, by allowing irresponsible industry to operate at lower cost. A clear, definite rule and quantitative guidelines are needed.

5. **Section C2(e)** specifies that "spray-borne solids" must remain within the pond's lined perimeter. This is ambiguous language, in potential conflict with the guideline that says "spray-borne salt." The rule should require that spray-borne *solids and dissolved solids* are confined to the lined perimeter of the pond or pit.

6. **Section C2(g)** provides a blanket exemption for approximately 300 square miles of the southeast, and for the "oil and gas producing areas of the San Juan Basin" that are more than 100 ft above a named river or 50 ft above any other channel. I have two objections to this language.

First, the language is insufficiently precise for regulatory purposes.

It is not clear whether the Chama River is excluded by virtue of being a "creek" that drains into the Rio Grande. If so, pits near it are apparently subject to the 50-foot requirement, not the 100-foot requirement of the named rivers.

The meaning of "oil and gas producing areas" is not clear, and probably not legally defensible. If an oil company were to drill in a previously untapped area, the area might arguably be called "oil producing" and no liner would be required. However, if a geothermal company were to drill, then presumably a pit liner would be required because the drilling would not be "within the oil and gas producing areas."

Second, the blanket exemptions do not protect the environment.

Contaminants, particularly salts, will be distributed to the environment by unlined pits in the San Juan basin. The moisture and potential profiles shown in Figs. 1 and 3 indicate that soluble contaminants can move under unsaturated conditions. When saturated flow occurs in fractures and preferential subsurface channels, contaminants can be carried much faster, and can move hundreds of feet in a few years. This was noted during environmental restoration studies at Los Alamos, where components of explosives were found in the aquifer hundreds of feet below a discharge on the surface of normally dry ground. Soluble contaminants, once discharged into the ground, can move back to the root zone or to the surface.

In an arid region, the shores adjacent to a lake can not usually be classified as a wetland, as will be defined by 19.15.1.7 NMAC. Such lake shores are not rivers or drainage channels. It therefore would be permissible to place unlined pits close to such lakes in the San Juan basin unless "protectable" ground water were present.

It has been argued that the Division has authority to protect only water, and cannot require pit liners in the absence of ground water. This is an unfounded argument, because the second EMNR Department Goal is to "protect the environment ... ." Furthermore, protection of the environment is cited 11 times in the proposed rule itself. In the San Juan basin, the rule provides limited protection for streams and groundwater, but little protection for the living environment, which is dependent on the soils and pore water of the vadose zone. In particular, the discharge of salts into the soil destroys the biological productivity of the soil.

7. **Section C2(g)** allows discharge to an unlined pit in any area where the discharge quality meets WQCC standards. Allowing unlimited discharges so long as the concentration in the discharge meets WQCC standards is an invitation to pollution. An evaporation pit concentrates the contaminants so that, although the initial discharge may meet standards, the water infiltrating the soil does not meet standards. Furthermore, the standards were meant to be the limit above which remediation would be required--not meant to be the extent to which all water can permissibly be polluted. When large discharges occur, as with coalbed methane production, the total quantity of contaminant released is more important than the concentration in the release itself.

Allowing unlimited discharges to the soil also invites intentional misapplication of the rule. In a marginal case, if the discharged water did not meet WQCC standards, the operator could dilute it with fresh water, thereby releasing all of the contaminants but in an increasingly mobile form! Such dilution is being done to justify the discharge of polluted mine water in southern New Mexico. Furthermore, the OCD has received at least one proposal from a major producer to dilute contaminated soils until the mixture meets the standard beyond which remediation is not required. Whether diluted or not, the important number is the total quantity of salt or other contaminants that will be discharged onto the landscape, not the concentration at the outlet pipe.

8. **Section E** of the proposed rule specifies that drilling fluids and cuttings in a pit may be disposed in a manner "approved by the division." This invites burial of chlorides and other soluble wastes in closed pits. The drying of wastes prior to burial is somewhat of an artifice. The dried, buried wastes will later be transported by runoff, infiltration, and unsaturated flow. The extent to which they are dried prior to burial simply delays the migration, but does not prevent it. Unfortunately, the proposed rule does not even require that liners be maintained intact upon closure. However, even an intact buried liner will eventually fail, allowing the wastes to migrate. The migration may be especially abrupt if the buried liner acts as a subsurface basin that collects infiltrated rain, or if the closed pit is located in a watercourse that is scoured by a flash flood above the "normal" high water mark.

8. **Section F** requires closure of pits within six months. The STRONGER guideline for workover pits is 120 days. Rapid closure is important particularly because Section C2(a) of the proposed rule would allow workover pits in the bottom of a watercourse.

9. **Burial of wastes** in closed pits is in general unacceptable. The proposed rule implicitly allows such burial, without even the minimal requirement of an intact liner. In the exempt areas, burial may occur without any liner! Anything soluble left in a pit will migrate. While the migration of wastes from one pit might seem inconsequential, it is the combined migration from thousands of pits that will affect surface ecology, which in turn can affect surface water far from the site. It is reasonable to allow burial of insoluble harmless minerals, but on-site burial of soluble wastes in unlined pits across thousands of square miles should not be allowed. In another state, the petroleum industry has argued that it cannot maintain liner integrity during pit closure. I accept that judgment, and conclude that soluble wastes must be removed from pits for injection or other safe disposal. **Fig. 5** illustrates the kind of environment left by pits, several years after closure.

SUMMARY

OCD is to be commended for its effort to develop a pit rule requiring liners, which prevent the immediate percolation of wastes into the ground. However, the proposed rule is seriously faulty for exempting large areas of the state from the liner requirement. Other industries are not allowed to dump their wastes across the landscape. Oil and gas activities affect large areas, which can become wastelands. This industry can, and should, be held to the same degree of environmental responsibility as other industries. Until the industry and the regulations by which it abides demonstrate such responsibility, the industry does not deserve to move into new, unspoiled areas.

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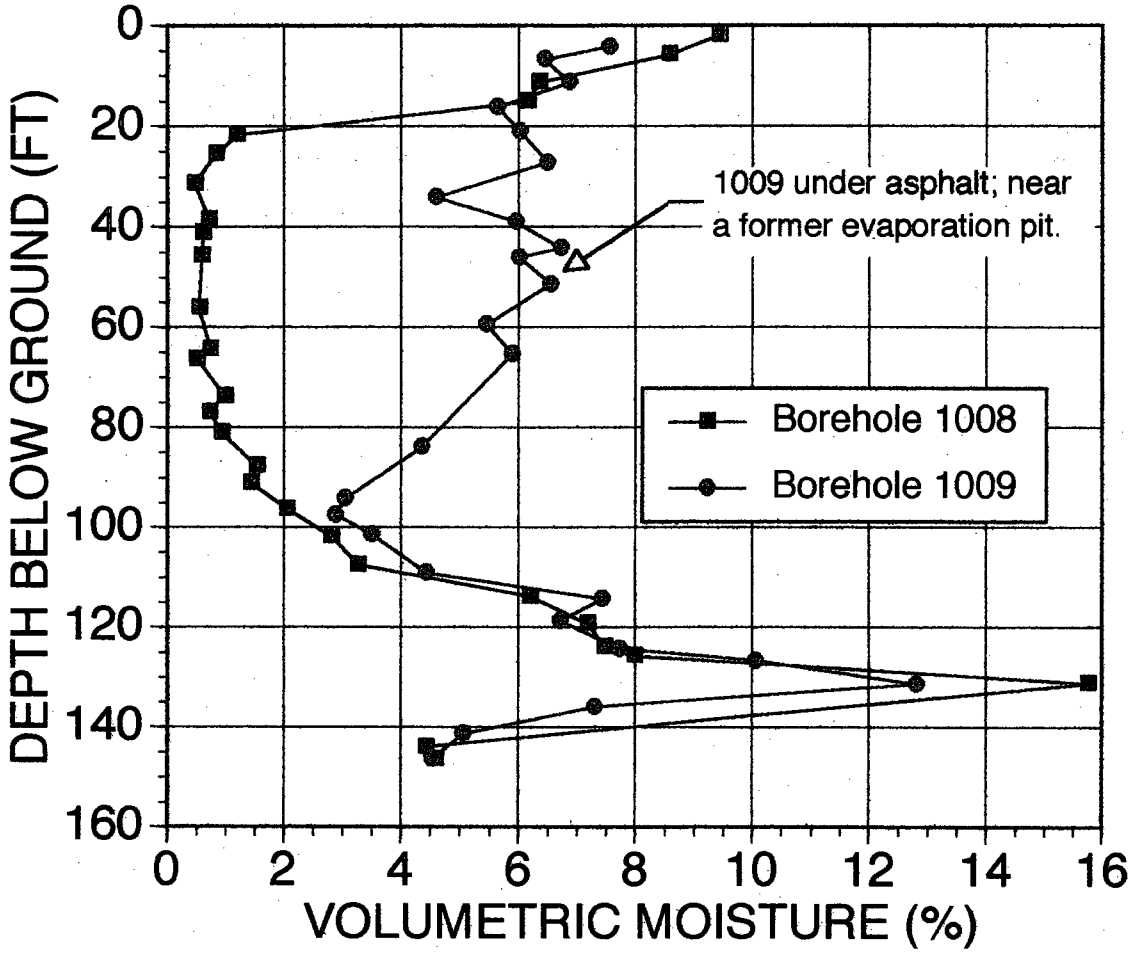


Fig. 1. Volumetric moisture as a function of depth in dry porous tuff. Porosity is approximately 50%.

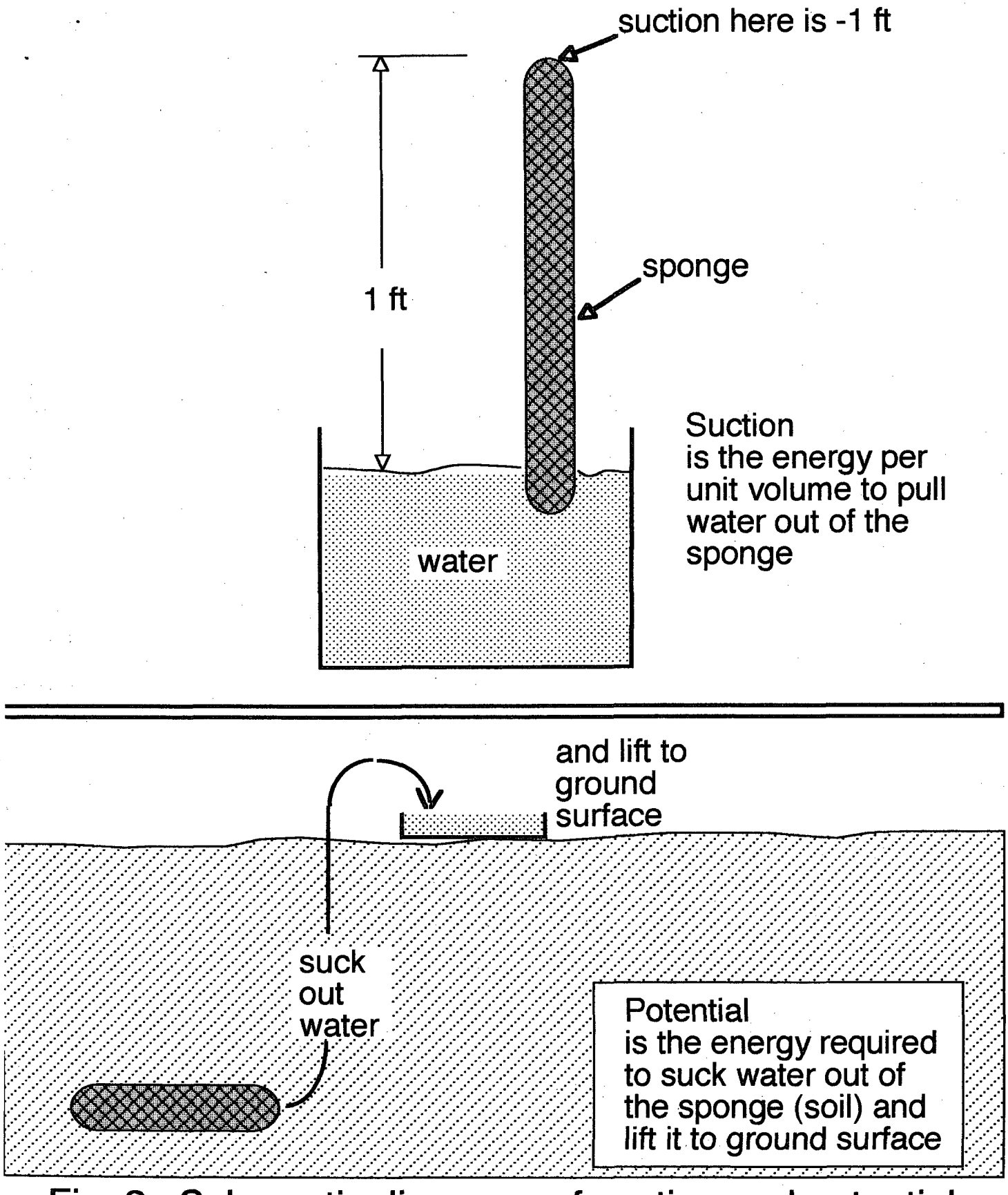


Fig. 2. Schematic diagrams of suction and potential.

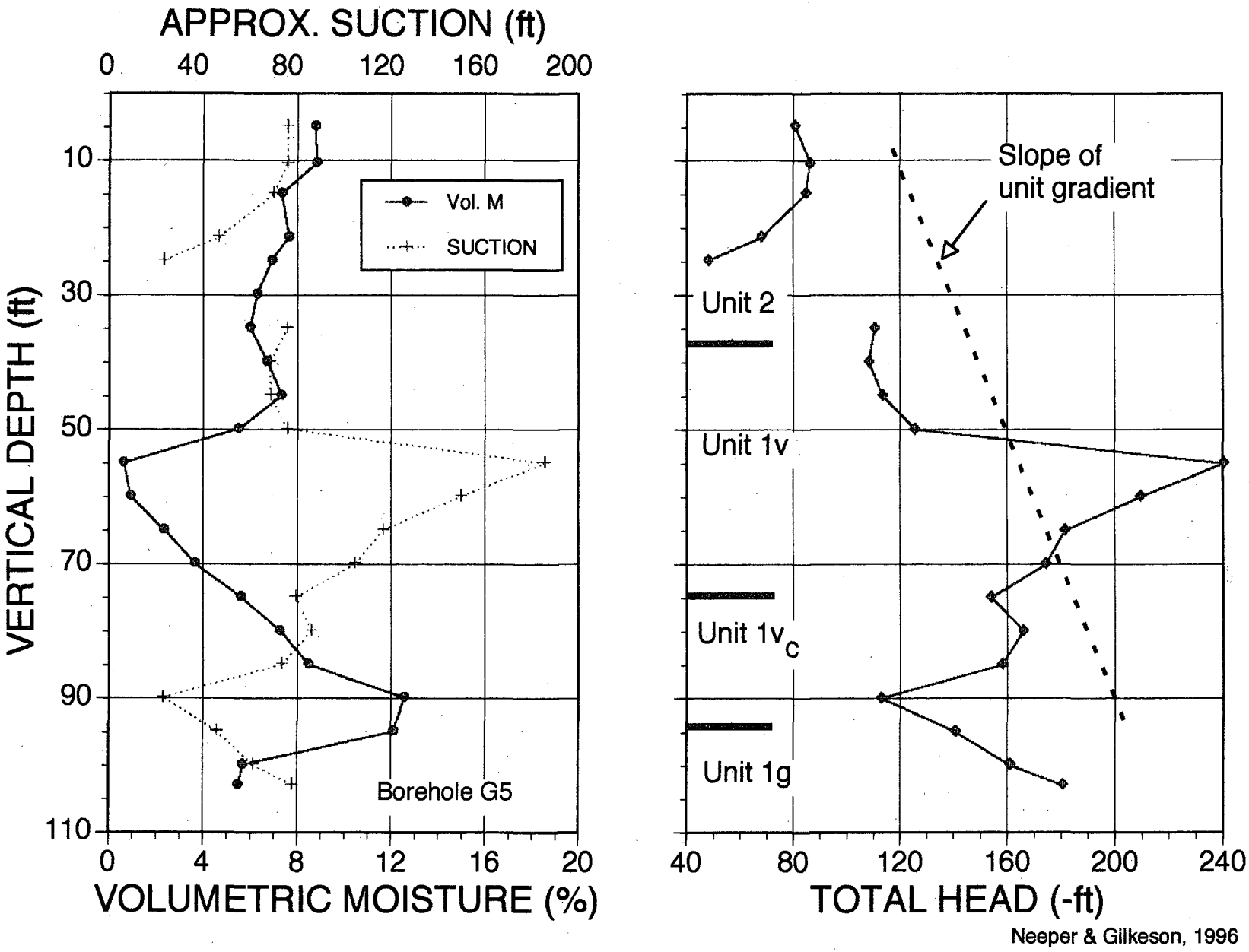


Fig. 3. Measured moisture, suction, and potential in a borehole.

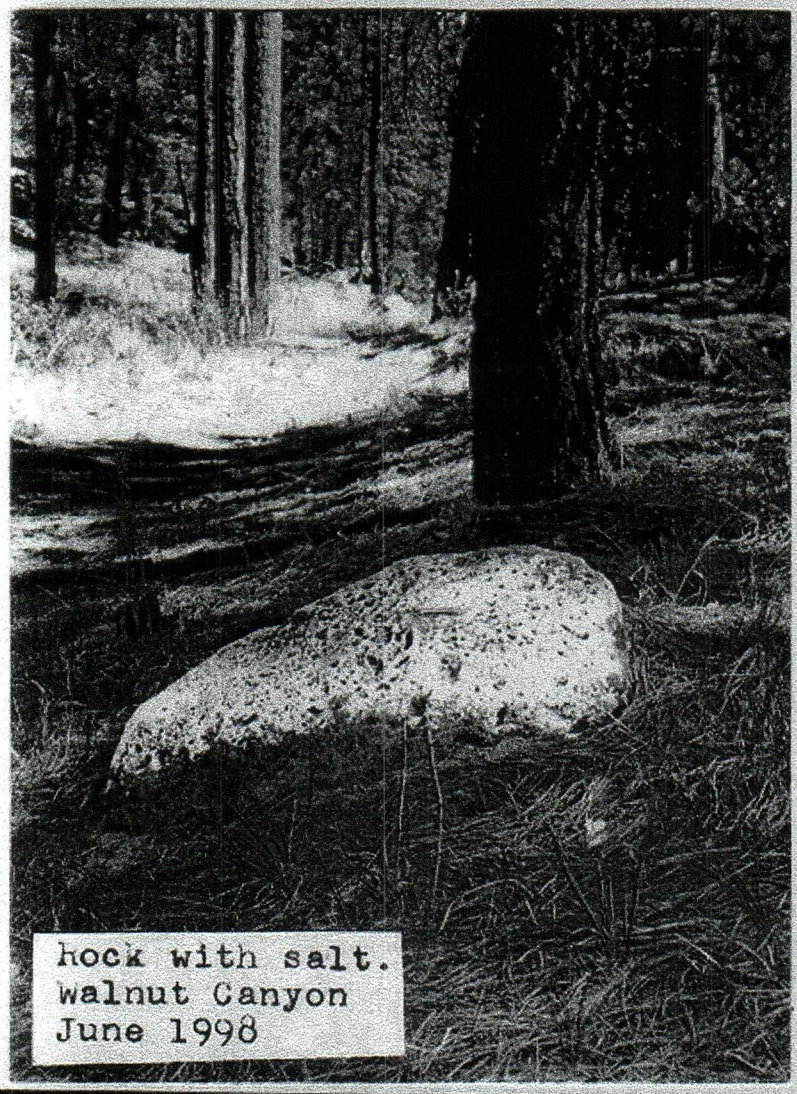
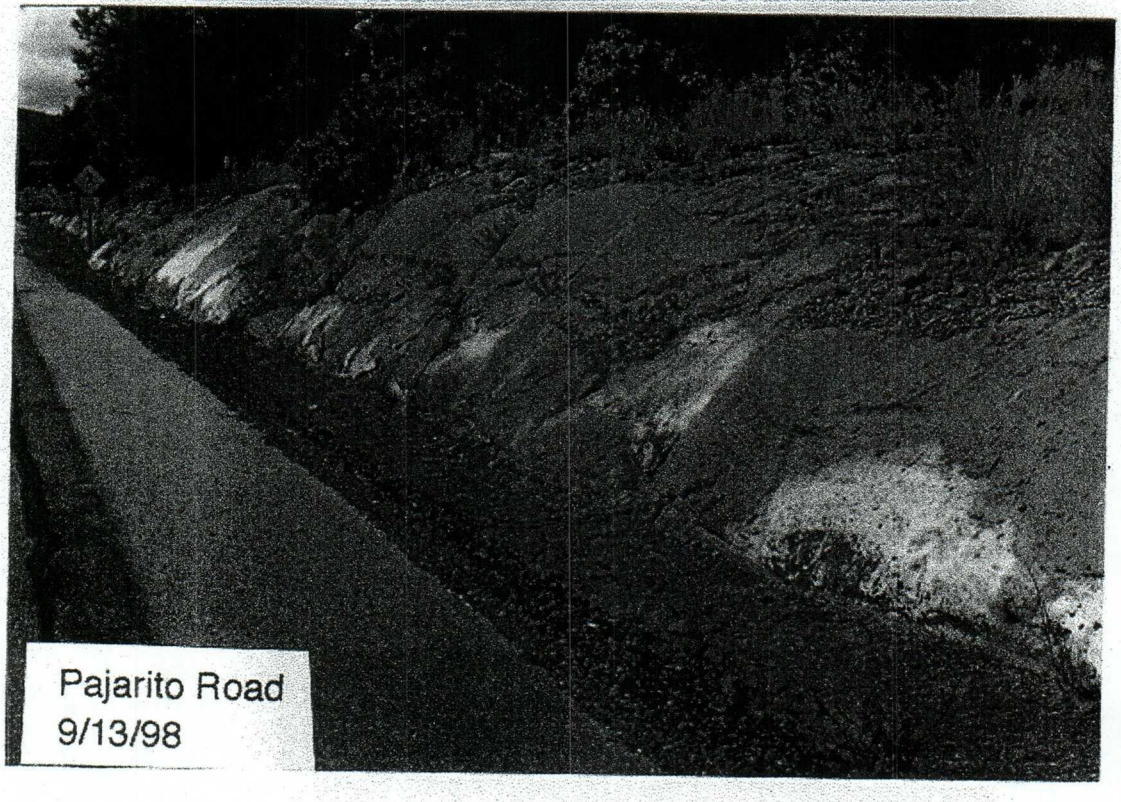


Fig. 4. Salts left on rock surfaces by unsaturated transport.



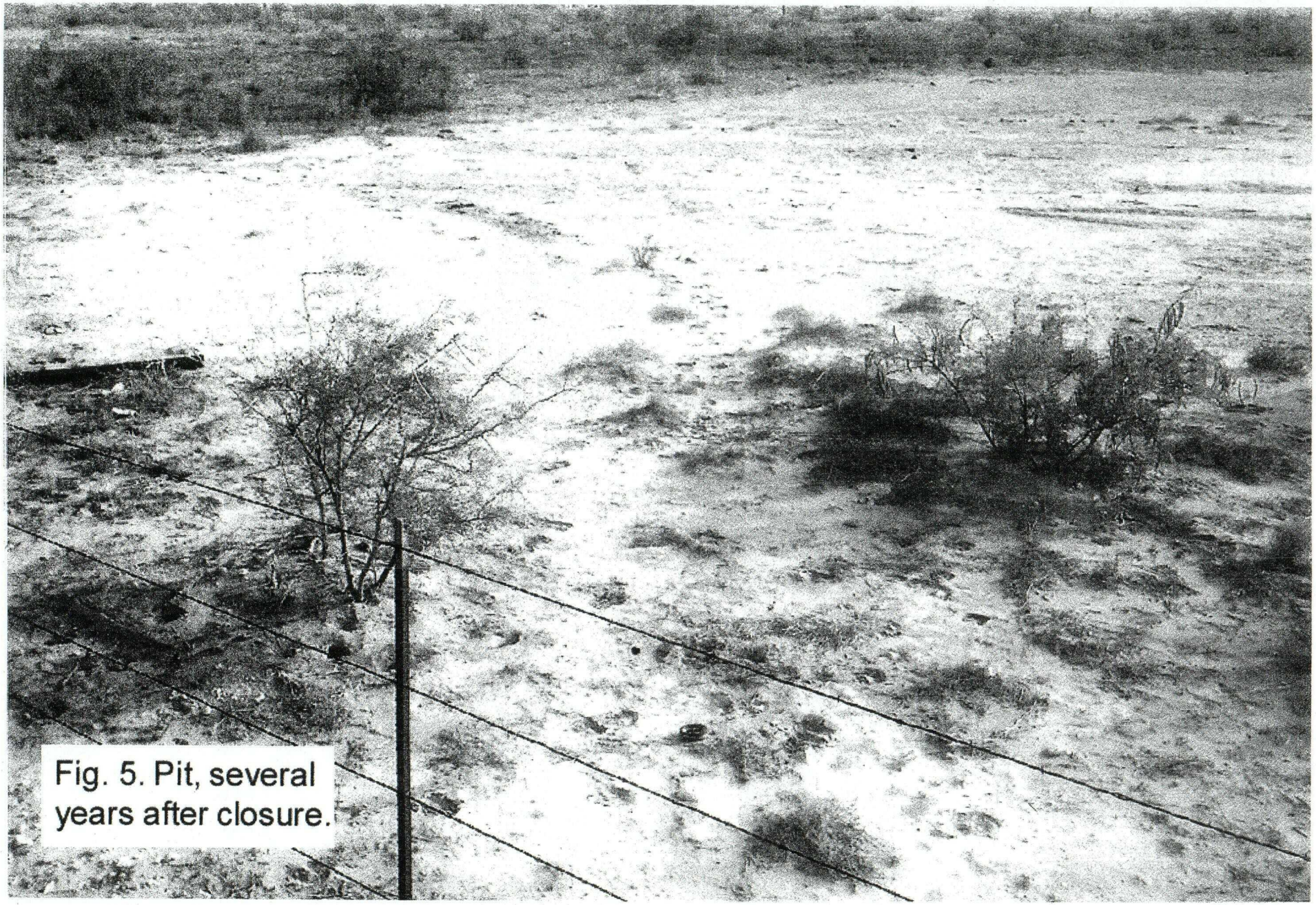


Fig. 5. Pit, several years after closure.

SIERRA CLUB
FOUNDED 1892

Santa Fe Group - Rio Grande Chapter

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November 13, 2003

Re: Case 12969, Pits and Below-Grade Tanks

This is to provide comment on the proposed rules on behalf of the Rio Grande Chapter of the Sierra Club.

With two exceptions we support the draft as it has been presented. We oppose entirely the recommendations that were presented by NMOGA/IPANM on non-consensus language. We have expanded the reasons for this opposition in the items listed below. In order to be enforced, quantitative standards should replace such words as "generally", "reasonably" and "predominantly". Such words render enforcement open to argument and litigation.

There are six areas of particular concern.

1. C2(a) Location:
   Firstly, the rule as written would permit a drilling or workover pit be located in the middle of a river. We recommend that the first sentence read "*No pit shall be located in any watercourse, lakebed, sinkhole, or playa lake ~~except where the pit is to be temporarily used in a transient operation such as drilling or workover.~~*"
   Secondly, as we cannot anticipate all conditions that might be encountered, it is important to require the Division to increase environmental protection if such a need can be demonstrated. The examples cited during negotiations were high ground water tables and karst regions. It is clear that in such circumstances, closed systems might be necessary. The sentence in question does not mandate such protections, it simply permits them. We recommend that the last sentence of this section be altered to read "*The division <u>shall</u> require additional protective measures for pits located in groundwater sensitive areas.*"

2. C2(e) Disposal or Storage Pits: While the intent of this sentence is to allow no discharge of hydrocarbons into a pit, analytical chemistry could create an unintended burden. The amount of "two-tenths of one percent" captures the essence of the intent without creating a potentially abusive requirement.

3. C2(f) Netting:
   Firstly, the intent is to protect water fowl. A compromise was made to provide relief to this requirement when there is active human presence. An alternative would be to simply require netting of all ponds greater than 16' in diameter AT ALL TIMES. This intent has been obscured in testimony. Netting should be required at all times there is no human presence. Evidence has been presented that drilling/workover pits are often both unnetted and toxic.

Secondly, the "two-tenths of one percent" should replace the language "reasonably free of oil" in this paragraph. The technology exists to remove hydrocarbons easily. A field operator can use visual inspection of a pond to insure that separators are working properly but this would be a highly subjective standard upon which to apply an enforcement standard.

4. C4 Sumps: The industry negotiators moved the size of sumps from the original 21 gallons (1/2 of an oil barrel) to 110 gallons (2 drums). This change has given sumps a greater potential for environmental damage due to leakage. While the intent is that sumps will generally be free of hydrocarbons, hydrocarbons will be present in all of the sumps some of the time and some of the sumps all of the time. A sump constructed of a half-barrel, half drum, full barrel or full drum fits operational reality. Anything else would be a manufactured tank. Visual inspection of a sump is not possible without removing the sump from the ground. We propose that a sump be limited to a 55-gallon drum and that all sumps be tested. If an operator regards integrity testing to be a burden, the sump simply has to be placed ON the ground instead of IN the ground.
5. F2 Surface Restoration: The prevention of ponding is not an erosion issue; it is a percolation issue. The NMOGA comment misses the point.
6. G3 Exemptions: The intent of the rule is prevent "stealth" operations. The Division needs to maintain control of the communication process. Environmental contamination, particularly of an aquifer, has impacts well beyond a surface owner.

Respectfully submitted,

Clifford Larsen, Mining Co-Chair
Rio Grande Chapter of the Sierra Club

New Mexico Oil Conservation Commission Hearing
November 13, 2003
New Mexico Oil & Gas Association
and Independent Petroleum Association of New Mexico
Joint Position on Proposed Pit Rule
Bruce A. Gantner

General Comments

New Mexico Oil and Gas Association (NMOGA) representatives have been working with New Mexico Oil Conservation Division (NMOCD) and other members of the consensus committee on this proposed rule for over a year. Although the process was not always smooth going and consensus was not reached on every issue, NMOGA feels that it was beneficial to hear the views of all. We very much appreciated the opportunity for being involved in this rulemaking process and would like to be involved in the future.

NMOGA/IPANM would like to point out to the Commissioners that with any rulemaking there should be justifiable need established first and then the rulemaking process should focus on addressing that need. In that regard, NMOGA/IPANM members have looked through NMOCD files for specific examples of groundwater impact cases related to pit and below-grade tanks to see if any problems really exist. Based upon that extensive review, there was no evidence apparent to the NMOGA/IPANM representatives that any pits from drilling or workovers were associated with any groundwater cases on file. In fact, the problems identified during our review appear to be related to production pits, spills, and releases, which could be more specifically addressed rather than the present path to establish a statewide rule.

Another general comment that NMOGA/IPANM would like to make is with regard to the NMOCD pit construction and closure guidelines. We are pleased to see that reference to the current guidelines have been removed from the rule as this tended to give regulatory standing to these guidelines. We understand that these and other guidelines are a necessary means of streamlining the design and approval of projects. However, we would like to encourage the NMOCD that these guidelines should allow for the same industry input sought during rulemaking and we would welcome the opportunity to work with NMOCD on these guidelines in the near future.

As a final general comment, NMOGA/IPANM would like to compliment the NMOCD for incorporating many of our industry suggestions into the present version of the pit rule and these changes have gone a long way to make the rule more acceptable to industry. Nevertheless, there still remain some industry concerns on the present rule, which are itemized below.

1) **NMOGA/IPANM proposes that drilling and workover pits be allowed via "permit by rule" language vs. what is presently in the rule which requires permitting through the APD, Sundry, or electronically as otherwise provided in the Chapter.[19.15.2xx,Section B.1.(b)]**

It is NMOGA/IPANM's position that there is no need for permitting of temporary pits such as drilling, workover, and completion pits provided that the operator designs and installs these pits in accordance with the requirements of the rule. This "permit by rule" approach makes even more sense given NMOCD's limited staffing and budget which is better focused on production and disposal pits that have a longer intended life. Furthermore, small workover pits that currently to not require Sundry notice clearly should not require a separate permit to be submitted for approval.

2) **NMOGA/IPANM propose more reasonable compliance deadlines than those currently stated in the rule [19.15.2xx, Section B.3.(b)]**

For pits and below grade tanks in existence prior to the rule that have not been exempted through hearing under OCC Order R-3221 through R3221D inclusive, NMOGA/IPANM believes that six (6) months from the effective rule date is more reasonable than the January 15, 2004 deadline stated in the current rule.

We are also somewhat concerned about what the formal permit application entails for continued use of below grade tanks given that we have not yet seen this form nor any criteria on which NMOCD might deny such applications. As long as integrity of such tanks is demonstrated and until such time as a facility upgrade occurs, NMOGA/IPANM feel that continued use of such tanks should be approved and authorized.

3) **NMOGA/IPANM propose that language under Disposal and Storage Pits require that the pit be kept reasonable free of oil and not prohibit the discharge of liquids with greater than 0.2% oil content into pits. [19.15.2xx, Section C.2.(e)]**

NMOGA/IPANM appreciates that NMOCD has eliminated previous language that required require a skimmer tank where the oil content in liquids was greater than 0.2%. Nevertheless, to prohibit the discharge into pits where the hydrocarbon content is 0.2% still troublesome. Such protection is unnecessary to prevent impact to human health or the environment and would be difficult for our field lease operators to judge compliance on a daily basis. Operators typically have separation equipment in place where there are economically recoverable quantities of liquid hydrocarbon so this should not be an issue in 99.9% of the cases in the field. Where our field lease operators and/or OCD discover an instance of significant oil release to a pit, then NMOGA/IPANM suggested wording should suffice to guide our field

employees to correct the situation and to provide NMOCD with leverage to require separation or skimming where the situation is not timely corrected.

4) **NMOGA/IPANM propose alternative language that exempts netting of pits for drilling and workover operations as long as the pits are kept reasonably free of oil. Current OCD language would imply that the netting exemption is only valid during the drilling and workover activity with the implication that netting would be required after the rig moves off the well and until the pits are closed. [19.15.2xx, Section C.2.(f)]**

Self explanatory.

5) **NMOGA/IPANM propose alternative language that requires annual visual inspection of those sumps exceeding 30 gallons in capacity. [19.15.2xx, Section C.4.]**

NMOGA/IPANM believes that visual inspections are sufficient means of demonstrating integrity of sumps but other alternatives should be allowed as well. Furthermore, there is no legitimate reason to require such integrity testing for small sumps given that they must be kept relatively free of liquids.

6) **NMOGA/IPANM propose alternative language that does not require permitting of impoundments or other structures used by operators to meet SPCC requirements, which are not intended to store spilled oil. [19.15.2xx, Section D.5.]**

The specific pits NMOCD is referencing appear to be produced water emergency pits which NMOGA/IPANM agree should be covered by this rule. However, the unintentional result of NMOCD's wording is that it would regulate as "pits" impoundments installed by some companies to prevent discharge of oils into waters of the US. It is NMOGA/IPANM's opinion that such impoundments are not designed to be storage pits as defined by this rule but instead are emergency impoundments designed to keep a spill from reaching a pond, river, or other body of water. In NMOGA/IPANM's opinion, such impoundments should be exempt. Emergency produced water pits are clearly anticipated to contain produced water for some time and are typically lined given that anticipated frequency of storage. Emergency impoundments used by operators to meet their obligations under 40 CFR 132 for SPCC plans are not anticipated to store crude oil but are a contingency measure to prevent discharge into waters of the US in the event of a catastrophic failure of tanks or other vessels storing oil. Such impoundments are not typically lined as their purpose is short-term containment and not storage and as such any release that they contain is promptly removed.

7) **NMOGA/IPANM propose alternative language that does not require formal closure reports for drilling and workover pits as long as they are closed in accordance with APD or Sundry notices where**

applicable or in accordance with generally accepted practices. Furthermore, NMOGA/IPANM propose alternative language that allows for below grade tanks to be closed by visual determination if the tank being removed demonstrates integrity and there is no visible contamination beneath it. Current OCD rule language would require soil testing and documented closure of drilling and workover pits as well as for all below grade tanks. [19.15.2xx, Section F.1.]

NMOGA/IPANM advocate that the closure of drilling and workover pits should not have to follow the same closure guidelines as for unlined production pits. Furthermore, under NMOGA/IPANM's proposed "permit by rule" process, closure reports for drilling and workover should not be required as long as the pits are closed in accordance with generally accepted practices for drilling and workovers. Normally, the process for closure is typically identified by the operator on APDs and Sundry Notices for drilling and workover activities.

With respect to below grade tanks, NMOGA/IPANM strongly contend that below grade tanks need no special closure procedures as long as the tank had integrity and that there is no visible soil impacts beneath it. If integrity is not demonstrated or the area beneath the tank visibly shows contamination, then formal closure is warranted.

8) **NMOGA/IPANM propose alternative language that surface restoration of pits that the operator contour the area where the pit was located to prevent erosion and prevent ponding, except where the area will still be used for operations. OCD language requires contouring after one year, irrespective of whether the area will be reused again. [19.15.2xx, Section F.2.]**

Typically, operators will set an above ground tank into the depression where the pit was previously. Hence, the unintentional result of the OCD language would cause an operator to be in violation where there is no environmental problem.

9) **NMOGA/IPANM propose alternative language that the operator must give notice of proposed exemptions only to surface owners of record where the pit is to be located and not to anyone else at discretion of the OCD.**

NMOGA/IPANM strongly disagrees with the original draft that OCD should have unrestricted discretion as to who is notified, require the operator to obtain a release from those entities, and then further allow a 30 day of time of notice to comment. NMOGA/IPANM believes that the surface owner should have that right along with OCD oversight to protect public health and the environment.

NMOGA/IPANM Consensus Proposed Definitions
12 November 2003

Division guidelines referred to in this Section are, by design, tools for use by industry and OCD to expedite the proper design, installation, and closure of pits. These guidelines are not formal rulemaking and as such to not supplant the requirements of the rule.

* Pit means any surface or sub-surface impoundment, man-made or natural depression, or diked area on the surface. Excepted from this definition are berms constructed around tanks or other facilities solely for the purpose of safety and secondary containment. This definition does not include sumps

* Berm means an embankment or ridge constructed for the purpose of preventing the movement of liquids, sludges, solids, or other materials.

* Playa Lake means a level or nearly level area that occupies the lowest part of a completely closed basin and that is covered with water at irregular intervals, forming a temporary lake.

* Below-grade Tank means a vessel, excluding sumps *and pressurized pipeline drip tanks*, used to store, treat or evaporate products or wastes under the jurisdiction of the Division where any portion of the sidewalls of the tank is below the surface of the ground and not visible.

* Sump means any below-grade impermeable single wall reservoir ~~*with a capacity less than 110 gallons*~~ *where any portion of the sidewalls of the tank is below the surface of the ground and not visible, that remains predominantly empty,* and serves as a drain or receptacle for spilled or leaked liquids on an intermittent basis and is not used to store, treat, dispose or evaporate products or wastes. The annular space between a double walled tank or between secondary containment and a pit are not a sump..

NMOGA/IPANM believes that the sump definition is best described without volumes and should reflect that it is below-grade. The volume issue is dealt with in the rule itself by requiring inspections on sumps only greater than 110 gallons. Above ground drip or leak catch units are not sumps and should not be regulated as such as long as the sidewalls are visible. NMOGA/IPANM also believes that it is important to clarify that the annular space between double walled tanks or secondary containment and a pit does not meet the definition of a sump.

* Wellhead Protection Area means any radius of 1000 horizontal feet from any springs or fresh water well. Wellhead protection areas shall not include areas around water wells drilled within 1000 feet of an existing oil, ~~or~~ natural gas, waste storage, treatment or disposal site after such site was established ~~or~~ wells drilled specifically to supply water for oil and gas related operations.

NMOGA strongly believes that the wellhead protection area definition should not apply to water wells drilled by an operator to support oil and gas related operations.

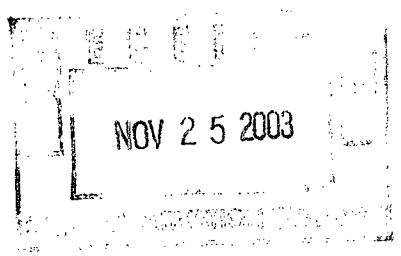
* Alluvium means detrital materials which have been transported by water or other erosional forces and deposited at points along the flood plain of a watercourse. It is typically

composed of sands, silts and gravels, exhibits high porosity and permeability and generally carries fresh water.

* Ground Water Sensitive Area means an area where ground water exists that would likely exceed standards if contaminants were introduced into the environment, which is specifically so designated by the division after evaluation of technical evidence.

* ~~Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico. Constructed wetlands used for wastewater treatment purposes are not included in this definition~~

NMOGA believes that there is sufficient case history to define what is a wetland without the NMOCD defining a new definition that is inconsistent what already exists in case law.



OCD case 12969, Pit Rule
Post-hearing submittal.
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The following comments are submitted in clarification of two issues: A) burial of wastes, and B) the term "reasonable" as a standard.

A) **Burial of Wastes**

In my verbal testimony, I indicated that on-site burial of harmless mineral wastes is acceptable. I recognize that "harmless" is not technically defined. Legally, either a contaminant is present in excess of a standard, or it is considered inconsequential. **My statement is meant to suggest that the concentrations of any contaminants *in the buried substance itself* shall not be of a harmful concentration**. For example, if the concentrations of chemicals in a drilling mud were toxic, that mud should not be buried on site.

B) "**Reasonable" as a standard or guideline**

In response to testimony supporting the term "reasonable" rather than a numerical standard, I queried the witness regarding how he could guarantee that "reasonable" would not be interpreted in such a way as to negate the intent of the regulation. As an example, I cited the WQCC regulation that states: "Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be *reasonably measured.*" (emphasis mine). I asserted that the original intent of "reasonably measured" was to mean a sheen on the water, and that this intent had been negated by an OCD interpretation of one-eighth inch. In fact, it is the regulation of the Petroleum Storage Tank Bureau (PSTB) that provides the one-eighth inch interpretation of a "reasonably" allowable thickness of floating petroleum product. The PSTB rule [**20.5.12.1207 A NMAC**] says,

> **"Owners and operators shall assess the potential for remediation of non-aqueous phase liquid (NAPL) where there is a thickness of greater than one-eighth inch of NAPL on surface water, in any excavation pit, or in any well."**

Although OCD personnel denied using such a gross guideline, the example provided by my inquiry remains: the "reasonable" WQCC standard has been weakened in practice. **This example demonstrates that the term "reasonable" provides an unreliable standard and therefore is unacceptable to citizens**.

NMOGA/IPANM Consensus Pit Rule
12 November 2002

19.15.2 ___ Pits and Below-Grade Tanks.

A. Permit Required. Discharge into, or construction of, any pit or below-grade tank is prohibited absent possession of a permit issued by the division, unless otherwise herein provided or unless the division grants an exemption pursuant to Subsection G of 19.15.2.53 NMAC. Facilities permitted by the division pursuant to Section 711 of 19.15.9 NMAC or Water Quality Control Commission regulations are exempt from Section 53 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 surface waste management facility that is not permitted pursuant to Section 711 of 19.15.9 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.

(b) Drilling or Production. Drilling, workover, and completions pits and below-grade tanks are specifically authorized by this rule provided that they are designed and constructed in accordance with the requirements of this rule. Otherwise, a~~A~~n operator shall apply to the appropriate district office for a permit for use of a pit or below-grade tank in drilling, production, or operations not otherwise identified in Subparagraph (a) of 19.15.2.53.B.1 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. Submittal ~~Approval~~ of such form constitutes a permit for all pits and below-grade tanks annotated on the form. A separate form C-144 is not required. Exempt from permitting are temporary pits needed for minor workovers or well repairs that fall outside of the requirements for submitting a sundry notice.

It is NMOGA/IPANM's position that there is no need for formal permitting of temporary pits such as drilling, workover, or completions pits provided that the operator designs and installs these pits in accordance with the requirements of this rule. This " permit by rule" approach makes even more sense given the OCD's limited budget and staffing which is better utilized on production and disposal pits that have a longer life. Also, the exemption for " minor workover and well repair pits" seems self evident that small pits installed for short term events do not require permitting.

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 (effective date of rule), operators shall obtain a permit before constructing a pit or below-grade tank.

(b) Existing Pits or Below-Grade Tanks. For pits or below-grade tanks in existence prior to (effective date of rule) that have not received an exemption after hearing as allowed by OCC Order R-3221 through R-3221D inclusive, the operator shall submit a notice by ~~January 15, 2004~~six months from the effective date of this rule indicating whether use of those pits or below-grade tanks will continue. 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 by June 30, 2005. If use of a pit or below-grade tank will continue, the operator shall file a permit application by June 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 application~~as long as integrity of the pit or below grade tank is demonstrated and until such time as a facility upgrade occurs..

For pits and below grade tanks in existence prior to the rule that have not been exempted through hearing under OCC Order R-3221 through R-3221D inclusive, NMOGA/IPANM believe that six (6) months from the effective date of the rule is more reasonable than January 15, 2004 as a deadline. We also believe that as long as integrity of such pits or below grade tanks are demonstrated, that continued use these facilities should be approved and authorized.

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 except where the pit is to be temporarily used in a transient operation such as drilling or a workover. 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.

(b) Liners.

(i) Drilling Pits, 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 waters, 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 or Storage Pits. Each 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. Liners shall be designed, constructed, and maintained so as to prevent the contamination of fresh waters, 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) Leak Detection. A leak detection system shall be installed between the primary and secondary liner in each disposal or storage pit. The leak detection system shall be designed, installed, and operated so as to prevent the contamination of fresh waters, and protect public health and the environment. The operator shall notify the division at least twenty-four hours prior to installation of the primary liner so a division representative may inspect the leak detection system before it is covered.

(d) Drilling and Workover Pits. Each drilling or workover pit shall be of an adequate size to assure that a supply of mud-laden fluid is available and sufficient to confine oil, natural gas, or water within its native strata. Hydrocarbon-based drilling fluids shall be contained in tanks made of steel or other division approved material.

(e) Disposal or Storage Pits ~~. Liquids with greater than two-tenths of one percent free hydrocarbon shall not be discharged to a pit~~Liquids discharged to a pit shall be kept reasonably free of oil. Spray evaporation systems shall be operated such that all spray-borne solids remain within the perimeter of the pond's lined portion.

NMOGA/IPANM believe that it is unnecessary to stipulate a 0.2% hydrocarbon content limitation to protect human health or the environment and it is impractical for our field lease operators to determine compliance. Operators typically have separation equipment in place where there are economically recoverable quantities of liquid hydrocarbon so this should not be an issue in 99.9% of typical field operations. Where field lease operators discover a case of a measurable oil layer on the surface of these pits, they can take appropriate measures to remove the hydrocarbon from the surface and correct any operational problems that caused this situation. The term " reasonably free" seems sufficient to NMOGA/IPANM to implement on an operational basis, is enforceable by NMOCD, and is protective of the environment.

(f) Fencing and Netting. All pits shall be fenced or enclosed to prevent access by livestock or wildlife. Active drilling or workover pits may have a portion of the pit unfenced to facilitate operations. All tanks exceeding 16 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 during drilling or workover operations and subsequent to drilling and workover operations if the pits are kept reasonably free of oil. 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.

NMOGA/IPANM believe that drilling and workover pits should not require netting at any time as long as the pits are kept reasonably free of oil.

(g) Unlined Pits.

(i) General Prohibition. After June 30, 2005 use of, or discharge into, any 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 53 of 19.15.2 NMAC. After (effective date of rule), construction of unlined pits is prohibited unless otherwise provided in Section 53 of 19.15.2 NMAC.

(ii) Exemptions for Good Cause. The division may grant an exemption to the prohibition set out in Subsubparagraph (i) of 19.15.2.53(C)(2)(g) only if the operator demonstrates to the division's satisfaction that the unlined pit will not contaminate fresh water and that public health and the environment are protected.

(iii) Unlined Pits Exempted By Previous Order. An operator of an unlined pit existing on (effective date of rule) 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) of 19.15.2.53(C)2 NMAC provided the operator notifies the division, no later than January 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) of 19.15.2.53(C)2 NMAC . The division may terminate any such permit in accordance with paragraph (2) of 19.15.2.53(G) NMAC. Any pit constructed after (effective date of this rule) shall comply with the permitting/lining and other standards of Section 53 of 19.15.2 NMAC, notwithstanding any previous Order to the contrary.

(iv) 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 Subsection 53 of 19.15.2 NMAC:

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;

that area within San Juan, Rio Arriba, Sandoval, and McKinley Counties that is defined as being outside the valleys of the San Juan, Animas, Rio Grande, and La Plata Rivers, which is bounded by the topographic line on either side of the river that is 100 vertical feet above the river channel measured perpendicularly to the river channel, and which 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 located within the oil and gas producing areas of the San Juan Basin in northwestern New Mexico, provided that the areas do not lie 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 and the pit site is not located in water bearing alluvium, no protectable ground water is present or if present, will not be adversely affected by the discharge, and the discharge is not located within a Wellhead Protection Area; or

any area where the discharge quality meets New Mexico Water Quality Control Commission ground water standards.

3. Special Requirements for Below-grade Tanks. All below-grade tanks shall be constructed with secondary containment and leak detection. The operator of any below-grade tank constructed prior to (effective date of this rule) shall demonstrate its integrity annually and shall remove it or equip it with leak detection at the time of any major repairs.

4. Sumps. Visual or other means of ~~i~~Integrity of all sumps exceeding 30 gallons in capacity shall be demonstrated annually.

NMOGA/IPANM believe that visual inspections of sumps are sufficient means of demonstrating integrity but other alternative should be allowed as well. Contingent with NMOGA/IPANM acceptance of this language is our definition of sumps.

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 or if granted verbal approval by the division.

An emergency pit may be necessary where there is no immediate danger to fresh water, public health, or the environment so NMOGA/IPANM believe that it is appropriate to allow for verbal division approval as another viable reason to allow a pit.

2. Construction Standards. A pit constructed in an emergency shall be constructed, to the extent possible given the emergency, in a manner consistent with the requirements of Section 53 of 19.15.2 NMAC and that prevents the contamination of fresh waters, 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 and solids must be removed within 24 hours after cessation of use unless the division extends that time period.

5. "Emergency Pits." Subsection (D) of 19.15.2.53 NMAC shall not be construed to allow construction of so-called "emergency pits," which are pits constructed as a precautionary matter to contain a spill in the event of a release. Impoundments constructed to comply with federal SPCC requirements are not "emergency pits" and shall not require a permit issued pursuant to this section provided that all fluids are removed from the impounded area within 24 hours of use. Construction or use of any such " emergency pits" shall require a permit issued pursuant to Subsection 53 of 19.15.2 NMAC.

The specific pits that NMOCD appears to refer to as " emergency pits" are pits designed to contain produced water associated with salt water disposal wells for which NMOGA/IPANM agree. However, the unintentional result of NMOCD's wording is to call impoundments installed pursuant to federal SPCC requirements under 40 CFR 132 could be construed as " emergency pits" require permitting. In NMOGA/IPANM's opinion, such impoundments are not " emergency pits" and should be clearly stated as exempt from this rule. These impoundments are typically unlined as their purpose is short-term containment of crude oil in the event of a catastrophic release.

E. Drilling Fluids and Cuttings. Drilling fluids and drill cuttings contained in any pit or below-grade tank shall be recycled or dried and disposed of in a manner approved by the division and in such a manner as to prevent contamination of fresh water, or danger to public health or the environment. The operator shall describe the proposed disposal method in the Application for Permit to Drill or the Sundry Notice.

F. Closure and Restoration.

1. Unlined Pit Closure. Except as otherwise specified in Subsection 53 of 19.15.2 NMAC, an unlined pit ~~or below-grade tank~~ shall be properly closed within six months after cessation of use. In appropriate cases, 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 Notice 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. Drilling and workover pits are specifically exempted from filing a detailed closure plan, a formal closure report, or sundry notice of pit closures.

2. Lined Pit and Below-Grade Tank Closure. Except as othersiwe specified in this Section, a lined pit of below-grade tank shall be properly closed within six (6) months after cessation of use. Unless there is evidence that the liner or tank does not have integrity and that the soils have been impacted, no soil samples or closure reports are necessary. If evidence shows that soils have been impacted, then a Closure Report, Form C-144 or Sundry Notice shall be submitted to the division. Where the pit contents will likely migrate and cause ground water or surface water to exced Water Quality Control Commission standards, the pit's contents and the liner shall be removed and disposed in a manner approved by the division.

1) NMOGA/IPANM advocate that closure of drilling and workover pits should not have to follow the same formal closure requirements or submit formal closure reports as unlined production pits or below grade tanks. Item 1 should only address unlined pits.
2) This section added to address lined pits and below grade tanks. If the liner or below-grade tanks demonstrates integrity and there is no evidence of impacted soils (e.g., visual, PID, etc.) then there is no need to sample soils and file a formal closure report. Where there is evidence of lack of integrity or soil impacts, then formal closure is appropriate.

2. 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 extended ponding of rainwater.

The obvious issue is to prevent erosion so there is not need to arbitrarily prohibit pools of water on a closed pit area as this could be misconstrued as to prevent small pools of water which inevitably occur. If erosion is prevented, then the objective is met.

G. Exemptions; Additional Conditions.

1. The division may attach additional conditions to any permit upon a finding that such conditions are necessary to protect fresh waters, public health, or the environment.

2. The division may grant exemptions from any requirement upon a finding that the granting of such exemption will not endanger fresh waters, public health, or the environment. The division may revoke any such exemption after notice to the owner or operator of the pit and opportunity for a hearing.

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 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.

NMOGA/IPANM vigorously disagree with the original draft that NMOCD should have unrestricted discretion as to who is notified, require the operator to obtain a release from those entities, and then further, allow such entities a 30 day of time of notice to comment. We believe that the surface owner should have that right along with OCD oversight to protect public health and the environment.

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

RECEIVED

NOV 7 2003

Oil Conservation Division

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

PROPOSED RULEMAKING
CASE NO. 12969

APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION THROUGH THE ENVIRONMENTAL BUREAU CHIEF FOR REPEAL OF RULES 18, 105 AND 313 AND ADOPTION OF A NEW RULE REGULATING PITS.

IPANM's PRE-HEARING STATEMENT

The Independent Petroleum Association of New Mexico ("IPANM") hereby submits this Pre-Hearing Statement pursuant to the Commission's Pre-Hearing Order in this matter.

APPEARANCES

PARTY	ATTORNEY
Independent Petroleum Association of New Mexico	Michael H. Feldewert, Esq. Holland & Hart, LLP P. O. Box 2208 Santa Fe, NM 87504-2208 505/988-4421

IPANM'S STATEMENT OF CASE

IPANM desires to present comment and testimony in this rulemaking proceedings concerning the matters outlined in its previous submissions to New Mexico Oil Conservation Division and the New Mexico Oil Conservation Commission.

APPLICANT'S PROPOSED EVIDENCE

WITNESS	ESTIMATED TIME
John Byrom, President of D.J. Simmons, Inc. and IPANM representative on the Division's work group committee.	Approx. 10 minutes
Robert Manthei, Operations Supervisor for BP and industry representative on the Division's work group committee.	Approx. 10 minutes
Dan Girand, IPANM member for Mack Energy.	Approx. 10 minutes
Randall Hicks, certified professional geologist with R.T. Hicks Consulting, Ltd.	Approx. 20 minutes

PROCEDURAL MATTERS

None.

Respectfully submitted,

HOLLAND & HART, LLP

By: _____

Michael H. Feldewert
P.O. Box 2208
Santa Fe, NM 87504-2208
505/988-4421
Attorneys for IPANM

STATEMENT OF INTENT TO PRESENT TECHNICAL TESTIMONY
at the Oil Conservation Division hearing to adopt
Rule 19.15.2.53, regarding pits and tanks.

Witness: Donald A. Neeper, Ph.D.

Affiliation: New Mexico Citizens for Clean Air and Water

Address:
2708 B. Walnut St.
Los Alamos, New Mexico 87544-2050
phone (voice): (505) 662-4592
e-mail: dneeper@aol.com

Qualifications: Dr. Neeper earned a doctorate in low-temperature physics from the University of Wisconsin in 1964. From 1968 to 1993, he was employed at the Los Alamos National Laboratory (LANL) where he conducted research in thermal physics and thermal engineering. During his last three years at the Laboratory, he conducted professional research on contaminant migration and vapor extraction for the remediation of contaminated soils. He also managed a RCRA Facility Investigation of a large site containing subsurface plumes of organic vapors and tritium. In 1993, Dr. Neeper retired from LANL. As a part-time employee of a private company, he continues to research subsurface air motion and its relationship to the transport of petroleum vapors.

Length of Testimony: Approximately 20 minutes.

Summary of Testimony: Dr. Neeper will present technical testimony regarding unsaturated transport in the vadose zone, the need for impervious liners in active pits, and the reasons for prohibiting burial of wastes containing soluble substances.

Preferred date of Testimony: August 14, 2003

GOVERNOR
Bill Richardson

STATE OF NEW MEXICO
DEPARTMENT OF GAME & FISH

One Wildlife Way
PO Box 25112
Santa Fe, NM 87504

Visit our website at www.gmfsh.state.nm.us
For basic information or to order free publications: 1-800-862-9310.

DIRECTOR AND SECRETARY
TO THE COMMISSION
Bruce C. Thompson

October 28, 2003

Florene Davidson, Division Administrator
Oil & Gas Conservation Division, EMNRD
1220 South St. Francis Drive
Santa Fe NM 87505

Re: Written comments on proposed OCD rule 19.15.2 NMAC, Pits and Below-Grade Tanks

Dear Ms. Davidson:

The New Mexico Department of Game and Fish (Department) supports adoption of the proposed rule. The main intent of the rule is to institute a permit system, which would give the Oil Conservation Division (OCD) a workable method to keep track of all oil and gas pit development in the state. Another effect of the new rule will be consolidation of information and requirements scattered throughout Title 19 Chapter 15 of the NM Administrative Code. Clarity and cohesion of regulatory information is a benefit for all involved including enforcement personnel and the regulated parties. We offer the following comments and recommendations regarding specific provisions of the proposed rule.

The following discussion of petroleum environmental toxicity is adapted from a US Geological Survey article titled "Environmental Contaminants": Petroleum hydrocarbons are composed of mostly carbon and hydrogen, but some also contain oxygen, nitrogen, sulfur, and other elements and vary greatly in molecular weight, volatility, solubility, persistence, and toxicity. Crude oils and refined products, as well as wastes from petroleum production and processing facilities, are also highly variable in composition and toxicity. On release into the environment, the composition and potential toxicity of petroleum mixtures change rapidly and continuously as individual compounds are volatilized, solubilized, dispersed, and degraded at differing rates by physical, chemical, and biological processes. The rates of these weathering processes vary depending on temperature, currents, wind, concentrations of suspended and dissolved components of the receiving water, and biological activity. In addition to direct toxicity, the loss of insulating capacity caused by oil on feathers and fur increases the vulnerability of birds and mammals to cold. Microliter quantities of oil transferred to eggs from the feathers of oiled birds can be toxic to developing embryos, and ingestion of a single dose by female birds may alter the yolk structure and reduce the hatchability of eggs.

The proposed rule, in paragraph C.2.e, prohibits discharge to a pit of liquids with greater than 0.2% free hydrocarbon. Due to the variable toxicity discussed above, and potential non-obvious toxic effects of petroleum hydrocarbons, some liquids with less than 0.2% hydrocarbon may be hazardous to wildlife. Therefore the Department supports the requirement to prevent access by wildlife to all oil and gas pits.

The US Fish and Wildlife Service (FWS) has developed recommendations for excluding birds from oilfield waste pits (available on the internet at http://www.r6.fws.gov/contaminants/contaminants1c.html, hard copy enclosed with these comments). Netting that extends to the ground as recommended, should

also be effective at preventing entry by most terrestrial wildlife. The FWS guidelines don't specify the netting material. Plastic monofilament products commercially available as "bird netting" have been implicated in entanglement deaths of birds as well as terrestrial snakes and lizards. The Department therefore recommends the use of heavier duty, less flexible netting materials which are less likely to create an entanglement hazard. Heavier material will also show improved performance in terms of durability and less frequent maintenance. Many wildlife injuries have occurred at protected pits where the netting was poorly installed or maintained. FWS has found that deterrents such as flagging, reflectors, strobe lights and noise guns are not effective in oil pits. We are not aware of enough research to evaluate the effectiveness of HDPE (high-density polyethylene) balls for bird exclusion. A disadvantage of the HDPE balls for most oilfield pits would be that they cause reduced evaporation rates.

Paragraph C.2.f of the proposed rule states that "All pits shall be fenced or enclosed to prevent access by livestock or wildlife." While netting installed as described above may effectively prevent access to wildlife species, typical three- or four-strand cattle fence will not. If cattle fence is to be installed, we recommend the fence be designed to minimize potential injury to large wildlife crossing over or under the fence. A recommended fence design is enclosed with these comments.

The Department does not support the exception from bird protection for tanks not exceeding 16 feet diameter. We understand that protection on all tanks, regardless of size, would contradict Oil Conservation Commission Order No. R-8952, issued in 1989. In view of the facts that open tanks of any size may constitute a hazard, that the Migratory Bird Treaty Act and associated penalties for violation apply regardless of tank size, and that smaller tanks are actually easier to protect than large ones, we encourage OCD to pursue administrative avenues toward removing the tank size exception.

The Department supports the exemption from the netting requirement during drilling or workover operations, however we recommend adding language to specify a maximum interruption of active operations beyond which the exemption would not be in effect. A time period on the order of 24 to 48 hours might be appropriate.

One finding of the OCD Order No. R-8952 was: "Cooperative efforts should be established and maintained between industry and state and federal government agencies to further quantify migratory bird losses, where they are taking place, and to work together to develop economical means to prevent such future losses." Our Department remains available to work in conjunction with FWS, OCD and industry representatives to develop technical specifications for effective, practical and economical solutions for wildlife exclusion from oilfield pits.

The proposed rule Paragraph F.1 requires that a pit or tank be "properly closed" within six months after cessation of use. Paragraph F.2 gives the operator an additional year after completion of closure to contour the surface. Thus the site may remain essentially unreclaimed for up to 18 months. Both the currently effective 1993 and the proposed 2003 OCD pit closure guidelines read: "Upon termination of any required soil remedial actions (Section V.), a pit or below-grade tank may be closed by backfilling, contouring to provide drainage away from the site and revegetating the site." If pit closure is defined as in the guidelines, it is not clear why final grade should not be established at the time of closure. It would be reasonable to allow up to a year for revegetation due to greater dependence on seasonal considerations.

The Department recommends adding the words "and revegetate" between "contour" and "the surface" in paragraph F.2. Revegetation is essential to the stated regulatory purpose of preventing erosion, and has the added benefit of restoring the land to some level of useful functionality, such as rangeland and/or wildlife habitat. Lack of vegetation is almost certain to lead to increased erosion, and may also allow establishment of weedy plants which have the potential to invade and adversely impact lands adjacent the project site. The recommended language would help ensure that some level of true ecological recovery takes place, while leaving the details of surface restoration up to negotiation with the surface landowner.

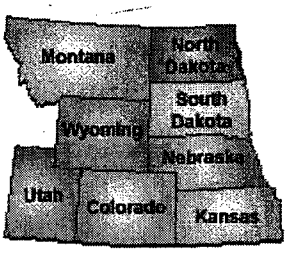
Please contact our office if you require clarification on these comments or if we can be of further assistance.

Sincerely,

Lisa Kirkpatrick, Chief
Conservation Services Division

LK/rjj

cc: Tod Stevenson, Deputy Director, NMGF
Joy Nicholopolous, New Mexico Ecological Services, USFWS
Steve Anderson, Northwest Area Habitat Specialist
Clint Henson, Northeast Area Habitat Specialist
Alexa Sandoval, Southeast Area Habitat Specialist
Pat Mathis, Southwest Area Habitat Specialist



Contaminant Issues - Oil Field Waste Pits

The Problem - Solutions - Links - Return to Oil Field Waste Pits

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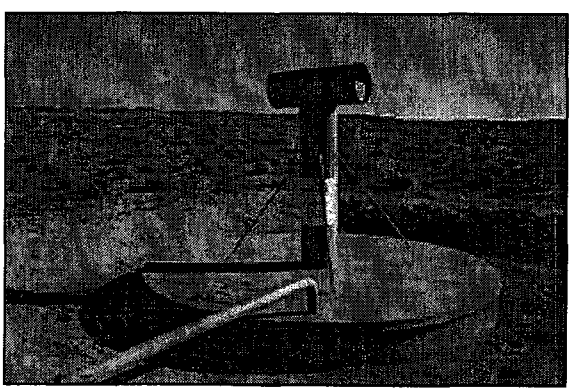
Solutions

Solutions to preventing wildlife mortality in oil field waste pits are fairly simple and straight forward and are being implementing by many oil operators. The U.S. Fish and Wildlife Service suggests the following measures.

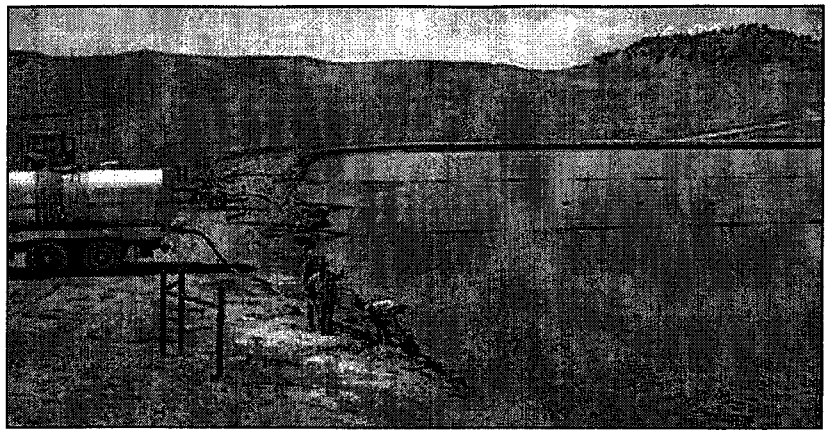
Use Closed Containment Systems

Closed containment systems require little or no maintenance and the system can be moved to a new site when the well is shut in. Closed containment systems eliminate soil contamination and remediation expense. Closed containment systems used to collect oil field produced water do not attract wildlife and isolate oil from the environment.



Eliminate Pits or Keep Oil Off Open Pits or Ponds

A fail-safe solution is to remove the pits or keep oil from entering the pits. Immediate clean up of oil spills into open pits is critical to prevent wildlife mortalities.

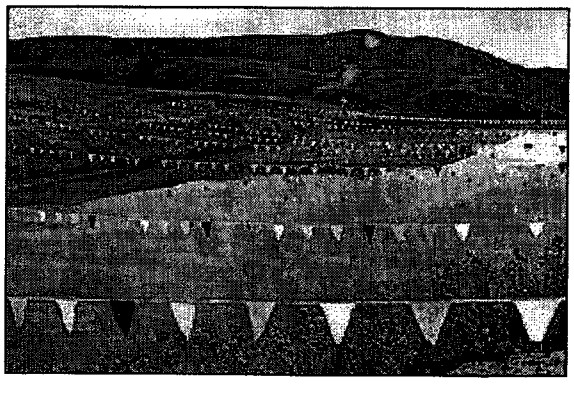


Use Effective and Proven Wildlife Deterrents or Exclusionary Devices

Netting appears to be the most effective method of keeping birds from entering waste pits.

Deterrents That DO NOT Work at Oil Pits

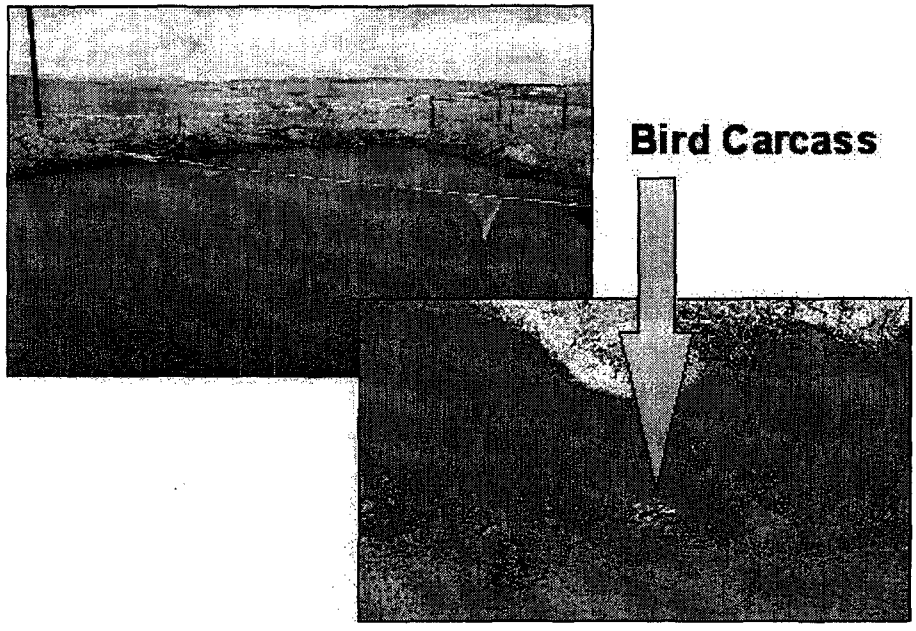
- Flagging



Flagging is ineffective at deterring migratory birds and other wildlife from oil field waste pits.

- Reflectors
- Strobe Lights
- Zon Guns

Published scientific studies as well as field inspections by U.S. Fish and Wildlife Service personnel have documented bird mortalities at oil pits with flagging, reflectors, and strobe lights. Although Zon guns or propane cannons have been used in other applications to deter birds, their use in oil pits have been ineffective.



Effective Net Installation

The effectiveness of netting oil pits to exclude birds and other wildlife depends on its installation. Effective installation requires a design allowing for snow-loading and one that also prevents ground entry by small mammals and birds. According to a professional net installation contractor, a maximum mesh size of 1 1/2 inches will allow for snow-loading and will exclude most birds. Netting should be suspended a minimum of 4 to 5 feet from the surface of the pond to prevent the net from sagging into the oil-covered pond during heavy snow-loads. Three-inch steel tubing can be used for support posts and are set a maximum of 7 feet apart. These are buried a minimum of 7 feet in depth and set in concrete. Three-inch steel tubing is also used as a top rail to connect the posts. Cable is strung across this frame at 7-foot intervals along the y-axis and the x-axis to form a grid of 7-foot squares by the cable. The netting is draped over this cable grid. Netting should be wide enough to drape down the sides of the frame to prevent ground entry by wildlife. A bottom perimeter cable strung along the bottom of the posts at ground level is used to attach the bottom of the

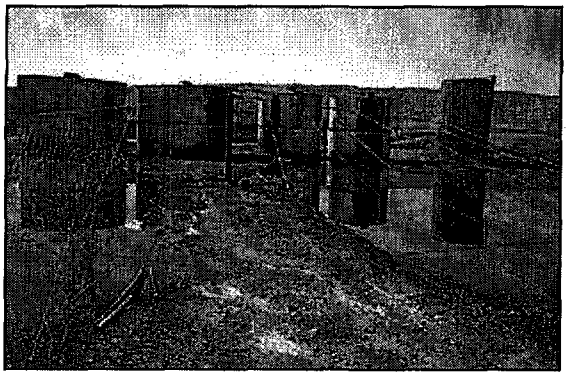
net. Cables are strung over the net at 7-foot intervals to prevent the wind from whipping the net back and forth. Proper maintenance should be performed to repair holes in the netting and to re-stretch sagging nets after heavy snow-loads.

Properly installed net at commercial oil field produced water disposal facility in Wyoming. Net is supported by steel frame and high-tensile strength cable to prevent sagging. Sides are also netted to prevent ground entry by birds and other wildlife. Netting to exclude migratory birds should also extend down the sides of the supporting frame to prevent ground entry by birds and other wildlife

---

This net was installed less than 5 feet above the fluid surface. A heavy snow-load caused the net to sag into the oil-covered pond. The exposed oil entrapped migratory birds. Netting should be suspended a minimum of 4 to 5 feet from the surface of the pond to prevent the net from sagging into the oil-covered pond during heavy snow-loads.

Poorly installed and maintained netting at this commercial oil field produced water disposal facility in Wyoming allows entry by migratory birds and other wildlife. To insure effectiveness, netting should exclude wildlife from ground as well as aerial entry.



Proper maintenance is necessary to prevent wildlife and migratory birds from entering oil-covered pits. Small mammals and birds can enter this pit through this small opening on the side.

In Summary . . .

- Netting has been found effective at deterring birds from oil pits.
- HDPE balls have been used as bird deterrents in waste pits.
- Use enclosed tanks to separate the oil from the produced water prior to discharge into the environment.
- Industry compliance with existing state and federal regulations prohibiting the accumulation of oil in separator pits.
- Report migratory bird deaths in oil pits to the nearest U.S. Fish & Wildlife Service office.

For more information, contact Pedro 'Pete' Ramirez, Jr. (Pedro_Ramirez@fws.gov)

The Problem - Solutions - **Links** - Return to **Oil Field Waste Pits**

Region 6 Environmental Contaminants Home Page
National Environmental Contaminants Program Home Page

USFWS Region 6 Home Page
USFWS National Home Page

Figure 1. The preferred 3-strand fence for big game habitats in New Mexico. Top and bottom wires are best if smooth, rather than barbed. This is more critical for the top wire. Fence posts and stays should be no more than 10 feet apart, to keep a taut fence. Wires should be at 16, 26 and 38 inches above the ground to accommodate crawling, penetrating and jumping animals.

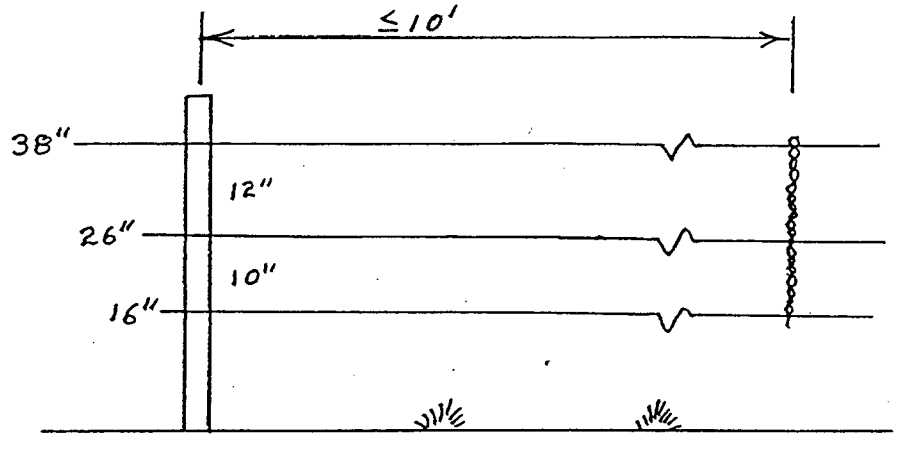
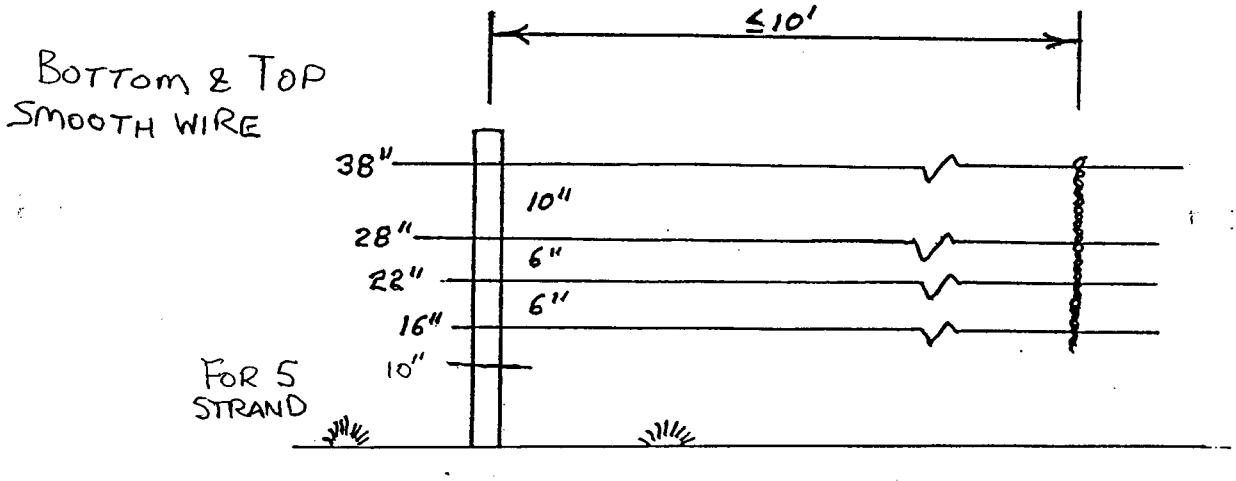


Figure 2. Recommended 4-strand fence with nearly-equal wire spacings. Top and bottom wires are best if smooth, rather that barbed. This is more critical for the top wire. Fence posts and stays should be no more than 10 feet apart, to keep a taut fence. Wires should be at 16, 22, 28 and 38 inches above ground to accommodate crawling and jumping animals.



New Mexico Cattle Growers' Association

2231 RIO GRANDE BLVD., N.W. • ALBUQUERQUE, NEW MEXICO 87104
P.O. BOX 7517 • ALBUQUERQUE, NEW MEXICO 87194
TELEPHONE (505) 247-0584 • FAX (505) 842-1766 • E-MAIL NMCGA@RT66.COM

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NOV 0 6 2003
OIL CONSERVATION DIVISION

October 9, 2003

To: Oil Conservation Commission
From: Caren Cowan, Executive Director
New Mexico Cattle Growers' Association
Subject: Non-Technical Testimony
By New Mexico Cattle Growers' Association
For The Proposed Draft Pit Rule

Enforcement of existing regulations leaves much to be desired. Ideally, we would like to see enforcement of the present regulations now in effect, reach a consistent level before new regulations are considered for adoption.

However, if the new pit rule is adopted, we have the following comments and concerns:

1. All pits should be lined.
2. No pits should be located on flood plains.
3. No silicone material should be allowed in the pit. The silicone causes the contents of the pit to become thick and syrupy, which makes the contamination even more damaging to the environment.
4. Present practices allow for the liner to simply be buried at the site; and other garbage is being buried along with the liner. The possibility of seepage into groundwater, causing contamination, is increased greatly by this practice. The liner and all other materials associated with the site should be disposed of at a designated OCD waste site, only. Fresh soil should replace what has been taken out, to aid in returning the land to its original integrity.
5. Mud pits are allowed to sit and dry or seep into the ground; then dirt is pushed over them.
6. Whenever a pit is closed, dismantled, and buried, the contamination is spread over a much larger surface, increasing the odds of contamination. Our members tell us that no reclamation of the sites seems possible. Some pit sites in the southeast part of the state are over 40 years old, and nothing but noxious weeds can grow over them. The best-case scenario is to use steel tanks, lined with plastic to insure that the site is free from contamination to the soil or ground water or surface water

Thank you for the opportunity to comment.

Sincerely,

Caren Cowan
Executive Director

RECEIVED

SEP 10 2003

Oil Conservation Division

Mrs Dawdson:

This is my formal complaint I submit Today with a document I wish to have submitted to the Record - I Also wish to be placed on the Agenda OCT 16th (Pit Rules) To discuss this info and to submit Additional info as it becomes Available.

[signature]

505 - 963 - 2436 -

September 11, 2003

RECEIVED

SEP 10 2003

Oil Conservation Division

Oil Conservation Division
District 2
1301 West Grand Avenue
Artesia New Mexico 88210

Please accept this as a formal complaint in regards to the removal of drilling fluids by Threshold Development Company from the Chiricahua R21 Federal #1 Well site located in S21, T24S, 18E in Otero County New Mexico.

The intent of this complaint is twofold, first as residents of the Salt Basin and Crow Flat, we have no intention of interfering with the production of oil and gas. As a matter of fact, we need development in this area for an increase of tax dollars and the creation of jobs locally. Secondly, there is a statewide water crisis. The probability of the Salt Basin water being needed to mitigate a portion of that crisis is a certainty.

The Chiricahua R 21 Federal # I well site is located within the boundaries of a declared Zone A flood plain. Therefore, our objections to the procedures followed by Threshold Development Company are due to the fact that the actions of the Company are in complete disregard of the Oil Conservation Division's rules and regulations for the disposal of drilling fluids. The Last Chance Water Company should not be responsible for negligent actions by the oil company.

One member of the Last Chance Water Company was told by a local farmer that the Chiricahua Well had produced an excess amount of drilling fluids which were removed from the well site. He and another water truck driver hauled drilling fluids from the Chiricahua Well to a farm and ranch, located approximately five (5) miles east of the well site. The farmer said he had hauled seven (7) loads of the excess drilling fluids and put on his farmland and another truck driver hauled seven (7) loads of the excess drilling fluids and put it on some ranch roads. These areas are also located within a flood plain area.

Late on the evening of August 7, 03, and during that same night, another member of the Last Chance Water Company saw two (2) separate water trucks coming to and from the Chiricahua Well site and the farm/ranch to the east of the well site. This date corresponds with the drilling fluid hauling incident referenced above.

I was told there would be a log of activity recorded, regarding the drilling of the Chiricahua Well available to Threshold Development Company and the Bureau of Land Management There is presently a preliminary water test, which was collected from the mud pit at the Chiricahua Well site, showing the presence of contaminants. As President of the Last

Chance Water Company, I am requesting a copy of the fresh water well log. I demand that someone from the Oil Conservation Division qualified to inspect and monitor the drilling of oil and gas wells be present to witness the work being done on this well and subsequent wells drilled in this area. I want to be notified of any and all fluid movements away from these wells and the location of the approved disposal site if disposed of within Otero County.

Thank you.

Sincerely,

Greg Duggar
President of the Last Chance Water Company
P. O. Box 96
Dell City Texas 79837

Cc: Oil Conservation Division, Sante Fe
Senator Pete Domenici
Senator Jeff Bingaman
Doug Moore, Otero County Commission
Linda Rundell, New Mexico State BLM Director
Jerry King, State Land Office
New Mexico Environmental Department
Jim Scarantino, New Mexico Wilderness Alliance
Carl Lane Johnson

To Whom It May Concern:

RE: Additional information to my complaint dated September 11, 2003.

Drilling fluid samples were collected from a drilling fluid pit at the Chiricahua R-21 Federal #1 well site in New Mexico Township 24 South, Range 18 East, Section 21 on July 21, 2003. This drilling fluid was trucked to this location from another drilling location in the State of Texas (HEYCO well) according to conversations with a driver of one of the water trucks dumping the drilling fluid into the pits at the Chiricahua R-21 Federal #1 well site. The drilling operation at this location was under the direction of Threshold Development Company. The drilling fluid was analyzed by an independent laboratory certified to conduct Safe Drinking Water Act Analysis. The results of the analysis is as follows:

• Chloride	=	3130 mg/L	MCL	=	250 mg/L
• TDS	=	7010 mg/L	MCL	=	500 mg/L
• Surfactants	=	2.0 mg/L	MCL	=	0.5 mg/L
• Manganese	=	0.20 mg/L	MCL	=	0.01 mg/L
• Gross Alpha	=	74.7 pCi/L	MCL	=	15 pCi/L
• Fluoride	=	3.4 mg/L	MCL	=	0.1 mg/L
• Diesel Range Organics	=	0.63 mg/L	MCL	=	0.50 mg/L
• E. coli	=	positive			
• Total Coliform	=	positive			

The application for permit to drill (APD) for the Chiricahua R-21 Federal #1 well restricted drilling fluids to "fresh" water for the upper 2500' of the borehole. The BLM definition of "fresh" water is "water containing not more than 1000 ppm total dissolved solids (TDS) provided that such water does not contain objectionable levels of any constituent that is toxic to animals, plant, or aquatic life unless otherwise specified in applicable notices or orders." It is clear that the drilling fluid in the pit at the Chiricahua R-21 Federal #1 well did not meet this definition of "fresh" water. Considering that these regulations were in place and that this definition of "fresh" water does exists, it is difficult to understand why this issue persisted as long as it did. The BLM was informed that there was drilling fluid of questionable quality in the fluid pits at the well site multiple times while it was being hauled in to the well site. Only after the BLM was informed that samples of the drilling fluid had been collected and were being analyzed by an independent third party did the BLM act. At that point the BLM obtained and analyzed samples of the drilling fluid and determined that the drilling fluid in the pit exceeded the "fresh" water limit for chloride and issued a notice of noncompliance to Threshold Development Company regarding the drilling fluid. The drilling fluid was subsequently removed. However, in the mean time, this drilling fluid had been applied to both the drilling pad and the roads in the area and the BLM never analyzed for any other

contaminants. Clearly, this was a serious oversight on the part of BLM considering the level of contaminants that the drilling fluids contained.

All of these contaminants are above the Safe Drinking Water Act standards. Of particular interest is the level of gross alpha radioactivity (5 times the maximum contaminant level (MCL)). This naturally occurring radioactive material (NORM) is often a result of drilling activities associated with oil and/or gas exploration. Along these lines, drilling fluids from the HEYCO well, mentioned above, are hypothesized to be the source of this NORM.

The residents of the Crow Flats and Otero Mesa in southern Otero County, New Mexico are terribly concerned that our sole source of water (groundwater from the underlying limestone aquifer) will be contaminated by one or more of the above listed constituents after witnessing, first-hand, the blatant disregard by the oil and gas industry for laws and regulations that have been developed to protect groundwater resources. We are concerned that this water was applied to both roads and private lands in the area (corroborated by testimony) and was not sufficiently tested to quantify potential levels of contamination. We feel that the following steps should be taken in order to deal with this situation:

1) Considering the results of the analysis provided above, that the OCD, BLM and/or some regulatory entity should obtain soil and vegetation samples from areas where it is suspected that this contaminated drilling fluid was applied to the ground to determined if the contaminants exist and whether we, or our livestock, are at risk of experiencing any adverse health effects as a result.
2) The source of the contamination should be determined. Threshold Development Company is of the opinion that the water hauling service stopped in Dell City, Texas on the way to the Chiricahua R-21 Federal #1 well site with "fresh water" and picked up a load of waste and delivered the entire load to the Chiricahua R-21 Federal #1 drilling fluid pits. This might account for the E. coli and coliform bacteria in the sample. However, if this is indeed the case, the dairy and the Department of Health should be aware that those cattle are contaminated with alpha radiation.
3) If, as it is suspected, the HEYCO well in Texas is the source of the contaminated drilling fluid then we would like to know why this type of contaminated material is allowed to be transported across state lines and used at will rather than being disposed of at a site designed to accommodate such material. It would seem that the transport of this material would be regulated in some manner.
4) In addition, we feel that it is necessary to more thoroughly dispose if the drilling fluid pit material. After containing drilling fluids having constituents as mentioned above, it is unacceptable to leave this material in place and only cover it as current regulations allow. We feel that it is necessary to completely remove all material associated with the drilling fluid pits and that they be disposed of at facilities designed and permitted to accommodate such materials. This would entail quantifying the constituents of the drilling fluids by an independent third party laboratory. This would avoid any perception of influence by involved entities.

Based upon the conduct of business that we have experienced associated with the Chiricahua R-21 Federal #1 drilling operation, it is clear that the existing regulations are either inadequate and/or that enforcement of existing regulations is insufficient. The geologic environment that exists in the Crow Flats/Otero Mesa is one of a karst limestone. Therefore, contaminants on the surface or in pits at the surface have essentially direct access to the underlying groundwater system through fractures and solution cavities. This means that surface contaminants have the potential to be moved quickly into the groundwater system through this karst environment.

The groundwater resource of the Crow Flats/Otero Mesa (New Mexico Salt Basin) region is extremely valuable on a local, state, regional, and international level. It is estimated that there are 15 million acre-feet of recoverable, potable water in the New Mexico portion of the Salt Basin. Contamination of any sort in this karst environment would move quickly and would result in huge amounts of unusable water that was once potable. Does the OCD, BLM, or any entity want to take responsibility for rendering a significant potable groundwater resource unusable because the regulations or enforcement mechanisms were not sufficient to protect it from oil and gas drilling activities???? Given the current situation in New Mexico and the southwest in general, we think that that would be a poor position in which to find oneself!!!

Thank you for your attention.

Greg Duggar

July 30, 2003

Mr. Fleming,

RE: Our telephone conversation yesterday regarding the contaminated water that was in the reserve mud pit at the Chiricahua R21 Federal #1 well site.

On late Friday evening, July 11, 2003, two water hauling trucks came to our house. They were lost and talked to my mother, Jane Schafer. They said they had come from the Heyco oil and gas exploratory well on the Texas side of the state line and were hunting the Chiricahua well site. The directions they had were for the Chino well site which is to be located on the Pete Lewis allotment. The truck driver told Mom that they were instructed to bring the water from the Heyco well and put it into the mud pit at the well site in New Mexico. Mom remarked that it looked like it would cost the oil company more than what it was worth to haul the water that far. The truck driver said that this water was free, that it was running every where from the Heyco well, and they had to do something with it. He also said that they would be hauling water all night. The trucks had JWS on the doors.

Saturday July 12, 2003 We saw water hauling trucks coming and going to the site all day. The trucks dumped water into the inside pit and also on the road and pad site. We saw lights coming and going to the well site during the night after being alerted by the dogs barking.

Sunday July 13, 2003 Trucks again hauling water to the site. Water still being put in the pit and on the road/pad. We think they hauled at night again as the dogs barked off and on again all night.

Monday July 14, 2003 The last water truck we saw at the site was at 7:30 a.m. I went to the site and took pictures of the pits. The water in the outside pit was clear and clean, but the water in the inside pit was black and smelled like sewage. I came back and e-mailed Joe Torrez, at the Las Cruces BLM office, and told him of the water being hauled all weekend from the Heyco well and I felt that there was possible contamination in the inside pit. Joe answered me and forwarded my e-mail to Gary Tidmore, with Threshold Development Co. Mr. Tidmore e-mailed me and said that he had been told that only about 3 loads of fresh water had been hauled from the Heyco well. The remainder of the water used to water the roads etc. had come from an irrigation well a few miles to the south in New Mexico. He assured us that it was all "fresh" water.
I answered by another e-mail that we begged to differ with his information as there had been considerable more than 3 loads of water hauled to the Chiricahua site. I also told him that there were people who lived within sight of the irrigation well and also the highway in which the trucks travel and no one saw any water being hauled from the irrigation well. The trucks came from the south, up the highway, as if they were coming from Dell City. He answered me by e-mail again saying that the point he was trying to make was that it did not matter where the water came from, it was all fresh water. He said if I had evidence that the water was not fresh to contact him immediately.

Thursday July 17, 2003 I went to the well site and there was a water truck unloading water into the inside pit, the dirty water. I talked to the truck driver and ask him where the water was coming from. He said it was dirty water coming from the well on Jim Kiehne's (i.e. the Heyco well). I ask him if it was coming directly out of the oil well and he said yes. He said that someone had to come to the Chiricahua site on Friday, July 11, and pumped the clean water out of the inside pit into the outside pit, then they started hauling the dirty water to the inside pit. He said he had hired on only for part time, but the bosses had required them to haul all day and night throughout the weekend. He said if they could not get rid of all of the dirty water, they would have to start hauling it to somewhere in Carlsbad. The name on this truck door was Kauffman Well Service, tractor license plate # NM 14405, and trailer license plate # NM 7713 ETA.

Wednesday July 22, 2003 Joe Torrez and J. R. Hogwood, both from the BLM, stopped by our house. I was not there, but they told Dale Leith that the water in the inside pit had tested over 1000 ppm and must be removed. It is not to be used for drilling, on the road or the pad site. I sent an e-mail that evening to Joe Torrez and ask him for the results of their test. He answered by e-mail saying that on the inside pit it tested at: 3,300 ppm chlorides and 120 mg/L calcium. He said they did not run any further tests since they were asking Threshold to remove the water. He said the inside pit had characteristics similar to those of oilfield produced water, which was probably transported in a dirty water tanker. He said the outer pit had tested 300 ppm chlorides and 400 mg/L calcium. He said the company was going to remove the water from the inside pit.

Thursday July 24, 2003. We were not here during the day, but do know that trucks were coming and going most all of the night. As of 8 a.m. Friday, July 25, 2003 the water was all removed from the inside pit. All that remained was black, stinky, muck.

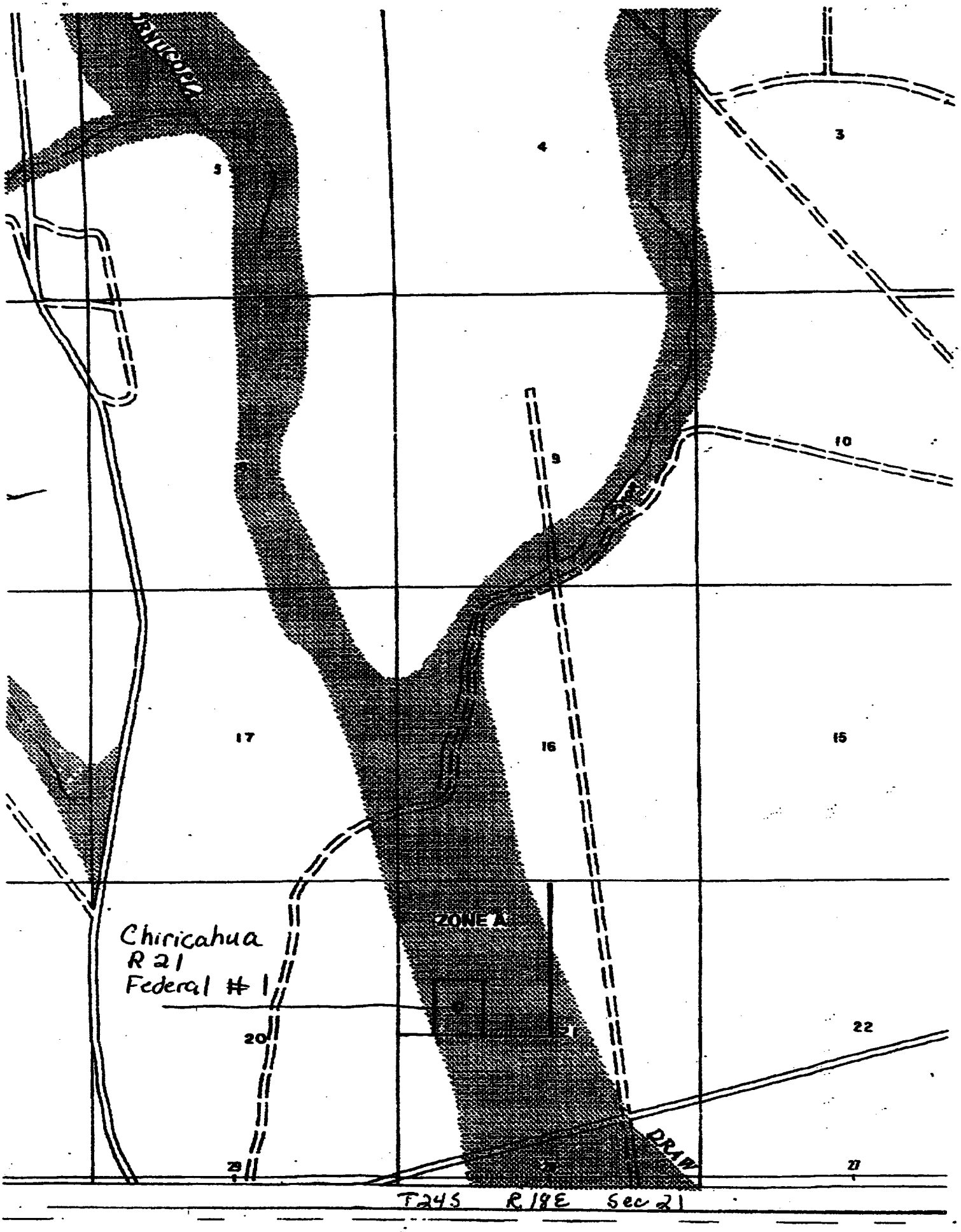
That is my recollection of how the water was delivered to and removed from the Chiricahua well site. I followed Mr. Tidmore's advice and took the necessary steps to find out if the water was contaminated. Preliminary results did indeed show contamination, and as you know, we are still waiting on the final results.

I hope this helps and please call if you have any questions.

Thank you.

Jonna Lou Schafer
505 963 2846

Cc: Tim Sanders, Las Cruces BLM
Doug Moore, Otero County Commissioner
Bobby Jones, Chairman of the Federal Trust Lands Committee
Ronnie Merritt, Chairman of the Enviromental Conservation Organization
Range Improvement Task Force, NMSU


ZONE A
Chiricahua
R 21
Federal # 1
DRAW
T24S R19E Sec 21

Sandia National Laboratories
Operated for the U.S. Department of Energy by
Sandia Corporation

4100 National Parks Highway
Carlsbad, NM 88220

Phone: (505) 234-0057
Fax: (505) 234-0061
Internet: acsnide@sandia.gov

date: July 23, 2003

to: David Chace, Dept. 6822

from: Anna Snider, Dept. 6822

subject: Analysis of Water Samples

Table 1. Analysis results.

	Sample	Mg^{2+} (mg/L)	Ca^{2+} (mg/L)	Na^{+} (mg/L)	K^{+} (mg/L)	Cl^{-} (mg/L)	SO_4^{2-} (mg/L)	HCO_3^{-} (mg/L)	% diff
1112.16	Chiricachua, outside pit	85.2	205	40.8	2.46	42	596	136.9	19.91
1154.10	Chiricachua, outside pit P	87.2	212	40.4	2.6	42	631	136.9	17.96
7637.5	Chiricachua, inside pit	22.4	58	2485	22.6	3722	389	940.5	-11.83
7659.7	Chiricachua, inside pit P	24	69.6	2504	22.6	3722	377	940.5	-10.99
991.52	Scnafer Well	60.8	184	14.7	1.42	10.9	112	308	

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POSITIVE E. COLI

Photo Deux →

Photo Trois →

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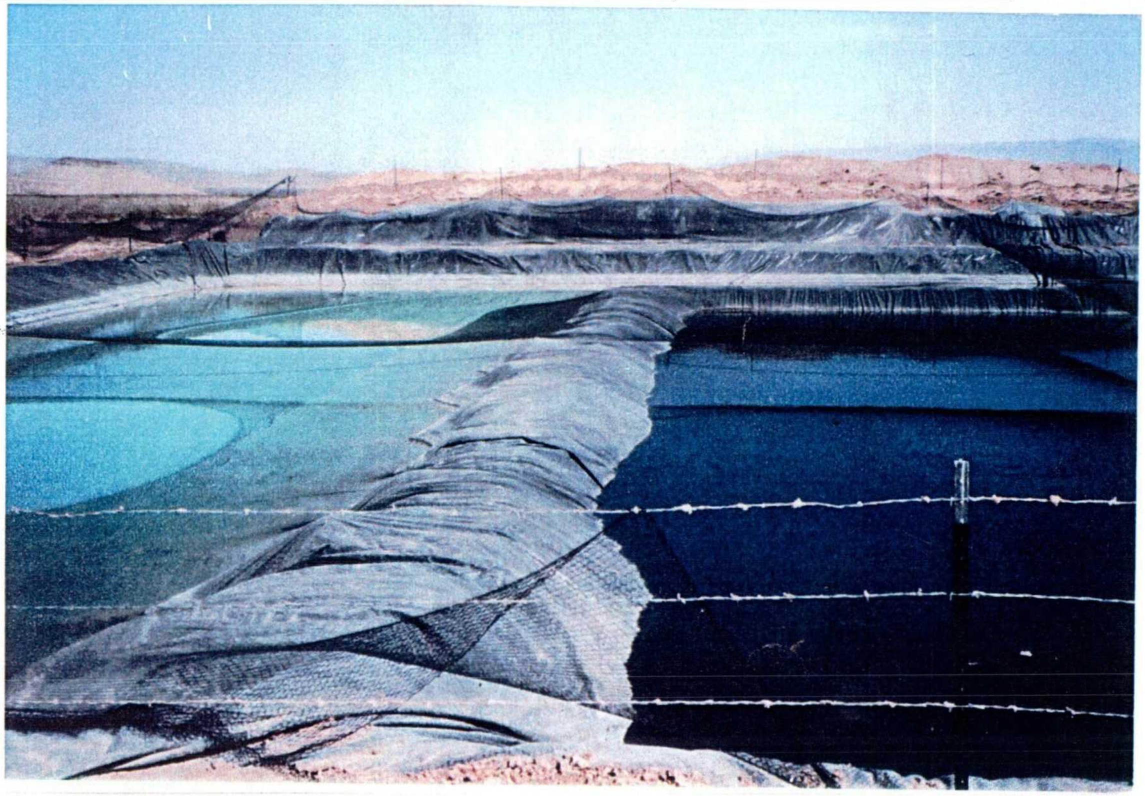

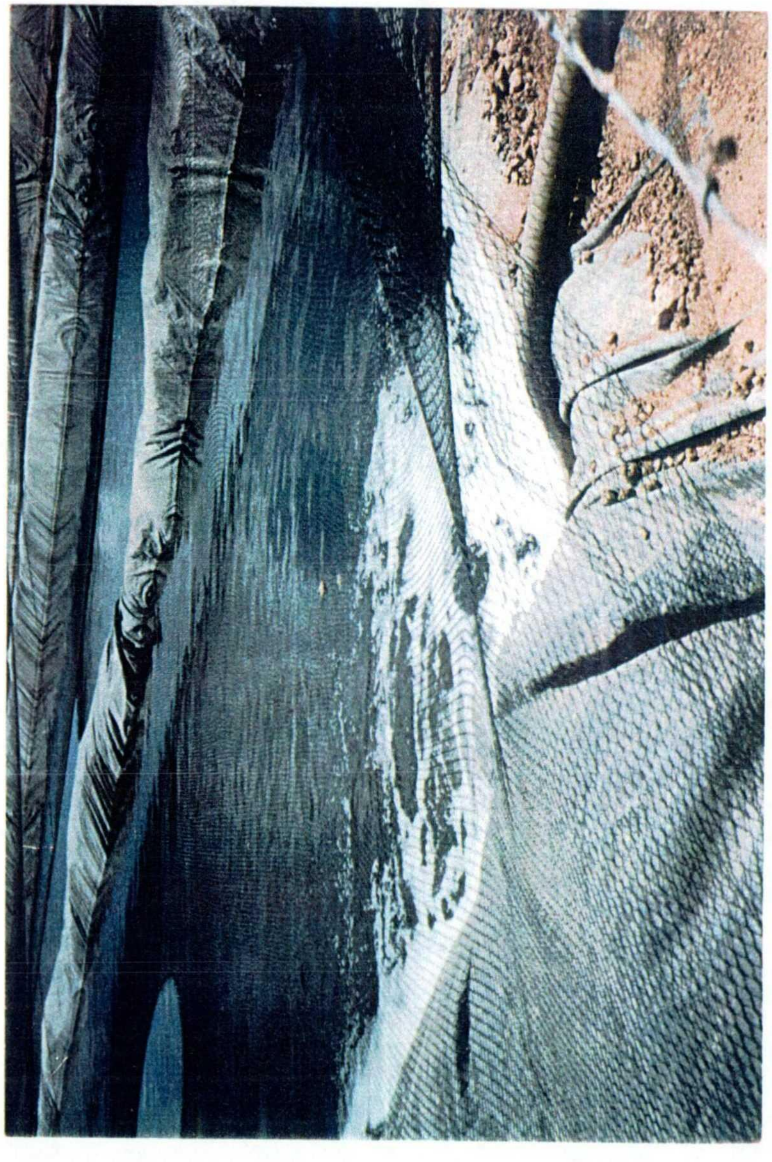

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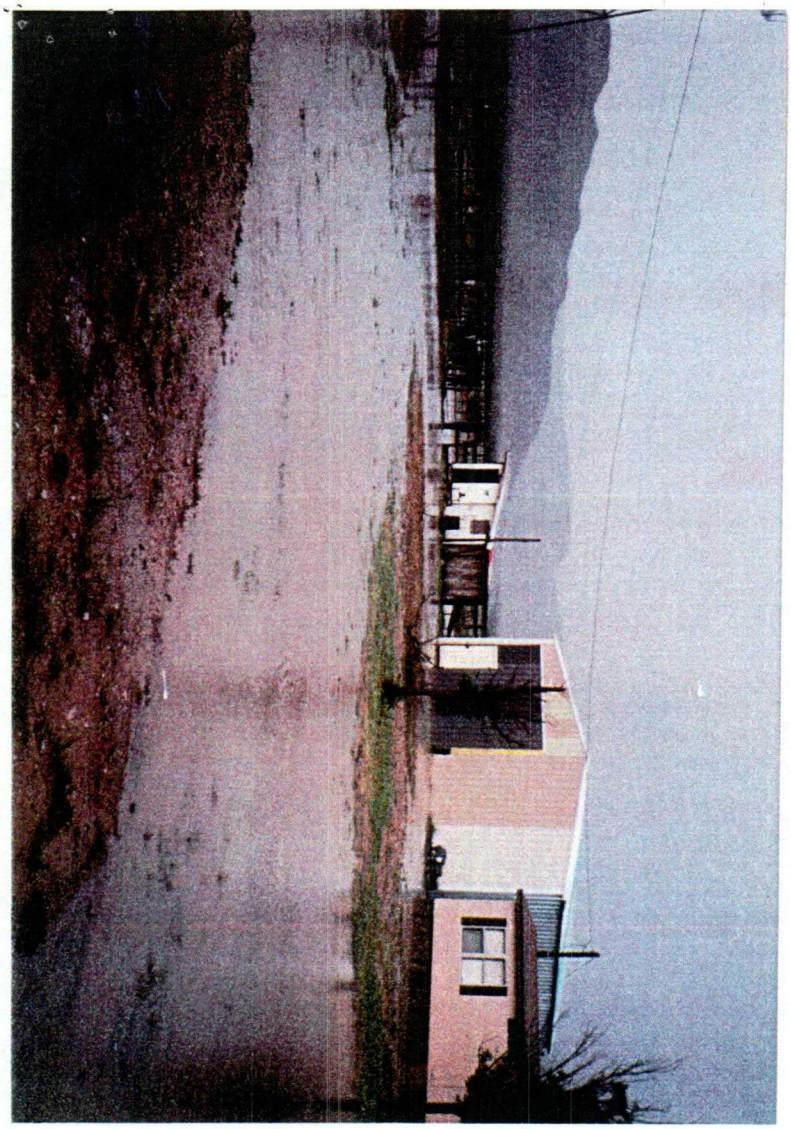

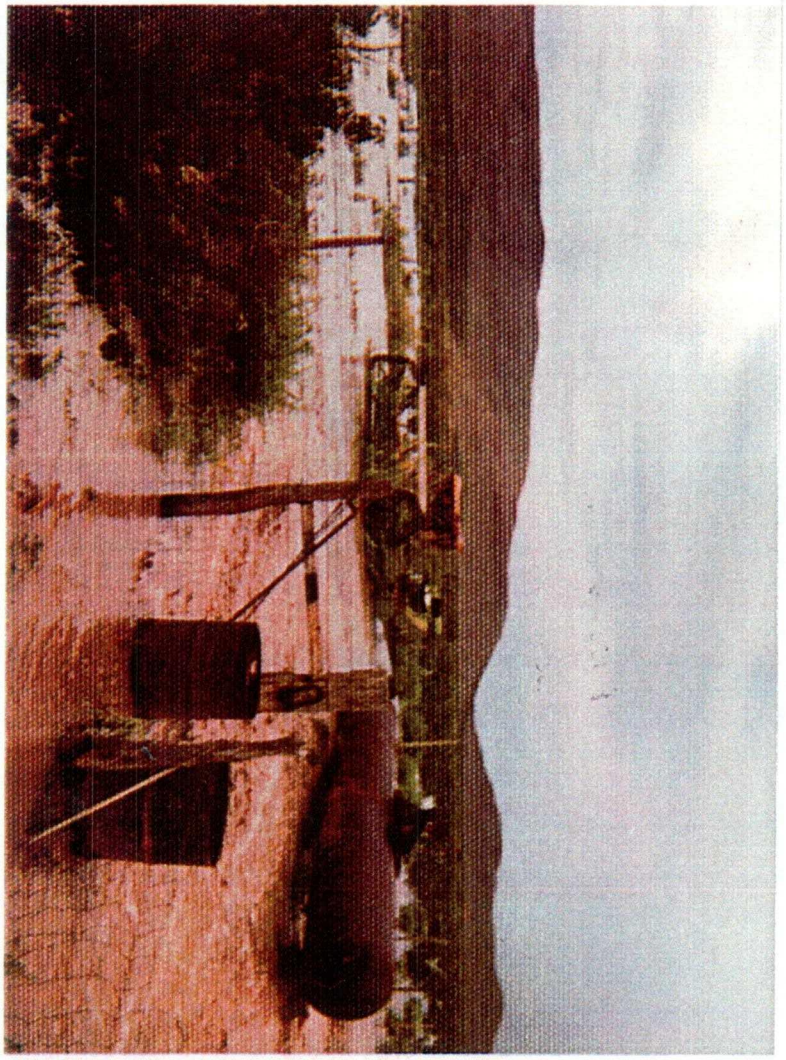

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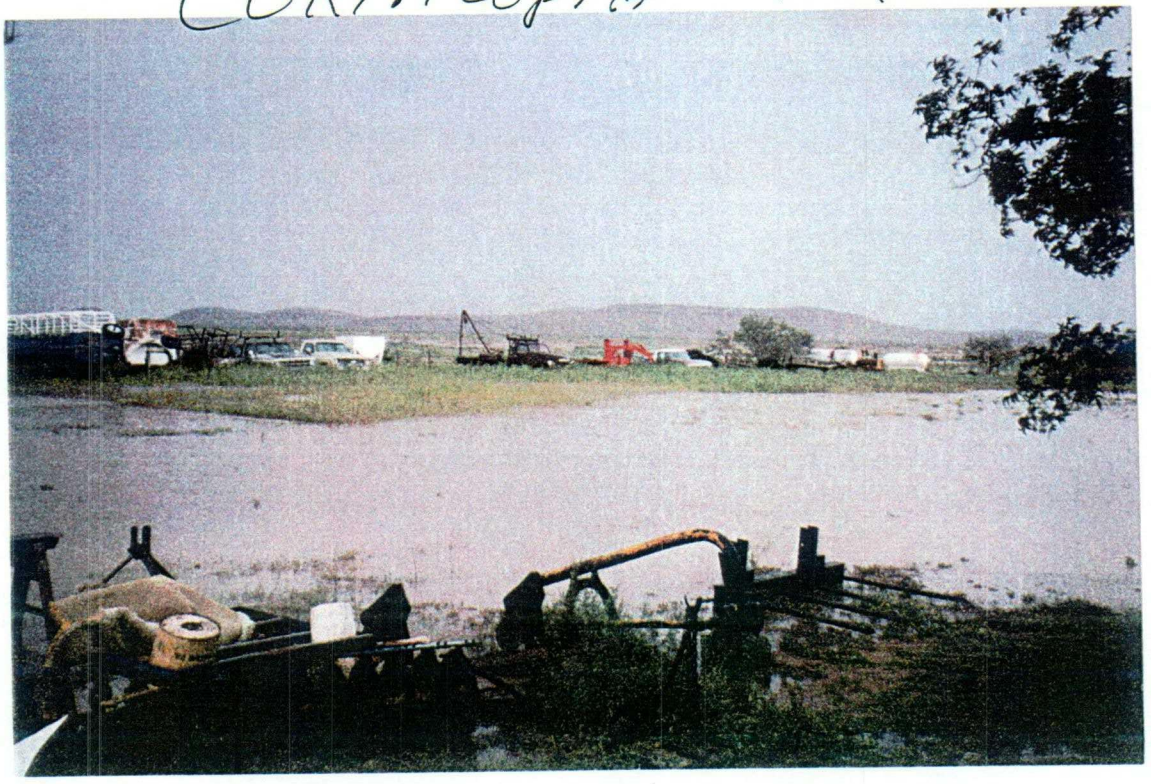

CORNUCOPIA Draw

Oil & Gas Accountability Project

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970-259-3353 · Fax: 970-259-7514

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El Prado, New Mexico 87529
505-776-3276 · Fax: 505-776-3837

September 8, 2003

Mr. Roger Anderson, Water Resources Specialist
Environmental Bureau
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Comments regarding the proposed Draft pit rule
Via Electronic and Regular Mail

Dear Mr. Anderson,

The Oil & Gas Accountability Project (OGAP) appreciates the opportunity to comment on the proposed draft pit rule that is the subject of the September 11, 2003 Oil Conservation Commission hearing. We hope that the Oil Conservation Division and the Oil Conservation Commission consider carefully the issues that we raise regarding this proposed rule.

General Comments

In general, we are supportive of the Division's effort to both consolidate regulation of pits and below-grade tanks and to establish a comprehensive permitting framework for these elements of oil and gas exploration and development. From OGAP's perspective, this framework is long overdue, as it will help to bring to the light of day the large number of these pits and tanks that are utilized by the industry in the state of New Mexico.

However, this proposed rule will only be as effective as its enforcement and it is in this area that OGAP has grave concerns. Specifically, we are uncertain as to whether this rule will make any difference at all in the lives of those who, on a daily basis, have to live with the impacts of this industry. OGAP would be remiss if it did not bring to the attention of this commission the widespread and profound distrust expressed to us by the residents in both parts of the state that are the subject of this rule. The strongly expressed view of the Division's past enforcement efforts is that the OCD is all too ready to apply the exemptions, 'loopholes' and discretion in favor of the industry and at the expense of those who have to live with the damage to the lands and waters of New Mexico. Residents in both the southeastern and northwestern counties of New Mexico state to us that, if this rule is not going to be strictly enforced, they would prefer that OCD be dismantled and replaced by an agency that is not seen as beholden to this industry. If current levels of enforcement continue, these residents believe, then the

improvement represented by this rule change will exist only on paper and will do nothing to bring about a more responsible level of development in this state.

It is possible that this proposed rule represents a commitment on the part of OCD to firmly and reasonably apply the substantive regulations and OCD's enforcement guidelines that are already on the books. However, based upon the comments of those living in the areas of our state impacted by oil and gas development, the proof will be in the application of this proposed rule by OCD. Certainly, all those affected by this rule change will be watching closely to see how OCD applies this rule to the realities of everyday oil and gas industry practice. Certainly, if things continue in a 'business as usual' fashion, this new rule will benefit no one.

Specific Comments

19.15.2.53 Pits and Below-Grade Tanks

(B)(3)(b) Existing pits or Below-Grade Tanks

-We believe there should be no discharges into existing pits or the use of below-grade tanks which are intended to be closed within 12 months from the reporting deadline (currently January 15, 2004 in the proposed rule). This gives the industry plenty of time to phase out those existing pits or below-grade tanks.

(C)(1) In General

-In general, we support the use of the "performance standard" language – "to prevent contamination of fresh water and to protect public health and the environment" – in the rule. We believe that it is preferable to include the standard by which OCD will judge applications and exemptions in the rule itself.

(C)(2)(a) Location

-An earlier version of this proposed rule stated that drilling pits shall not be located in any division defined groundwater sensitive area, as well as in wetlands. OGAP can see no justification for removing the prohibition on locating pits in groundwater sensitive areas. However, the current language of allowing "additional protective measures" in these areas is far superior to having no language at all.

(C)(2)(c) Leak Detection

-We are strongly supportive of the inclusion of this leak detection provision.

(C)(2)(e) Disposal or Storage Pits

-We are supportive of the language prohibiting discharge of liquids with greater than two-tenths of one percent free hydrocarbon into a disposal or storage pit.

(C)(2)(f) Fencing and Netting
-We support the requirement that fencing prevent access by wildlife, as well as livestock.

-An earlier version of this proposed rule provided that "drilling and workover pits are exempt from the netting requirement during **active** drilling or workover operations." We believe that the commission should err on the side of narrow exemptions; therefore, this exemption should be applicable only during <u>active</u> drilling or workover operations.

-In general, the US Fish & Wildlife Service has found that netting is the only consistently effective technique for adequately protecting migratory birds. Therefore, the language in this section allowing for alternative methods should be very narrowly applied by the Division.

(E) Drilling Fluids and Cuttings

-The language in this section should make explicit that no drilling fluids or cuttings may be buried on site. Otherwise, it is difficult to see how the Division can meet the standard of preventing contamination of fresh water, and protecting the public health and environment.

(F)(2) Surface Restoration

-This section allows one year from completion of closure of a pit to recontour. We believe that this period is too long and should be reduced to 6 months. Experience of surface owners shows that the entry of noxious weeds and erosion are commonplace, and therefore, the period during which the surface is left unrestored should be kept to the absolute minimum.

(G)(2) Exemptions

-This section allows the division to grant exemptions from any requirement upon a finding that the exemption will not endanger fresh waters, public health or the environment. This language is problematic for several reasons. At a minimum, it should be changed to reflect the performance standard language: that is, this section should read that an exemption may be granted only if the applicant demonstrates that such exemption will not **contaminate** (rather than the current language of "endanger") fresh waters and that the public health and environment will be protected.

-Second, the applicant for an exemption should be required to demonstrate that it cannot proceed without the exemption. Exemptions should be sparingly used and requiring the applicant to demonstrate a need for the exemption will help to prevent the exceptions from overwhelming the rule. The perception of those living in areas impacted by oil and gas development is that the division currently grants exemptions as a matter of course, rather than as a matter of actual and demonstrated need.

-Third, the section of the proposed rule that allows the division Director to determine whether "the objection [to the exemption] has technical merit" wrongly puts the burden on the surface owner or resident to show why the exemption should not be granted. The burden should,

instead, be on the industry applicant to affirmatively show why the exemption is necessary, as discussed above. This language should, therefore, be modified accordingly.

-Fourth, in addition to the required notice to the surface owner of record, the industry applicant should also be required to place a notice of the requested exemption in the nearest geographical newspaper of record.

Again, we appreciate the opportunity to comment on this proposed pit and below-grade tank rule. We look forward to this commission adopting a rule that serves all the residents of New Mexico well.

Respectfully submitted,

Jennifer Goldman, Associate Director
Oil & Gas Accountability Project

Cc: Florene Davidson, Division Administrator ✓
Oil Conservation Division

David Brooks, Assistant General Counsel
Oil Conservation Division

LAW OFFICES

HEIDEL, SAMBERSON, NEWELL, COX & McMAHON

C. GENE SAMBERSON
MICHAEL T. NEWELL
LEWIS C. COX, III
PATRICK B. McMAHON

311 NORTH FIRST STREET
POST OFFICE DRAWER 1599
LOVINGTON, NM 88260
TELEPHONE (505) 396-5303
FAX (505) 396-5305

F.L. HEIDEL
(1913-1985)

September 5, 2003

Florene Davidson, Division Administrator
State of New Mexico
Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Re: State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Commission
Amended Application of the New Mexico Oil Conservation Division, Through the Environmental Bureau Chief, for Adoption of a New Rule Regulating Pits and Below-Grade Tanks; Amendment of 19.15.1.7 NMAC and 19.15.5.313 NMAC; Recission of 19.15.1.18 NMAC, 19.15.3.105 NMAC and 19.15.2.1 through 19.15.2.15 NMAC; and Recission of Orders R-3221, R-3221-A, R-3221-B, R-3221-B-1, R-3221-C, R-3221-D, R-7940, R-7940-A, R-7940-B, R-7940-B(1) and R-7940-C
Case No. 12969

Dear Ms. Davidson,

This firm represents the Byrd Ranch and Mr. J.R. Byrd of Monument, New Mexico. Please accept this letter as Mr. Byrd's written request for an extension of time and written comments on the adoption of a new rule regarding pits and below-grade tanks (hereinafter referred to as "the Rule").

The Commission published notice of the Rule on or about August 18, 2003. The Commission will close the comment period for the proposed rule at 5:00 P.M. September 8, 2003, and has scheduled the hearing in this matter for 9:00 A.M., Thursday, September 11, 2003. In doing so the Commission has failed to allow adequate time to formulate comments and to prepare for a hearing. Accordingly, Mr. Byrd requests a thirty-day extension of time in which to comment and a sixty-day extension of the hearing date. Considering the subject matter of the proposed rule, the potential impact to ground water and the interests of public policy, the requested extensions of time are reasonable.

Notwithstanding the requests for extension of time, the Rule is deficient for the following reasons:

1. The Rule is vague, arbitrary and capricious.

2. The Rule does not adequately protect "water", as it is defined in the Rule.

3. The Rules does not adequately protect surface and subsurface soils.

4. The Rule does not adequately protect the public health, safety and well-being.

5. The Rule does to adequately protect cultural resources in the Maroon Cliffs Archaeological Area.

6. The Rule does not adequately protect the environment in the Los Medanos Raptor Area.

7. The Rule places an undue burden on the public.

8. The Rule places an undue burden on real property owners.

9. The Rule places an undue burden on the surface estate.

10. The Rule adversely affects real property rights.

11. The Rule conflicts with public policy.

Because the impact of the Rule will be greater to those living in and around oil and gas producing areas, I request that a hearing on this matter be held at a public meeting place in Hobbs, New Mexico.

If you have any questions, please do not hesitate to call.

Sincerely,

HEIDEL, SAMBERSON, NEWELL, COX & MCMAHON

By: Patrick B. McMahon

Patrick B. McMahon

PBM:cd
pc: J.R. Byrd

NEW MEXICO OIL CONSERVATION COMMISSION

Proposed Pit Rule Hearing
September 11-12, 2003

Please complete this form if you would like to speak or present evidence.

Name_Mike Starrett _____

Address__P.O. Box 4294, Houston, Texas 77210-4294

Company(ies) or Organization(s)__OXY PERMIAN

___X___ I would like to make a statement.

Approximate time needed: __10___ minutes.

_____ I will be offering testimony.

Number of witnesses: _____

Number of exhibits _____

Approximate time needed: _____ minutes.

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

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO.

APPLICATION OF

PRE-HEARING STATEMENT

This prehearing statement is submitted by Carl L. Johnson
as required by the Oil Conservation Division.

APPEARANCES OF PARTIES

APPLICANT	ATTORNEY
Carl L. Johnson	
Box 917	
Tatum, N.Mex. 88267	
505-398-6047 H.	
" 369-5515 Mob.	
name, address, phone and contact person	

OPPOSITION OR OTHER PARTY	ATTORNEY
name, address, phone and contact person	

PROPOSED EVIDENCE

APPLICANT

WITNESSES (Name and expertise)	EST. TIME	EXHIBITS
Earl L. Johnson	5-10 min	1

OPPOSITION

WITNESSES (Name and expertise)	EST. TIME	EXHIBITS

PROCEDURAL MATTERS

(Please identify any procedural matters which need to be resolved prior to the hearing)

Signature

STATEMENT OF CASE

APPLICANT

(Please make a concise statement of what is being sought with this application and the reasons therefore.)

History of applicants experience with the OCD. General feeling towards OCD from S.E. New Mex. surface users and underground water owners.

Thoughts of applicant as to viability and usefulness of any pit ruling if implemented by ~~present~~ present OCD.

OPPOSITION OR OTHER PARTY

(Please make a concise statement of the basis for opposing this application or otherwise state the position of the party filing this statement.)

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

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 12969

APPLICATION OF

PRE-HEARING STATEMENT

This prehearing statement is submitted by Greg Duggar
as required by the Oil Conservation Division.

APPEARANCES OF PARTIES

APPLICANT	ATTORNEY
Greg Duggar	
P.O. Box 96	
Dell City Texas 79837	
505 963 2436	
Greg Duggar	
name, address, phone and contact person	

OPPOSITION OR OTHER PARTY	ATTORNEY
name, address, phone and contact person	

STATEMENT OF CASE

APPLICANT
(Please make a concise statement of what is being sought with this application and the reasons therefore.)

I would like to address possible pollution and contamination and rules applied to reserve pits in the Salt Basin.

OPPOSITION OR OTHER PARTY
(Please make a concise statement of the basis for opposing this application or otherwise state the position of the party filing this statement.)

PROPOSED EVIDENCE

APPLICANT

WITNESSES (Name and expertise)	EST. TIME	EXHIBITS
Greg Duggar	10 minutes	Photographs Water test results Recommendations from Sandia Labs for reserve pit rules.

OPPOSITION

WITNESSES (Name and expertise)	EST. TIME	EXHIBITS

PROCEDURAL MATTERS
(Please identify any procedural matters which need to be resolved prior to the hearing)

Greg Duggar
Signature

HEARD, ROBINS, CLOUD,
LUBEL & GREENWOOD, L.L.P.
ATTORNEYS AT LAW
910 TRAVIS, SUITE 2020
HOUSTON, TEXAS 77002
TELEPHONE 713/650-1200
TELECOPY 713/650-1400

WILLIAM T. JONES, JR.
Licensed in Texas and New Mexico

E-MAIL: bjones@heardrobins.com

Facsimile Coversheet

DATE: **August 12, 2003**

TO: Ms. Florence Davidson **Telecopy No. 505/476-3462**
Oil Conservation Division

FROM: **William T. Jones, Jr.**

FILE: August 14, 2003 Hearing Docket

NOTE: Please see attached. Thank you for your cooperation.

TOTAL NUMBER OF PAGES (Including Coversheet): 2

If you do not receive all pages, please contact The Copy Center at 713/650-1200.

HEARD, ROBINS, CLOUD,
LUBEL & GREENWOOD, L.L.P.
ATTORNEYS AT LAW
910 TRAVIS, SUITE 2020
HOUSTON, TEXAS 77002
TELEPHONE 713/650-1200
TELECOPY 713/650-1400

WILLIAM T. JONES, JR.
Licensed in Texas and New Mexico

E-MAIL: bjones@heardrobins.com

August 12, 2003

Ms. Florence Davidson
Oil Conservation Division
1220 St. Francis Drive
Santa Fe, New Mexico 87505

Telecopy No. 505/476-3462

Re: August 14, 2003 Hearing Docket

Dear Ms. Davidson:

Please allow this letter to serve as a formal request to be placed on the OCD hearing docket currently scheduled for Thursday, August 14, 2003. I would like to request approximately thirty (30) minutes to comment on Case 12969 (Application of the New Mexico Oil Conservation Division, through the Environmental Bureau Chief, for Repeal of Rules 18, 105, and 313 and adoption of a new rule regulating pits).

My law firm represents a number of ranchers in the State of New Mexico who, collectively, own thousands of acres of land with ongoing oil and gas production. As such, the purpose of my appearance is to comment on the proposed new rule on behalf of our clients.

If you require any further information, or have any comments, please do not hesitate to contact me.

Very truly yours,

William T. Jones, Jr.

WTJ:vjs
Enclosure

BEFORE THE
NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

RECEIVED

AUG 27 2003

Oil Conservation Division

AMENDED APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION, THROUGH THE ENVIRONMENTAL BUREAU CHIEF, FOR ADOPTION OF A NEW RULE REGULATING PITS AND BELOW-GRADE TANKS; AMENDMENT OF 19.15.1.7 NMAC AND 19.15.5.313 NMAC; RECISSION OF 19.15.1.18 NMAC, 19.15.3.105 NMAC AND 19.15.2.1 THROUGH 19.15.2.15 NMAC; AND RECISSION OF ORDERS R-3221, R-3221-A, R-3221-B, R-3221-B-1, R-3221-C, R-3221-D, R-7940, R-7940-A, R-7940-B, R-7940-B(1) AND R-7940-C

Case No. 12969

ENTRY OF APPEARANCE

HOLLAND & HART, L.L.P. enters its appearance in the above-referenced case on behalf of Controlled Recovery, Inc..

Respectfully submitted,

HOLLAND & HART, LLP

Michael H. Feldewert
P.O. Box 2208
Santa Fe, NM 87501
505-988-4421

Attorneys for Controlled Recovery, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on August 27, 2003, a copy of this Entry of Appearance was mailed to the following:

Attorney for the New Mexico Oil Conservation Division:

Gail MacQuesten
Assistant General Counsel
Energy, Minerals and Natural Resources
Department of the State of New Mexico
1220 S. St. Francis Drive
Santa Fe, NM 87505

Michael H. Feldewert

3124349_1.DOC

Fee and Public Land Association
Post Office Box 202
Eunice, New Mexico 88231
August 06, 2003

Re: Response to the Proposed Draft Pit Rule

The board of the Fee and Public Land Association at their called meeting for the purpose of reviewing the Proposed Draft Pit Rule, all agree with the following observations.

There are already adequate rules and regulations within the jurisdiction of the Department of Energy and the subordinate Oil Conservation Division. The Oil Conservation Division has not enforced the existing rules and regulations and will not enforce existing or future rules.

Land owners will suffer the activity of pits all the way from the initial digging to the maintenance during use and the contamination of the soil and water during use and after abandonment. Instead of adding the confusion of the Proposed Draft Pit Rule we ask you to abandon the study and the work of the committee and let the surface owner and the oil and gas lease holder work under the current rules and regulations.

In any case refrain from diluting the existing requirements for maximum permissible levels of TPH, chlorides and other hazardous constituents.

*

HOLLAND & HART LLP
ATTORNEYS AT LAW

DENVER · ASPEN
BOULDER · COLORADO SPRINGS
DENVER TECH CENTER
BILLINGS · BOISE
CHEYENNE · JACKSON HOLE
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Michael H. Feldewert
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Recognized Specialist in the Area of
Natural Resources - oil and gas law -
New Mexico Board of Legal Specialization
44440.0004

July 31, 2003

VIA HAND DELIVERY
Mr. David K. Brooks,
Legal Bureau
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Commission
1220 South St. Francis Dr.
Santa Fe, NM 87505

Re: Proposed Draft Pit Rule 07/18/03

Dear Mr. Brooks

Controlled Recovery Inc. ("CRI") has been directed to your office to answer questions regarding the applicability of the Proposed Draft Pit Rule to its facility.

Subpart A of the draft rule states: "Facilities permitted by the division pursuant to 19.15.9.771 or Water Quality Control Commission Regulations are exempt *from this section.*" Does this exemption mean CRI's facility is exempt from all of the provisions of the Proposed Draft Pit Rule? If not, what provisions of the Proposed Draft Pit Rule does the Commission consider applicable to CRI's facility?

Your assistance in answering these questions will obviously determine how involved CRI needs to be in the rulemaking process.

Sincerely,

Michael H. Feldewert

MHF/jlp

cc: Ken Marsh, Controlled Recovery, Inc.

3113967_1.DOC

Michael H. Feldewert

From: Brooks, David K [DKBrooks@state.nm.us]
Sent: Thursday, July 31, 2003 4:59 PM
To: Michael H. Feldewert
Subject: Your letter of July 31 re CRI

Mike

Literally "this section" is the entire pit rule except the definitions. So CRI's facility would be exempt from all of the substantive provisions of the proposed pit rule.

David Brooks

RECEIVED

JUL 22 2003

OIL CONSERVATION
DIVISION

Post Office Box 6596
Santa Fe, New Mexico 87502
July 20, 2003

Mr. Roger C. Anderson
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Dear Sir:

In accordance with your request, the following are my comments on the latest draft of the Pit Rules.

I am opposed to on site burial of any waste, under any conditions. On site burial cannot provide absolute containment, and with the ability of waste to migrate, underground water is endangered. Consequently, I cannot support the wording of Section E. Drilling Fluids and Cuttings, and Section F. 1. Closure, and suggest the following changes:

In Section E, following "in a manner approved by the division" insert "other than on site burial".

In Setion F.1. delete "Where the contents of pits will likely migrate and cause ground water or surface water to exceed WQCC standards,".

Very truly yours

Andrew M. Swarthout

Andrew M. Swarthout

Clifford K. Larsen
22 Calle Alexia
Santa Fe, NM 870508

July 24, 2003

Mr. Roger C. Anderson
NMEMNRD Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87055

Re: Proposed Draft Pit Rule 07/18/03

Dear Roger:

This is to provide comment on the proposed draft in preparation for the August 14 OCC meeting.

I support the draft as it has been presented. I am concerned, nonetheless, that some of the language currently in italics (non-consensus) may be altered or eliminated. I oppose any such changes.

There are seven areas of particular concern. I want to make a brief comment on each and am prepared to expand on those comments at the hearing itself.

1. C2(a) Location: As we cannot anticipate all conditions that might be encountered, it is important to leave the Division with the capacity to increase environmental protection if such a need can be demonstrated. The examples I cited were high ground water tables and karst regions. It is clear that in such circumstances, closed systems might be necessary. The sentence in question does not mandate such protections, it simply permits them.
2. C2(e) Disposal or Storage Pits: While the intent of this sentence is to allow no discharge of hydrocarbons into a pit, analytical chemistry could create an unintended burden. The amount of "two-tenths of one percent" captures the essence of the intent without creating a potentially abusive requirement.
3. C2(f) Netting: The intent is to protect water fowl. A compromise was made to provide relief to this requirement when there is active human presence. An alternative would be to simply require netting of all ponds greater than 16' in diameter AT ALL TIMES.
4. C4 Sumps: The industry negotiators moved the size of sumps from the original 21 gallons (1/2 of an oil barrel) to 110 gallons (2 drums). This change has given sumps a greater potential for environmental damage due to leakage. While the intent is that sumps will generally be free of hydrocarbons, hydrocarbons will be present in all of the sumps some of the time and some of the sumps all of the time. If an operator regards integrity testing to be a burden, the sump simply has to be placed ON the ground instead of IN the ground.
5. F1 Closure: *It is unclear to me if underground tanks must be emptied as part of reclamation. Is this part of the guidelines? If not, it should be.*
6. F2 Surface Restoration: The prevention of ponding is not an erosion issue; it is a percolation issue. The NMOGA comment misses the point.
7. G3 Exemptions: The intent of the rule is prevent "stealth" operations. The Division needs to maintain control of the communication process. Environmental contamination, particularly of an aquifer, has impacts well beyond a surface owner.

Sincerely,

Clifford Larsen, Mining Co-Chair
Rio Grande Chapter of the Sierra Club