

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

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

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 AND R-7940-C.

CASE NO. 12969

ORDER NO. R-12011-B

ORDER OF THE OIL CONSERVATION COMMISSION

BY THE COMMISSION;

THIS MATTER came before the Oil Conservation Commission (hereinafter referred to as "the Commission") on November 13 and 14, 2003 at Santa Fe, New Mexico, on application of the New Mexico Oil Conservation Division (hereinafter referred to as "the Division") through the Chief of the Environmental Bureau, and the Commission, having carefully considered the evidence, the pleadings, comments and other materials submitted in support and in opposition of the proposal, now, on this 11th day of December, 2003,

FINDS:

1. Proper notices have been given of this proceeding and of the public hearing hereof, and the Commission has jurisdiction of the subject matter.

The Division's Proposals

2. In this rule making proceeding, the Division has applied for repeal of existing rules concerning pits and **below-grade** tanks, except pits and tanks that are a part of waste management facilities permitted pursuant to Rule 711 (19.15.9.711 NMAC) or facilities permitted under Water Quality Control Commission (WQCC) regulations, and the adoption of a new comprehensive rule regulating pits and below-grade tanks.

3. The Division proposes repeal of the following rules and orders:

Rule 18	19.15.1.18 NMAC
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Rule 105	19.15.3.105 NMAC
Order R-7940	not codified
Order R-7940-A	not codified
Order R-7940-C	19.15.2.1 through 19.15.2.11 NMAC
Order R-3221	19.15.2.12 NMAC
Order R-3221-A	19.15.2.13 NMAC
Order R-3221-B	19.15.2.14 NMAC
Order R-3221-B-1	19.15.2.15 NMAC
Order R-3221-C	not codified
Order R-3221-D	not codified

Orders R-7940-B and R-7940-B(1) were withdrawn by Order R-7940-C.

4. In addition, the Division proposes to amend Rule 313 [19.15.5.313 NMAC] to eliminate provisions therein relating to pits.

5. The Division proposes amendment of Rule 7 [19.15.1.7 NMAC] to incorporate additional definitions of general applicability, and the adoption of a new rule to be codified as 19.15.2.53 NMAC. The proposed new rule, proposed amendments to Rules 7 and 313 and the proposal to repeal the above-identified rules and orders, collectively, constitute "the Division's proposals."

6. To assist in formulating the Division's proposals, the Environmental Bureau of the Division ("the Bureau") created a workgroup including representatives of the New Mexico Oil and Gas Association ("NMOGA"), the Independent Petroleum Association of New Mexico ("IPANM"), other governmental agencies (including the United States Bureau of Land Management, and Native American tribes), other interested groups (including the Sierra Club, the Fee and Public Land-Users Association and the New Mexico Cattle Growers Association) and representatives of the Bureau. The workgroup was charged with reviewing existing rules and orders and developing recommendations. The Division's proposals incorporate the consensus of the workgroup on those issues on which the group was able to achieve consensus, and the Bureau's recommendations on identified issues on which no consensus was achieved. The efforts of the workgroup have been of invaluable assistance to the Division and the Commission.

7. The Commission held a public hearing on the Division's proposals on November 13 and 14, 2003. In addition, the Commission accepted written comments concerning the proposed **rulemaking** both prior to and following the hearing. The Commission deliberated on the application in open session during its meeting on December 11, 2003.

Background

8. The Commission has been concerned about disposal or storage of hydrocarbons, produced water and other materials in open pits and the potential of such pits

to contaminate fresh water resources of the State for a long time. Beginning in 1958 with the adoption of Order R-1224-A, the Commission has undertaken selective regulation of pits in particular areas of the State and in particular circumstances.

9. The Division's existing orders and rules regulating pits are complex and confusing.

10. Pits in the producing areas of southeastern New Mexico, consisting of Lea, Eddy, Chaves and Roosevelt Counties ("the southeast"), are governed by Order R-3221, as amended by Orders R-3221-A, R-3221-B, R-3221-B-1, R-3221-C and R-3221-D. Order R-3221, as amended by Order R-3221-C, sets forth the basic substantive rules, generally prohibiting unlined pits and requiring permits for lined pits. Order R-3221-B delineates an exempt area to which these rules do not apply, and Order R-3221-D establishes procedures applicable to requests for exceptions. Specific orders issued pursuant to Order R-3221-D have granted exceptions to the provisions of Orders R-3221 through R-3221-C in particular circumstances.

11. Pits in the producing areas of northwestern New Mexico (McKinley, Rio Arriba, Sandoval and San Juan Counties) are governed by special rules adopted by Order R-7940-C.

12. The proposed new rule submitted by the Division ("the proposed rule"), admitted into evidence as Exhibit 4 at the hearing, and the accompanying definitions admitted as Exhibit 3, would apply statewide and would supersede all of the existing rules and orders relating to pits. Basically the Division's proposals would subject all pits to permitting and closure requirements, and expand to statewide applicability most of the restrictive provisions applicable in the major producing areas under existing orders. Details of the proposed changes are analyzed below in connection with a review of the testimony at the hearing.

Technical Evidence

13. The Division presented the testimony of Roger Anderson, a chemical engineer and Chief of the Division's Environmental Bureau. Mr. Anderson testified concerning the organization, composition and activities of the work group and the process by which the Division's proposals were formed.

14. Mr. Anderson further explained the Division's proposals and the reasons why the Division recommended adoption of particular provisions. He pointed out those portions of the Division's proposals that represented a consensus of the work group and those that did not represent a consensus. With respect to those provisions where consensus was not achieved, Mr. Anderson testified concerning the Division's reasons for recommending particular alternatives and rejecting others.

15. The Division also presented the testimony of William C. Olson, a geologist and hydrologist employed as Senior Hydrologist by the Division. Mr. Olson testified concerning certain instances of pit contamination investigated by the Division.

16. Dr. Donald A. Neeper, a citizen of the State of New Mexico, possessor of a PhD degree in thermal physics and work experience in chemical contamination and environmental clean-ups testified on his own behalf. Dr. Neeper testified that soluble pollutants deposited in pits, and particularly those buried upon pit closure, will tend to percolate upwards toward the surface where they can pollute the vadose zone and inhibit plant growth, and that this can happen even if the pit is lined. Dr. Neeper recommended certain alternatives to the Division's proposals that are discussed below in reference to particular provisions.

17. Ms. Tweeti **Blancett** and Mr. Chris Velasquez, ranch operators in San Juan County, New Mexico, testified on behalf of the Oil and Gas Accountability Project and the San Juan Citizens' Alliance. Their testimony chiefly concerned specific instances of surface pollution and damage to livestock attributed to oil and gas operations. They recommended alternative and more restrictive provisions that are discussed below.

18. The New Mexico Oil and Gas Association and the Independent Petroleum Association of New Mexico, jointly (**NMOGA/IPANM**), presented the testimony of Mr. **Bruce Gantner**, Division Manager, Environmental Health and Safety for Burlington Resources, Mr. Robert L. Manthei, Operations Supervisor for Southeast New Mexico for BP American Production Company and Mr. **Randall T. Hicks**, a geologist and hydrologist with specialization in contaminant migration issues.

19. Mr. Gantner and Mr. Manthei testified in support of alternatives to some of the Division's proposals recommended by **IPANM/NMOGA**. Their testimony is described below in connection with the discussion of specific provisions of the proposed rule.

20. Mr. Hicks testified regarding studies and simulation models in which he participated in order to determine the effects of discharges of chlorides in an environment resembling that of southeast New Mexico. Mr. Hicks testified that his studies indicate that water containing chlorides, unless constituting a highly concentrated discharge in a small area, would not likely cause **groundwater** to exceed standards, or even reach **groundwater**. He accordingly concluded that, except in unusual circumstances, such as where groundwater is extremely close to the surface, pits such as drilling or workover pits containing relatively small fluid volumes do not pose a threat to groundwater.

21. Mr. Hicks further testified, however, that chlorides from pits closed on site could migrate upward and cause soil sterilization, confirming the testimony of Dr. Neeper. Accordingly, Mr. Hicks recommended that all pits, including temporary pits, **should** be properly closed. He did not, however, recommend specific provisions concerning closure.

Comments

22. NMOGA/IPANM, Controlled Recovery, Inc., the Fee and Public Land Association, Greg Duggar, Donald A. Neeper, PhD, the Oil and Gas Accountability Project, the New Mexico Department of Game and Fish, the New Mexico Cattle Growers Association, the Rio Grande Chapter of the Sierra Club the Surface Division of the New Mexico State Land Office and Carl L. Johnson submitted written comments at or before the hearing.

23. In addition to the above identified witnesses, the following persons made comments at the hearing: Janet Rees, San Juan County resident; B.J. Brock, representing the New Mexico Cattle Growers Association, Cody Morrow, representing the Surface Division of the New Mexico State Land Office; Jennifer Goldman, representing the Oil and Gas Accountability Project; Greg Duggar, Otero County resident; Mike Starrett, representing OXY Permian; Clifford K. Larsen, representing the Rio Grande Chapter of the Sierra Club; Irvin Boyd, representing the Fee and Public Land Users Association; and David Sandoval, attorney representing various landowners.

24. NMOGA/IPANM, the Division, David Sandoval, Dr. Neeper, the Department of Game and Fish, and Carl L. Johnson submitted post-hearing comments within the time allowed by the Commission.

Discussion of the Proposed Rule

Subsection A - Permit Requirement

24. Subsection A of the proposed rule requires a permit for any pit not expressly exempted or permitted pursuant to another rule.

25. Permits are now required for lined disposal or storage pits in the southeast by paragraph (5) of Order R-3221-C, by Rule 4 adopted by Order R-7940-C in the northwest, and by statewide Rule 18 in all other areas. Paragraph (4) Order R-3221-C, however, provides an exception to the permit requirement for "surface pits . . . utilized for the disposal of a maximum of one barrel of produced water per day for each developed 40-acre tract." Permits are required for storage of wastes in below-grade tanks by Rule 4 adopted by Order R-7940-C in the northwest, and by statewide Rule 18 in all other areas. Permits are not required for unlined pits in those areas where unlined pits are allowed. Unlined pits in the northwest outside the vulnerable areas are required to be registered; however registration is not a prerequisite to construction or use of such pits. Although there is no express exclusion from the permitting requirements of Rule 4 of Order R-7940-B or of statewide Rule 18 for drilling and workover pits, the division has interpreted those provisions as not applying to such pits.

26. Subsection A of the proposed rule would extend the permitting requirement to unlined pits, eliminate the exemption for relatively small disposal pits currently provided by Order R-3221-C, and, in conjunction with the definition of "pit" in the Division's proposals, would make clear that the permitting requirement applies to drilling or workover pits.

27. Mr. Anderson testified that this provision represented the consensus of the workgroup. He further testified that the Interstate Oil and Gas Compact Commission (IOGCC), and State Review of Oil and Natural Gas Environmental Regulation, Inc. (STRONGER) through their state review program, had found New Mexico's regulatory regime deficient under IOGCC guidelines due to the absence of "a permitting or review process in place for all pits." Mr. Anderson **also** testified generally concerning the potential dangers to groundwater and the environment associated with pits.

28. No party opposed the general permitting requirement of Subsection A. Witnesses and representatives of public interest groups and landowners' and ranchers' associations who appeared or submitted comments generally recommended that the Commission prohibit all pits associated with wells and require wells to be operated with closed systems.

29. The Commission concludes that:

a. use of pits for either temporary or permanent storage of oil field wastes, including drilling fluids, entails significant hazards to freshwater resources and the environment, but such hazards are manageable;

b. a general permitting requirement applicable all pits is necessary to enable the Division to manage the hazards associated with pits and to conform New Mexico to national regulatory standards;

c. the concerns articulated by landowners concerning surface contamination from pits, while significant, are more germane to the manner of closure of pits than to the existence of pits;

d. none of the parties urging prohibition of pits offered persuasive evidence specifically indicating that lined pits presented surface contamination dangers so long as liner integrity was maintained and proper closure procedures were followed; and

e. accordingly, subsection A of the proposed rule should be adopted.

Subsection B: Permitting Procedures

30. Subsection B of the proposed rule sets forth the procedures, including **timeframes**, for filing for and approval of, permits for existing and future pits. These provisions are new.

31. Mr. Anderson testified that Subsection B represented the consensus of the workgroup, except with respect to drilling and workover pits, and with respect to the specific timeframes for continued use of existing pits. He further testified that the times provided in the proposed rule for notification of intent to close or to continue to use existing pits and for filing permit applications for existing pits contemplated an earlier adoption of the rule than is now possible, and accordingly should be deferred to reflect the actual date of enactment, but that the June 30, 2005 date for discontinuance of use of existing pits for which permits were not filed should not be deferred.

32. NMOGA/IPANM recommended that drilling and workover pits be permitted by rule, dispensing with the need for a specific application. In support of that recommendation, Mr. Gantner testified that such pits are relatively small and open for relatively short periods, and that OCD records reflect an extremely small number of environmental problems with such pits. Mr. Gantner also pointed out that the permitting requirement would add new paperwork since advance sundry notices are not now required for some small workover operations that involve workover pits.

33. NMOGA/IPANM also recommended a six-months deferral of the time for notification of intent to continue to use existing pits.

34. NMOGA/IPANM recommended that existing pits be grandfathered so long as they have integrity. Their witnesses did not explain, however, what class or classes of pits might be grandfathered under their recommended language, whether those pits would meet standards for permitting or whether concerns regarding such pits could be addressed through the exception process provided in the proposed rule.

35. The Commission concludes that:

a. The permitting procedure provided in subsection B of the proposed rule is generally reasonable;

b. Specific permitting of pits, including drilling and workover pits, will enable the Division to have reliable information regarding the nature and location of pits, and to consider site-specific factors in applying its guidelines;

c. Existing pits that comply with standards should be permitted; whereas those that do not should be brought up to standards unless a basis for a specific exception is established; accordingly existing pits for which permits are not approved should not be allowed to continue to operate, as recommended by the NMOGA/IPANM;

d. the timeframe provided in subsection B of the proposed rule for notification of intent to continue to use existing pits should be deferred to April 15,

2004, and the time for filing permit applications for existing pits should be deferred to September 30, 2004; and

e. subsection B of the proposed rule should be adopted without substantive change other than as to specific times, in the form shown in Exhibit C hereto.

Subsection C: Design, Construction and Operational Standards

36. Subsection C of the proposed rule sets forth design, construction and operational standards for pits and below-grade tanks.

37. Paragraph 1 of subsection C establishes general performance standards. Mr. Anderson testified that this provision represented work group consensus, and no party voiced any opposition.

38. Subparagraph C.2(a) relates to location of pits. It would prohibit pits, except drilling and workover pits, in any watercourse, sinkhole, lakebed, playa lake or wetland, and authorizes the Division to impose additional requirements for pits in groundwater sensitive areas. The Division also submitted, as a part of its proposed amendments to Rule 7, a proposed definition of "groundwater sensitive areas."

39. Subparagraph C.2(a) is new. Existing orders prohibit unlined pits in certain areas but do not contain specific provisions regarding location of lined pits.

40. Mr. Anderson testified that Subparagraph C.2(a) did not represent work group consensus.

41. The Department of Game & Fish of the State of New Mexico and Mr. Larsen, representing the Rio Grande Chapter of the Sierra Club, objected to the exception allowing drilling or workover pits in areas where this paragraph would prohibit other pits.

42. Mr. Larsen also recommended that the proposed language should be altered to provide that the Division "shall" rather than "may" impose additional requirements in groundwater sensitive areas.

43. Mr. Morrow, representing the Surface Division of the New Mexico State Land Office, recommended that pits be excluded from additional areas such as areas in the vicinity of existing water wells and 100-year floodplain areas. Mr. Sandoval also recommended prohibiting pits in areas around public or private water wells.

44. Mr. Anderson testified that the work group did not reach a consensus on the definition of "groundwater sensitive area," but no party raised specific objections to the proposed definition.

45. The Commission concludes that:

a. pits located in actually or intermittently saturated areas present extra hazards to surface water and groundwater, as exemplified by the testimony of Mr. Hicks concerning a pit that was located in the bed of the San Juan River;

b. the exception process in the proposed rule provides an avenue of relief where unusual reasons might exist for locating a pit in an otherwise prohibited area;

c. no adequate basis was shown for generally excepting drilling and workover pits from the prohibition of pits in aquatic environments;

d. while the Division should have authority to impose additional permit conditions and stipulations for pits located in **groundwater** sensitive areas, in the absence of the Commission adopting standards for such additional requirements, it would not be meaningful to make imposition of additional conditions mandatory;

e. wellhead protection areas, as defined in the definitions set forth in Exhibit B hereto, should be treated similarly to groundwater sensitive areas as areas where additional protective conditions should be considered;

f. accordingly, Subparagraph C.2.(a) of the proposed rule should be adopted, deleting the exception for drilling and workover pits and adding authorization for additional protective conditions in wellhead protection areas, in the form shown in Exhibit C hereto; and

g. the accompanying definition of groundwater sensitive areas should also be adopted.

46. **Subparagraphs C.2(b) and C.2(c)** of the proposed rule set forth requirements for liners and leak detection. Generally these provisions require a single liner for drilling and workover pits and a double liner with a leak detection device between the liners for all other pits, except flare pits for which no liner is required.

47. Mr. Anderson testified that these provisions represented work group consensus, and, except for the requirement that drilling and workover pits be lined, are in accordance with existing Division guidelines. Mr. Sandoval recommended more specific liner performance standards.

48. Subparagraph C.2(d) of the proposed rule preserves the provision of existing Rule 105 requiring that drilling and workover pits be of sufficient size to provide an adequate supply of drilling fluid, and adds a new requirement that hydrocarbon-based drilling fluids be confined in tanks.

49. Mr. Anderson testified that these provisions represented work group consensus, and no party voiced any opposition thereto.

50. The Commission concludes that:

- a. specific liner standards are more appropriate for inclusion in the guidelines; and
- b. subparagraphs C.2(b), (c) and (d) of the proposed rule should be adopted.

51. Subparagraph C.2(e) of the proposed rule establishes two performance standards applicable to disposal and storage pits, requiring that liquids containing more than two-tenths percent hydrocarbons not be discharged into such pits, and that if spray evaporation systems are used, spray-borne solids not be allowed to escape from the perimeter of the lined pit. These provisions are new.

52. Mr. Anderson testified that the work group reached consensus on the spray-borne solids requirement but not on the two-tenths percent hydrocarbon limitation. He further testified that the latter requirement was introduced in the interest of specificity, but he did not indicate any scientific or policy-based reason for this particular standard.

53. NMOGA/IPANM recommended an alternative provision requiring that disposal and storage pits be "kept reasonably free of oil."

54. In support of this recommendation, Mr. Kantner and Mr. Manthei testified that field personnel could not determine if a stream contained more than two-tenths percent hydrocarbons, and thus could not comply with the standard of the proposed rule, but could make a meaningful judgment based on visible inspection as to whether a pit was reasonably free of oil.

55. Mr. Larsen recommended retention of the two-tenths percent hydrocarbon limitation because of its objectivity, and several witnesses expressed concern about enforceability of vague language such as "reasonably."

56. Mr. Anderson testified that the phrase "spray-borne solids" in the spray evaporation system requirement was intended to include solids dissolved in the sprayed fluid.

57. Ms. Blancett and Mr. Vasquez recommended that spray evaporation systems be prohibited. In support of this recommendation, they testified concerning instances of such systems that had over-sprayed and destroyed vegetation, and Ms. Blancett express doubt that spray-borne solids could be confined to pits.

58. The Commission concludes that:

- a. the Division's proposed two-tenths percent standard lacks adequate scientific or policy justification, and would be difficult to enforce;

b. NMOGA/IPANM's recommended language is subject to varying interpretation;

c. a more reasonable and enforceable approach is to require that disposal and storage pits be kept free of "any measurable or visible layer of oil anywhere on the pit";

d. for clarification, the standard regarding spray evaporation systems should be changed to require that "spray-borne *suspended or dissolved* solids" remain within the pit perimeter; and

e. Subparagraph C.2(e) of Exhibit C to this order, incorporating the above changes, should be adopted in lieu of the provision recommended by the Division.

59. Subparagraph C.2(f) of the proposed rule deals with fencing and netting of pits and open tanks for the protection of livestock, birds and other wildlife.

60. Present Rule 313 requires pits used for disposal of tank bottoms to be fenced, and Order R-3221-C, applicable to the southeast, requires that lined **storage** and disposal pits be fenced. These provisions also specifically require that fences be kept in repair. There is not now a fencing requirement for other pits.

61. Present Rules 18 and 313 require tanks exceeding 16 feet in diameter and all pits to be netted or screened to protect birds unless specifically exempted. Rule 105, applicable specifically to drilling and workover pits, requires netting or screening only after the operation has ceased and then only if oil is not removed from the surface of the pit.

62. Mr. Anderson testified that consensus was not achieved on the fencing and netting proposals. He further testified that netting was not necessary for drilling and workover pits during active operations because human presence would be a deterrent to birds, but that netting might be necessary after cessation of operations.

63. In response to cross-examination concerning the requirement for fencing to protect wildlife, Mr. Anderson testified that the proposed rule was not intended to require fencing specifically designed to exclude wildlife except where a particular wildlife concern was identified.

64. Ms. Blancett and Mr. Velasquez testified to instances of damage to livestock where pits either were not fenced, or where fences were inadequately maintained.

65. NMOGA/IPANM recommended **retaining** the present exemption from netting for drilling and workover pits. Mr. Manthei testified in support of this recommendation that during his many years of field experience, he had never seen a dead bird in or near a drilling or workover pit.

66. Ms. Rees, Mr. Larsen and the Department of Game & Fish recommended that there be no exceptions to the netting requirements, and Ms. Rees and the Department of Game and Fish recommended that tanks less than 16 feet in diameter also be required to be netted.

67. The commission concludes that:

a. exclusion of wildlife would require specially designed fencing that should not be required except where a wildlife problem has been identified;

b. accordingly, the general fencing requirement should be limited to protection of livestock;

c. the fencing proposal, as so modified, should be adopted with the addition of a specific provision, as in present Rule 313 and Order Re-3221-C, that fences be kept in repair;

d. netting is not necessary for drilling or workover pits during operations because human presence and activity will generally render drilling and workover pits non-hazardous to birds during such operations, and such pits will not present a material hazard to birds after operations if they are kept reasonably free from oil; and

e. accordingly, Subparagraph C.2(f) of Exhibit C should be adopted in lieu of the provision recommended by the Division.

68. Subparagraph C.2(g) of the proposed rule would prohibit unlined pits except in designated geographical areas.

69. This provision restates the requirements of existing orders with the following changes:

a. unlined pits will no longer be allowed in parts of the state outside the eight major producing counties;

b. the exception allowing unlined disposal pits that receive less than one barrel of produced water per day per 40-acre tract served in the southeast, provided in Order 3221-C, will be repealed; and

c. pursuant to the Division's proposed definition of "wellhead protection area," the wellhead protection areas where unlined pits are prohibited in the northwest would be extended to include a 1,000-foot radius around all water wells; whereas Order 7940-C now provides for a wellhead protection area defined by a 200-foot radius around domestic wells and a 1,000-foot radius around other wells.

70. Mr. Anderson testified *that* Subparagraph C.2(g) represented work group consensus.

71. Clause (ii) of Subparagraph C.2(g) provides a procedure for an operator to apply to the Division for a permit for an unlined pit in a particular case. This provision does not include a notice requirement. However, Mr. Anderson testified that the notice requirement in proposed subsection G was intended to apply.

72. Some **commentors**, including several landowners, Mr. Morrow, representing the Surface Division of the New Mexico State Land Office, and the Department of Game and Fish, recommended that unlined pits be prohibited in all areas. However, no technical evidence was presented to demonstrate a need for such a prohibition in those areas where unlined pits are specifically permitted.

73. The Division did not present any specific evidence to support extension of "wellhead protection areas" from 200 to 1000 feet around private water wells.

74. The Commission concludes that:

a. areas where unlined pits may continue to be allowed without endangering groundwater have been defined in previous orders based on extensive evidence received by the commission in the proceeding that produced those orders;

b. the evidence presented in this proceeding was insufficient to justify re-visiting those determinations, except that the prohibition of unlined pits in wellhead protection areas, currently applicable only in the northwest, should be made statewide;

c. the exception procedure for unlined pits in clause (ii) of this Subparagraph duplicates the exception procedure provided in paragraph G.1 of the proposed rule, and is therefore redundant and unnecessary;

d. Subparagraph C.2(g) should be adopted generally as proposed, deleting the exception procedure as redundant, and with effective date changes and clarifying wording changes as set forth in Exhibit C hereto; and

e. the definition of "wellhead protection area" set forth in Exhibit B hereto, which is substantively the same as that in Order 7940-C, should be adopted in lieu of that proposed by the Division.

75. Proposed paragraph C.3 requires secondary containment and leak detection for all new below-grade tanks, and retrofitting of existing below-grade tanks at the time of major repairs. Mr. Anderson testified that this paragraph represented work group consensus, and no party objected thereto (except to its applicability to large sumps that would not qualify as "sumps" under the Division's proposed definition).

76. The Commission concludes that paragraph C.3 of Exhibit C hereof should be adopted, incorporating the substance of the Division's proposed paragraph C.3 with clarified wording.

77. Proposed paragraph C.4 requires annual integrity testing of sumps. Sumps are basically tanks used to catch drips or leaks. Sumps are intended to remain predominantly empty. They are excluded from the permitting and secondary containment requirements otherwise applicable to pits and below-grade tanks. The Division submitted an accompanying definition of "sump," which limited the applicability of the term to a reservoir that has a capacity less than 110 gallons.

78. NMOGA/IPANM proposed (a) defining a sump as a "vessel" rather than a "reservoir," (b) eliminating the 110-gallon maximum, and exempting sumps of less than 30-gallons capacity from the annual integrity testing requirement.

79. In support of these proposals, Mr. Manthei testified concerning the use of sumps in the oil field. He testified that sumps are made of man-made materials, not earthen impoundments, and, accordingly, the term "vessel" is a more accurate description than "reservoir." He further testified that since sumps are intended to be used only in the event of a spill or leak, and will otherwise remain empty, there is no reason to require secondary containment for sumps as is proposed for below-grade tanks, regardless of the size of the sump. Mr. Kantner testified that, in his opinion, there is no legitimate reason for integrity testing of very small sumps.

80. Mr. Larsen recommended preserving the size limitation on sumps, suggesting that large sumps should be subject to permitting and leak detection requirements applicable to below-grade tanks even if berms are not required.

81. The Commission concludes that:

a. the word "vessel" should be substituted for "reservoir" in the definition of "sump" to exclude emergency pits from the definition;

b. the 110-gallon maximum for sumps not required to be permitted as below-grade tanks is somewhat arbitrary and excludes many structures of similar function; however, some maximum size should be retained because of the greater environmental hazards posed by larger vessels that could contain larger quantities of contaminants;

c. a 500-gallon limitation would bring most drain and leak-catching sumps within the definition while still requiring permitting of larger structures;

d. the exception process provided in subsection G of the rule will enable the Division to dispense with the requirement for secondary containment and leak

detection for larger installations that serve a function analogous to sumps where the lack of need for additional protective measures can be shown;

e. annual integrity testing should be required for all sumps, with visual testing authorized only for those that can be removed from their emplacements for testing; and

f. the definition of "sump" set forth in Exhibit B hereto, and paragraph C.4 set forth in Exhibit C hereto should be adopted in lieu of the Division's recommendations.

Subsection D: Emergencies

82. Subsection D of the proposed rule, except for paragraph D.5, deals with pits constructed in an emergency. The new rule authorizes construction and use of such pits without a permit provided they are emptied within 24 hours. Paragraph D.5 requires that "emergency pits" constructed in advance to contain a potential release be permitted.

83. Mr. Anderson testified that the proposed provisions regarding pits constructed in an emergency situation represented a work group consensus, except that some members wanted to allow construction of such pits in less exigent circumstances upon verbal approval of the Division.

84. NMOGA/IPANM proposed adding language allowing construction of emergency pits upon verbal approval of the Division, but their witnesses did not identify any circumstance that would justify construction of such a pit upon verbal approval that would not also constitute an emergency.

85. Mr. Anderson testified that paragraph D.5 requiring permitting of pits constructed in anticipation of a future emergency did not represent a work group consensus, but was a necessary provision for enforcement in view of the frequent use of such pits as unpermitted disposal pits.

86. NMOGA/IPANM recommended that proposed paragraph D.5 be changed to exclude impoundments constructed pursuant to the Environmental Protection Agency's Spill Prevention, Control and Countermeasure (SPCC) requirements, and the Division, in post-hearing comments, joined in this recommendation provided that the pit is described in a plan submitted to the Environmental Protection Agency (EPA) and that notice of the location of the pit be filed with the Division.

87. The Commission concludes that:

a. the Division's proposed conditions for excepting SPCC pits are desirable to prevent the exception being used to evade the permitting requirement for emergency pits;

b. however, since SPCC plans are not ordinarily filed with EPA except in the event of certain incidents, a requirement that the SPCC plan have been filed with EPA is too restrictive; and

(b) proposed subsection D should be adopted in the form set forth in Exhibit C, which exempts spill containment pits described in SPCC plans that are required by EPA provided the Division is given notice thereof.

Subsection E: Drilling Fluids and Cuttings

88. Subsection E of the proposed rule provides for disposal of drill cuttings and drilling fluids in any pit in a manner approved by the Division, and requires that the proposed method of disposal be stated in the permit application.

89. Present Rule 105 requires on-site burial of drill cuttings and drilling fluids unless the Division expressly approves off-site disposal.

90. Mr. Anderson testified that the work group did not achieve consensus on subsection E because some members advocated prohibiting on-site disposal in all cases. At the hearing landowner witnesses and commentators proposed prohibiting on-site burial and expressed concern that buried contaminants would rise to the surface and contaminate soils. Both independent witness, Dr. Neepser, and NMOGA/IPANM witness, Randall Hicks, testified that soil contamination was a possibility if there were salts in the buried material.

91. The Commission concludes that:

a. proposed subsection E addresses concerns about potential surface pollution from burial of drilling fluids and drill cuttings by (1) establishing a performance standard for disposal of these materials that encompasses protection of public health and the environment and is not limited, as is present Rule 105, to protection of surface and subsurface water, and (2) requiring division approval for the operator's proposed method of disposal for each specific location, in lieu of requiring on-site burial in other than exceptional cases, as the present rule does;

b. proposed subsection E, apparently inadvertently, is limited to disposal of those substances "contained in any pit or below-grade tank"; whereas present Rule 105 is not so limited; and

c. proposed subsection E should be adopted deleting the inadvertently added language and with clarified wording in the form set forth in Exhibit C hereto.

Subsection F: Pit Closure

92. Subsection F of the proposed rule prescribes procedures for pit closure, basically requiring that pits be filled and leveled, and a closure report filed with the division, within six months after cessation of use.

93. Order 3221-C, applicable in the southeast, requires closure and leveling of lined pits permitted pursuant to that order "as soon as practicable after termination of use." Rule 202 requires that when a well is plugged and abandoned, all pits be filled and the location leveled within one year. Otherwise, subsection F of the proposed rule is new.

94. Mr. Anderson testified that the work group did not achieve consensus on subsection F.

95. NMOGA/IPANM submitted an alternative proposal regarding closure, which would require closure reports only for unlined pits or lined pits where there is evidence of soil contamination.

96. In support of this proposal, Mr. Kantner testified that, in his experience, when a pit liner is removed it is very apparent if there has been soil contamination. However, he conceded in response to cross-examination that liner removal could be difficult.

97. NMOGA/IPANM further recommended that the surface restoration provisions of proposed paragraph F.2 be changed to read "to prevent extended ponding of rainwater," instead of "to prevent ponding of rainwater." In support of this proposal, Mr. Kantner testified that, after substantial rains formation of some small ponds would be practically inevitable.

98. In response to a question about the vagueness of the requirement that a detailed closure plan be filed "in appropriate cases," Mr. Anderson testified that it was the Division's intention that a closure plan be required if the permit so required.

99. The Division, in post-hearing comments, specifically opposed the recommendation that closure reports and soil samples be required only where there is evidence of contamination, and offered a counter suggestion that the requirement apply unless the operator demonstrated that there was not soil contamination.

100. Landowner and ranching association witnesses and commentators expressed significant concerns about the manner in which pits were closed, particularly with regard to liner disposal. Most of these witnesses and commentators recommended prohibition of on-site burial of pit liners and pit contents at the time of closure.

101. Mr. Sandoval recommended that the closure provisions make specific reference to WQCC water quality standards.

102. The Commission concludes that:

a. because of the variety of situations that pit closures may present the Division should have the flexibility to determine specific closure requirements on a case-by-case basis through the promulgation and application of interpretive guidelines;

b. since the Division indicated that "appropriate cases" for requiring a detailed closure plan would be identified in the permit, the rule should be modified to state this intention;

c. express reference to WQCC standards is not necessary in subsection F since the rule as a whole clearly reflects adoption of WQCC water quality standards as the standard for protection of fresh water; and

d. accordingly, subsection F should be adopted, changing "in appropriate cases" to "as a condition of a permit" and with clarified wording, as set forth in Exhibit C hereto.

Subsection G: Exemptions; Additional Conditions

103. Subsection G of the proposed rule authorizes the Division to impose additional conditions on pit permits and to grant exceptions to requirements of the rule in particular cases. It also prescribes procedures for granting of exceptions. This subsection is new.

104. Mr. Anderson testified that the work group consensus supported subsections G.1 and G.2 authorizing additional conditions and exceptions, but that consensus was not achieved on the procedural provisions of subsection G.3, particularly the requirement that the applicant for an exception must notify the surface owner and such other persons as the Division may direct.

105. At the hearing and in written comments, NMOGA/IPANM opposed the provision authorizing the Division to require notice of exception applications to persons other than the surface owner. Mr. Sandoval recommended a broader specific notice requirement, including surface owners, mineral owners and cities within a two-mile radius.

106. Jennifer Goldman of the Oil and Gas Accountability Project, objected that the proposed rule did not clearly place the burden of proof on an operator seeking an exception to show that a requested exception met the standard.

107. The Commission concludes that:

a. subsection G.2 should be re-worded to make clear that an operator requesting an exception would have the burden to demonstrate in the administrative or hearing record that the requested exception would meet the prescribed standard;

b. in particular circumstances where an exception is likely to have off-premises effects, such as an exception for a pit in a municipality or on a small tract, notification of persons other than the surface owner at the pit location might be appropriate, and the Division should have the flexibility to require notice to additional persons or public agencies that might be affected;

c. however, because compliance with notice requirements may be burdensome and costly, notice to persons other than the landowner at the specific site should only be required in those cases where such persons are likely to be affected;

d. the Division's authority to revoke a previously granted exception should be governed by a standard stated in the rule, which should be that the standard which authorized the exception (*i.e.*, protection of fresh water, public health and the environment), was no longer met, and

e. subsection G should be adopted as proposed with the revisions necessary to specify the burden of proof for exception applications and the standard for exception revocation and with clarifying changes, as shown in Exhibit C hereto.

108. As a general comment on the proposed rule, Mr. Sandoval recommended that provisions be added requiring notice to the surface owner of various actions other than a request for exception, including permit applications and closure.

109. The Commission concludes, however, that such notice is not necessary since these are routine actions where the operator is required to comply with standards set forth in the rule.

Final Conclusions

110. The Commission has concluded that the rules and orders identified in finding paragraph 3 above should be repealed as recommended, and that Rules 313 and 7 [19.15.5.313 NMAC and 19.15.1.7 NMAC] should be amended to read as shown in Exhibits A and B hereto, respectively.

111. The Commission has further concluded that a new rule, to be codified as 19.15.2.53 NMAC, or otherwise if necessary to meet requirements of the Commission of Public Records, should be adopted in the form attached hereto as Exhibit C.

IT IS THEREFORE ORDERED:

1. A new rule of the Oil Conservation Division, to be codified at 19.15.2.53 NMAC (or elsewhere if necessary to meet requirements of the Commission of Public Records), copy attached as Exhibit C, is hereby adopted, effective as of the date of its publication in the New Mexico Register.

2. Rules 313 and 7 [19.15.5.313 NMAC and 19.15.1.7 NMAC] should be amended to read as shown in Exhibits A and B hereto, effective upon the effective date of the new rule.

3. Rules 18 [19.15.1.18 NMAC] and 105 [19.18.3.105] of the Oil Conservation Division are hereby repealed, effective upon the effective date of the new rule.

4. Orders R-3221, R-3221-A, R-3221-B, R-3221-B-1, R-3221-C, R-3221-D, R-7940, R-7940-A and R-7940-C, are hereby rescinded, and the portions of those orders codified as 19.15.2.1 through 19.15.2.15 NMAC are hereby repealed, effective upon the effective date of the new rule.

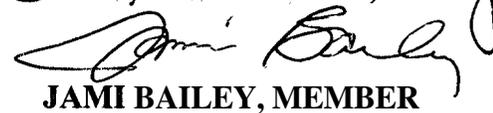
5. Staff of the Oil Conservation Division is instructed to secure prompt publication of the referenced rules, amendments and repeals in the New Mexico Register.

6. Jurisdiction of this matter is retained for entry of such further orders as may be necessary.

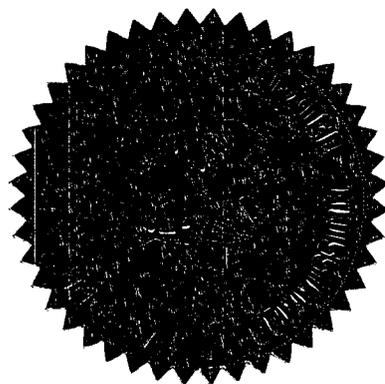
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**


LORI WROTENBERY, CHAIR


JAMI BAILEY, MEMBER


ROBERT LEE, MEMBER



SEAL

19.15.5.313 EMULSION, BASIC SEDIMENTS, AND TANK BOTTOMS:

Wells producing oil shall be operated in such a manner as will reduce as much as practicable the formation of emulsion and basic sediments. These substances and tank bottoms shall not be allowed to pollute fresh waters or cause surface damage. If tank bottoms are removed to surface pits, the pits shall be fenced and the fence shall be kept in good repair. To ~~protect~~ migratory birds, all tanks exceeding ~~16~~ feet in ~~diameter~~, and exposed pits and ponds shall be screened, netted or ~~covered~~. ~~Upon~~ written application by the operator, an exception to ~~screening~~, netting or covering of a facility may be granted by the district supervisor ~~upon a~~ showing that an ~~alternative~~ method will protect migratory birds or that the facility is not hazardous to migratory birds.

[1-1-50...2-1-96; 19.15.5.313 NMAC - Rn, 19 NMAC 15.E.313, 5-15-00]

19.15.1.7 DEFINITIONS

A. Definitions Beginning with the Letter "A":

- (1) Abate or Abatement shall mean the investigation, containment, removal or other mitigation of water pollution.
- (2) Abatement Plan shall mean a description of any operational, monitoring, contingency and closure requirements and conditions for the prevention, investigation and abatement of water pollution.
- (3) Adjoining Spacing Units are those existing or prospective spacing units in the same pool(s) that are touching at a point or line the spacing unit that is the subject of the application.
- (4) Adjusted Allowable shall mean the allowable production a well or **proration** unit receives after all adjustments are made.
- (5) Allocated Pool is one in which the total oil or natural gas production is restricted and allocated to various wells therein in accordance with proration schedules.
- (6) Allowable Production shall mean that number of barrels of oil or standard cubic feet of natural gas authorized by the Division to be produced from an allocated pool.
- (7) Alluvium shall mean **detrital** material that has been transported by water or other erosional forces and deposited at points along the flood plain of a watercourse. It typically is composed of sands, silts, and gravels, exhibits high porosity and permeability and generally carries fresh water.

~~(7)~~(8) Aquifer shall mean a geological formation, group of formations, or a part of a formation that is capable of yielding a significant amount of water to a well or spring.

B. Definitions Beginning with the Letter "B":

- (1) Back Allowable shall mean the authorization for production of any shortage or underproduction resulting from pipeline proration.
- (2) Background shall mean, for purposes of ground-water abatement plans only, the amount of ground-water contaminants naturally occurring from undisturbed geologic sources or water contaminants occurring from a source other than the responsible person's facility. This definition shall not prevent the Director from requiring abatement of commingled plumes of **pollution**, shall not prevent responsible persons from seeking contribution or other legal or equitable relief from other persons, and shall not preclude the Director from exercising enforcement authority under any applicable statute, regulation or common law.
- (3) Barrel shall mean 42 United States Gallons measured at 60 degrees Fahrenheit and atmospheric pressure at the sea level.
- (4) Barrel Of Oil shall mean 42 United States Gallons of oil, after deductions for the full amount of basic sediment, water and other impurities present, ascertained by centrifugal or other recognized and customary test.
- (5) Below-grade Tank shall mean a vessel, excluding sumps and pressurized pipeline drip taps, where any portion of the sidewalls of the tank is below the surface of the ground and not visible.
- (6) Berm shall mean an embankment or ridge constructed for the purpose of preventing the movement of liquids, sludge, solids, or other materials.
- ~~(5)~~(7) Bottom Hole Or Subsurface Pressure shall mean the gauge pressure in pounds per square inch under conditions existing at or near the producing horizon.
- ~~(6)~~(8) **Bradenhead** Gas Well shall mean any well producing gas through wellhead connections from a gas reservoir which has been successfully cased **off** from an underlying oil or gas reservoir.

C. Definitions Beginning with the Letter "C":

- (1) Carbon Dioxide Gas shall mean **noncombustible** gas composed chiefly of carbon dioxide occurring naturally in underground rocks.
- (2) Casinghead Gas shall mean any gas or vapor or both gas and vapor indigenous to and produced from a pool classified as an oil pool by the Division. This also includes gas-cap gas produced from such an oil pool.
- (3) Commission shall mean the Oil Conservation Commission.
- (4) Common Purchaser For Natural Gas shall mean any person now or hereafter engaged in purchasing from one or more producers gas produced from gas wells within each common source of supply from which it purchases.
- (5) Common Purchaser For Oil shall mean every person now engaged or hereafter engaging in the business of purchasing oil to be transported through **pipelines**.
- (6) Common Source Of Supply. See Pool.
- (7) **Condensate** shall mean the liquid recovered at the surface that results from condensation due

to reduced pressure or temperature of petroleum hydrocarbons existing in a gaseous phase in the reservoir.

(8) Contiguous shall mean acreage joined by more than one common point, that is, the common boundary must be at least one side of a governmental quarter-quarter section.

(9) Conventional Completion shall mean a well completion in which the production string of casing has an outside diameter in excess of 2.875 inches.

(10) Correlative Rights shall mean the opportunity afforded, as far as it is practicable to do so, to the owner of each property in a pool to produce without waste his just and equitable share of the oil or gas, or both, in the pool, being an amount, so far as can be practically determined, and so far as can be practically obtained without waste, substantially in the proportion that the quantity of recoverable oil or gas, or **both**, under such property bears to the total recoverable oil or gas, or **both**, in the pool, and for such purpose to use his just and equitable share of the reservoir energy.

(11) Cubic Feet Of Gas Or Standard Cubic Foot Of Gas, for the purpose of these rules, shall mean that volume of gas contained in one cubic foot of space and computed at a base pressure of 10 ounces per square inch above the average barometric pressure of 14.4 pounds per square inch (15.025 psia), at a standard base temperature of 60 degrees Fahrenheit.

D. Definitions Beginning with the Letter "D":

(1) Deep Pool shall mean a common source of supply which is situated 5000 feet or more below the surface.

(2) Depth Bracket Allowable shall mean the basic oil allowable assigned to a pool and based on its depth, unit size, or special pool rules, which, when multiplied by the market demand percentage factor in effect, will determine the top unit allowable for the pool.

(3) Director shall mean the Director of the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department.

(4) Division shall mean the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department.

E. Definitions Beginning with the Letter "E":

(1) Exempted Aquifer shall mean an aquifer that does not currently serve as a source of drinking water, and which cannot now and will not in the foreseeable future serve as a source of drinking water because: is hydrocarbon producing;

(a) it is hydrocarbon producing;

(b) it is situated at a depth or location which makes the recovery of water for drinking water purposes economically or technologically impractical; or,

(c) it is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption.

(2) Existing Spacing Unit is a spacing unit containing a producing well.

F. Definitions Beginning with the Letter "F":

(1) Facility shall mean any structure, installation, **operation**, storage tank, transmission line, access road, motor vehicle, rolling stock, or activity of any kind, whether stationary or mobile.

(2) Field means the general area which is underlaid or appears to be underlaid by at least one pool; and field also includes the underground reservoir or reservoirs containing such crude petroleum oil or natural gas, or both. The words field and pool mean the same thing when only one underground reservoir is involved; however, field unlike pool may relate to two or more pools.

(3) Fresh Water (to be protected) includes the water in lakes and playas, the surface waters of all streams regardless of the quality of the **water** within any given reach, and all underground waters containing 10,000 milligrams per liter (**mg/1**) or less of total dissolved solids (**TDS**) except for which, after notice and hearing, it is found there is no present or reasonably foreseeable beneficial use which would be impaired by contamination of such waters. The water in lakes and playas shall be protected from contamination even though it may contain more than 10,000 **mg/1** of TDS unless it can be shown that **hydrologically** connected fresh ground water will not be adversely affected.

G. Definitions Beginning with the Letter "G":

(1) Gas Lift shall mean any method of lifting liquid to the surface by injecting gas into a well from which oil production is obtained.

(2) Gas-Oil Ratio shall mean the ratio of the **casinghead** gas produced in standard cubic feet to the number of barrels of oil concurrently produced during any stated period.

(3) Gas-Oil Ratio Adjustment shall mean the reduction in allowable of a high gas oil ratio unit to conform with the production permitted by the limiting gas-oil ratio for the particular pool during a particular proration period.

(4) Gas Transportation Facility shall mean a pipeline in operation serving gas wells for the transportation of natural **gas**, or some other device or equipment in like operation whereby natural gas produced

from gas wells connected therewith can be transported or used for consumption.

(5) Gas Well shall mean a well producing gas or natural gas from a gas pool, or a well with a gas-oil ratio in excess of 100,000 cubic feet of gas per barrel of oil producing from an oil pool.

(6) Ground Water shall mean interstitial water which occurs in saturated earth material and which is capable of entering a well in sufficient amounts to be utilized as a water supply.

(7) Groundwater Sensitive Area shall mean an area specifically so designated by the division after evaluation of technical evidence where groundwater exists that would likely exceed Water Quality Control Commission standards if contaminants were introduced into the environment.

H. Definitions Beginning with the Letter "H":

(1) Hazard To Public Health exists when water which is used or is reasonably expected to be used in the future as a human drinking water supply exceeds at the time and place of such use, one or more of the numerical standards of 20 NMAC 6.2.3103.A, or the naturally occurring concentrations, whichever is higher, or if any toxic pollutant as defined at 20 NMAC 6.2.1101 affecting human health is present in the water. In determining whether a release would cause a hazard to public health to exist, the Director shall investigate and consider the purification and dilution reasonably expected to occur from the time and place of release to the time and place of withdrawal for use as human drinking water.

(2) High Gas-Oil Ratio Proration Unit shall mean a unit with at least one producing oil well with a gas-oil ratio in excess of the limiting gas-oil ratio for the pool in which the unit is located.

IT. Definitions Beginning with the Letter "I":

(1) Illegal Gas shall mean natural gas produced from a gas well in excess of the allowable determined by the Division.

(2) Illegal Oil shall mean crude petroleum oil produced in excess of the allowable as fixed by the Division.

(3) Illegal Product shall mean any product of illegal gas or illegal oil.

(4) Inactive Well shall be a well which is not being utilized for beneficial purposes such as production, injection or monitoring and which is not being drilled, completed, repaired or worked over.

(5) Injection Or Input Well shall mean any well used for the injection of air, gas, water, or other fluids into any underground stratum.

J. Reserved.

K. Reserved.

L. Definitions Beginning with the Letter "L":

(1) Limiting Gas-Oil Ratio shall mean the gas-oil ratio assigned by the Division to a particular oil pool to limit the volumes of casinghead gas which may be produced from the various oil producing units within that particular pool.

(2) Load Oil is any oil or liquid hydrocarbon which has been used in remedial operation in any oil or gas well.

(3) Log Or Well Log shall mean a systematic detailed and correct record of formations encountered in the drilling of a well.

M. Definitions Beginning with the Letter "M":

(1) Marginal Unit shall mean a proration unit which is incapable of producing top unit allowable for the pool in which it is located.

(2) Market Demand Percentage Factor shall mean that percentage factor of 100 percent or less as determined by the Division at an oil allowable hearing, which, when multiplied by the depth bracket allowable applicable to each pool, will determine the top unit allowable for that pool.

(3) Mineral Estate is the most complete ownership of oil and gas recognized in law and includes all the mineral interests and all the royalty interests.

(4) Mineral Interest Owners are owners of an interest in the executive rights, which are the rights to explore and develop, including oil and gas lessees (i.e., "working interest owners") and mineral interest owners who have not signed an oil and gas lease.

(5) Minimum Allowable shall mean the minimum amount of production from an oil or gas well which may be advisable from time to time to the end that production will repay reasonable lifting cost and thus prevent premature abandonment and resulting waste.

(6) Multiple Completion (Combination) shall mean a multiple completion in which two or more common sources of supply are produced through a combination of two or more conventional diameter casing strings cemented in a common well-bore, or a combination of small diameter and conventional diameter casing strings cemented in a common well-bore, the conventional diameter strings of which might or might not be a Multiple Completion (Conventional).

(7) Multiple Completion (Conventional) shall mean a completion in which two or more common sources of supply are produced through one or more strings of tubing installed within a single casing string,

with the production from each common source of supply completely segregated by means of packers.

(8) Multiple Completion (**Tubingless**) shall mean completion in which two or more common sources of supply are produced through an equal number of casing strings cemented in a common well-bore, each such string of casing having an outside diameter of 2.875 inches or less, with the production from each common source of supply completely segregated by use of cement.

N. Definitions Beginning with the Letter "N":

(1) Natural Gas Or Gas shall mean any combustible vapor composed chiefly of hydrocarbons occurring naturally in a pool classified by the Division as a gas pool.

(2) **Non-Aqueous** Phase Liquid shall mean an interstitial body of liquid oil, petroleum product, petrochemical, or organic solvent, including an emulsion containing such material.

(3) Non-Marginal Unit shall mean a proration unit which is capable of producing top unit allowable for the pool in which it is located, and to which has been assigned a top unit allowable.

O. Definitions Beginning with the Letter "O":

(4)(1) Official Gas-Oil Ratio Test shall mean the periodic gas-oil ratio test made by order of the Division by such method and means and in such manner as prescribed by the Division.

(5)(2) Oil, Crude Oil, Or Crude Petroleum Oil shall mean any petroleum hydrocarbon produced from a well in the liquid phase and which existed in a liquid phase in the reservoir.

(6)(3) Oil Field Wastes shall mean those wastes produced in conjunction with the exploration, production, refining, processing and transportation of crude oil **and/or** natural gas and commonly collected at field storage, processing, disposal, or service facilities, and waste collected at gas processing plants, refineries and other processing or transportation facilities.

(7)(4) Oil Well shall mean any well capable of producing oil and which is not a gas well as defined herein.

(8)(5) Operator shall mean any person ~~or persons~~ **who**, duly authorized, is in charge of the development of a lease or the operation of a producing **property**, or who is in charge of the **operation** or management of a facility.

(9)(6) Overage Or Overproduction shall mean the amount of oil or the amount of natural gas produced during a proration period in excess of the amount authorized on the proration schedule.

(10)(7) Owner means the person who has the right to drill into and to produce from any pool, and to appropriate the production either for himself or for himself and another.

P. Definitions Beginning with the Letter "P":

(1) Penalized Unit shall mean a proration unit to which, because of an excessive gas-oil ratio, an allowable has been assigned which is less than top unit allowable for the pool in which it is located and also less than the ability of the well(s) on the unit to produce.

(2) Person **shall** mean an individual or any other entity including partnerships, corporation, associations, responsible business or association agents or **officers**, the state or a political subdivision of the state or any agency, department or instrumentality of the United States and any of its officers, agents or employees.

(3) Pit shall mean any surface or sub-surface **impoundment**, **man-made** or **natural depression**, or diked area on the surface. Excluded from this definition are **berms** constructed around tanks or other facilities solely for the purpose of safety and secondary containment.

(4) **Playa** Lake shall mean 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.

(5)(5) Pool means any underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure, which zone is completely separated from any other zone in the structure, is covered by the word "pool" as used herein. "Pool" is synonymous with "common source of supply" and with "common **reservoir**."

(6)(6) Potential shall mean the properly determined capacity of a well to produce oil, or gas, or both, under conditions prescribed by the Division.

(7)(7) Pressure Maintenance shall mean the injection of gas or other fluid into a reservoir, either to maintain the existing pressure in such reservoir or to retard the natural decline in the reservoir pressure.

(8)(8) Produced Water shall mean those waters produced in conjunction with the production of crude oil **and/or** natural gas and commonly collected at field storage, processing, or disposal facilities including but not limited to: lease tanks, commingled tank batteries, burn pits, **LACT** units, and community or lease salt water disposal systems and which may be collected at gas processing plants, pipeline drips and other processing or transportation facilities.

(9)(9) Producer shall mean the owner of a well or wells capable of producing oil or natural gas or both in paying quantities.

(10)(10) Product means any commodity or thing made or manufactured from crude petroleum oil

topped crude, processed crude **petroleum**, residue from crude **petroleum**, cracking stock, **uncracked** fuel oil, treated crude oil, fuel oil, **residuam**, gas oil, naphtha, distillate, gasoline, **kerosene**, benzene, wash oil, lubricating oil, and blends or mixtures of crude petroleum oil or natural gas or any derivative thereof.

~~(9)~~(11) Proration Day shall consist of 24 consecutive hours which shall begin at 7 a.m. and end at 7 a.m. on the following day. The language in this paragraph is different than that which was filed 02-28-97 (effective

~~(10)~~(12) Proration Month shall mean the calendar month which shall begin at 7 a.m. on the first day of such month and end at 7 a.m. on the first day of the next succeeding month.

~~(11)~~(13) Proration Period shall mean for oil the proration month and for gas the twelve-month period which shall begin at 7 a.m. on January 1 of each year and end at 7 a.m. on January 1 of the succeeding year or other period designated by general or special order of the Division.

~~(12)~~(14) Proration Schedule shall mean the order of the Division authorizing the production, purchase, and transportation of oil, **casinghead** gas, and natural gas from the various units of oil or of natural gas in allocated pools.

~~(13)~~(15) Proration Unit is the area in a pool that can be effectively and efficiently drained by one well as determined by the Division or Commission (See **NMSA 1978 Section 70-2-17.B**) as well as the area assigned to an individual well for the purposes of allocating allowable production pursuant to a **prorationing** order for the pool. A proration unit will be the same size and shape as a spacing unit. All proration units are spacing units but not all spacing units are proration units.

~~(14)~~(16) Prospective Spacing Unit is a hypothetical spacing unit that does not yet have a producing well.

Q. Reserved.

R. Definitions Beginning with the Letter "R":

(1) **Recomplete** shall mean the subsequent completion of a well in a different pool from the pool in which it was originally completed.

(2) Regulated Naturally Occurring Radioactive Material (Regulated NORM) shall mean naturally occurring radioactive material (NORM) contained in any oil-field soils, equipment, sludges or any other materials related to oil-field operations or processes exceeding the radiation levels specified in 20 NMAC 3.1., Section 1403.

(3) Release shall mean all breaks, leaks, spills, releases, fires or blowouts involving crude oil, produced water, condensate, drilling fluids, completion fluids or other chemical or contaminant or mixture thereof, including oil field wastes and natural gases to the environment.

(4) Remediation Plan shall mean a written description of a program to address unauthorized releases. The plan may include appropriate information, including assessment data, health risk demonstrations, and corrective action(s). The plan may also include an alternative proposing no action beyond the **submittal** of a spill report.

(5) Responsible Person shall mean the owner or operator who must complete Division approved corrective action for pollution from releases.

(6) Royalty Interest Owners are owners of an interest in the non-executive rights including lessors, royalty interest owners and overriding royalty interest owners. Royalty interests are non-cost bearing.

S. Definitions Beginning with the Letter "S":

(1) Secondary Recovery shall mean a method of recovering quantities of oil or gas from a reservoir which quantities would not be recoverable by ordinary primary depletion methods.

(2) Shallow Pool shall mean a pool which has a depth range from 0 to 5000 feet.

(3) Shortage Or Underproduction shall mean the amount of oil or the amount of natural gas during a proration period by which a given proration unit failed to produce an amount equal to that authorized in the proration schedule.

(4) Shut-in shall be the status of a production well or an injection well which is temporarily closed down, whether by closing a valve or disconnection or other physical means.

(5) Shut-in Pressure shall mean the gauge pressure noted at the wellhead when the well is completely shut in, not to be confused with bottom hole pressure.

(6) Significant Modification Of An Abatement Plan shall mean a change in the abatement technology used excluding design and operational parameters, or relocation of 25% or more of the compliance sampling stations, for any single **medium**, as designated pursuant to Subsection E, Paragraph (4), Subparagraph (b), **Subsubparagraph** (iv) of Section 19.15.5.19 NMAC.

(7) Spacing Unit is the area allocated to a well under a well spacing order or rule. Under the Oil & Gas Act, **NMSA 1978, Section 70-2-12.B(10)**, the Commission has the power to fix spacing units without first creating proration units. See *Rutter & Wilbanks Corp. v. Oil Conservation Comm'n.* 87 NM 286 (1975).

this is the area designated on Division Form C-102.

(8) Subsurface Water shall mean ground water and water in the vadose zone that may become ground water or surface water in the reasonably foreseeable future or may be utilized by vegetation.

(9) Sump shall mean any impermeable single wall vessel with a capacity less than 500 gallons, where any portion of the sidewalls of the reservoir is below the surface of the ground and not visible which vessel remains predominantly empty, serves as a drain or receptacle for spilled or leaked liquids on an intermittent basis, and is not used to store, treat, dispose of, or evaporate products or wastes.

T. Definitions Beginning with the Letter "T":

(1) Tank Bottoms shall mean that accumulation of hydrocarbon material and other substances which settles naturally below crude oil in tanks and receptacles that are used in handling and storing of crude oil, and which accumulation contains in excess of two (2%) percent of basic sediment and water; provided, however, that with respect to lease production and for lease storage tanks, a tank bottom shall be limited to that volume of the tank in which it is contained that lies below the bottom of the pipeline outlet thereto.

(2) Temporary Abandonment shall be the status of a well which is inactive and has been approved for temporary abandonment in accordance with the provisions of these rules.

(3) Top Unit Allowable For Gas shall mean the maximum number of cubic feet of natural gas, for the proration period, allocated to a gas producing unit in an allocated gas pool.

(4) Top Unit Allowable For Oil shall mean the maximum number of barrels for oil daily for each calendar month allocated on a proration unit basis in a pool to non-marginal units. The top unit allowable for a pool shall be determined by multiplying the applicable depth bracket allowable by the market demand percentage factor in effect.

(5) Treating Plant shall mean any plant constructed for the purpose of wholly or partially or being used wholly or partially for reclaiming, treating, processing, or in any manner making tank bottoms or any other waste oil marketable.

(6) **Tubingless** Completion shall mean a well completion in which the production string of casing has an outside diameter of 2.875 inches or less.

U. Definitions Beginning with the Letter "U":

(1) Underground Source Of Drinking Water shall mean an aquifer which supplies water for human consumption or which contains ground water having a total dissolved solids concentration of 10,000 mg/1 or less and which is not an exempted aquifer.

(2) Unit Of Proration For Gas shall consist of such multiples of 40 acres as may be prescribed by special pool rules issued by the Division.

(3) Unit Of Proration For Oil shall consist of one 40-acre tract or such multiples of 40-acre tracts as may be prescribed by special pool rules issued by the Division.

(4) Unorthodox Well Location shall mean a location which does not conform to the spacing requirements established by the rules and regulations of the Division.

V. Definitions Beginning with the Letter "V":

(1) Vadose Zone shall mean **unsaturated** earth material below the land surface and above ground water, or in between bodies of ground water.

W. Definitions Beginning with the Letter "W":

(1) Waste, in addition to its ordinary meaning, shall include:

(a) Underground Waste as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recovered from any pool, and the use of **inefficient** underground storage of natural gas.

(b) Surface Waste as those words are generally understood in the oil and gas business, and in any event to embrace the unnecessary or excessive surface loss or destruction without beneficial use, however caused, of natural gas of any type or in any **form**, or crude petroleum oil, or any product thereof, but including the loss or destruction, without beneficial use, resulting from **evaporation**, seepage, leakage, or fire, especially such loss or destruction incident to or resulting from the manner of spacing, equipping, operating or producing a well or wells, or incident to or resulting from the use of inefficient storage or from the production of crude petroleum oil or natural gas, in excess of the reasonable market demand.

(c) The production of crude petroleum oil in this state in excess of the reasonable market demand for such crude petroleum oil. Such excess production causes or results in waste which is prohibited by the Oil and Gas Act. The words "reasonable market demand" as used herein with respect to crude petroleum oil, shall be construed to mean the demand for such crude petroleum oil, for reasonable current requirements for current consumption and use within or outside of the state, together with the demand of such amounts as are

reasonably necessary for building up or maintaining reasonable storage reserves of crude petroleum oil or the products thereof, or both such crude petroleum oil and products.

(d) The non-ratable purchase or taking of crude petroleum oil in this state. Such non-ratable taking and purchasing causes or results in waste, as defined in paragraphs (a), (b), and (c) of this definition and causes waste by violating Section 70-2-16 of the Oil and Gas Act.

(e) The production in this state of natural gas from any gas well or wells, or from any gas pool, in excess of the reasonable market demand from such source for natural gas of the type produced or in excess of the capacity of gas transportation facilities for such type of natural gas. The words "reasonable market demand," as used herein with respect to natural gas, shall be construed to mean the demand for natural gas for reasonable current requirements, for current consumption and for use within or outside the state, together with the demand for such amounts as are necessary for building up or maintaining reasonable storage reserves of natural gas or products thereof, or both such natural gas and products.

~~(1)~~(2) Water shall mean all water including water situated wholly or partly within or bordering upon the state, whether surface or subsurface, public or private, except private waters that do not combine with other surface or subsurface water.

~~(2)~~(3) Water Contaminant shall mean any substance that could alter if released or spilled the physical, chemical, biological or radiological qualities of water. "Water contaminant" does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954.

~~(3)~~(4) Watercourse shall mean any lake bed, or gully, draw, stream bed, wash, **arroyo**, or natural or human-made channel through which water flows or has flowed.

(4)(5) Water Pollution shall mean introducing or permitting the introduction into water, either directly or **indirectly**, of one or more water contaminants in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property.

~~(5)~~(6) Well Blowout shall mean a loss of control over and subsequent eruption of any drilling or workover well or the rupture of the casing, casinghead, or wellhead or any oil or gas well or injection or disposal well, whether active or inactive, accompanied by the sudden emission of fluids, gaseous or liquids, from the well.

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

 (8) Wetlands shall mean those areas that are inundated or saturated by surface or groundwater 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.

~~(6)~~(9) Working Interest Owners are the owners of the operating interest under an oil and gas lease who have the exclusive right to exploit the oil & gas minerals. Working interests are cost bearing.

[1-5-50...2-1-96; A, 7-15-96; **Rn**, 19 NMAC 15.A.7.1 through 7.84, 3-15-97; A, 7-15-99: **19.15.1.7NMAC - Rn, 19NMAC 15.A.7.5-15.011**

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. An 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 (form C-101) or on the Sundry Notices and Reports on Wells (form C-103), or electronically as otherwise provided in this Chapter. Approval of such form constitutes a permit for all pits and below-grade tanks annotated on the form. A separate form C-144 is not required.

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

3. When Filed.

(a) New Pits or New Below-Grade Tanks. After April 15, 2004, operators shall obtain a permit before constructing a pit or below-grade tank.

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

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. Pits adjacent to any such watercourse or depression shall be located safely above the ordinary high-water mark of such watercourse or depression. No pit shall be located in any wetland. The division may require additional protective measures for pits located in groundwater sensitive areas or wellhead protection areas.

(b) Liners.

(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 water, and protect public health and the environment. Pits used to vent or flare gas during drilling or workover operations that are designed to allow liquids to drain to a separate pit do not require a liner.

(ii) Disposal 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 water, and protect public health and the environment.

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

(c) 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 water, 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 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. No measurable or visible layer of oil may be allowed to accumulate or remain anywhere on the surface of any pit. Spray evaporation systems shall be operated such that all **spray-borne** suspended or dissolved solids remain within the perimeter of the pond's lined portion.

(f) Fencing and Netting. All pits shall be fenced or enclosed to prevent access by **livestock**, and fences shall be maintained in good repair. Active drilling or workover pits may have a portion of the pit **unfenced** to facilitate operations. In issuing a permit, the division may impose additional fencing requirements for protection of wildlife in particular areas. 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. Immediately after cessation of these operations such pits shall have any visible or measurable layer of oil removed from the surface. Upon written application, the division may grant an exception to screening, netting, or covering requirements upon a showing that an alternative method will adequately protect migratory birds or that the tank or pit is not hazardous to migratory birds.

(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 April 15, 2004, construction of unlined pits is prohibited unless otherwise provided in Section 53 of 19.15.2 NMAC.

(ii) Unlined Pits Exempted By Previous Order. An operator of an unlined pit existing on April 15, 2004 for which a previous exemption was received after hearing as allowed pursuant to Commission Orders No. R-3221 through R-3221D inclusive, shall not be required to reapply for an exemption pursuant to Subparagraph (g) of 19.15.2.53(C)2 NMAC provided the operator notifies the division, no later than April 15, 2004, of the existence of each unlined pit it believes is exempted by order, the location of the pit, and the nature and amount of any discharge into the pit. Such order shall constitute a permit for the purpose of Subparagraph (g) 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 April 15, 2004 shall comply with the permitting, lining and other requirements of Section 53 of 19.15.2 NMAC, notwithstanding any previous order to the contrary.

(iii) Unlined pits shall be allowed in the following areas provided that the operator has submitted, and the **division** has approved, an application for permit as provided in Subsection 53 of 19.15.2 NMAC, and provided that the pit site is not located in fresh water-bearing alluvium or in a wellhead protection area:

TOWNSHIP 19 SOUTH, RANGE 30 EAST, NMPM Sections 8 through 36;
TOWNSHIP 20 SOUTH, RANGE 30 EAST, NMPM Sections 1 through 36;
TOWNSHIP 20 SOUTH, RANGE 31 EAST, NMPM Sections 1 through 36;
TOWNSHIP 20 SOUTH, RANGE 32 EAST, NMPM Sections 4 through 9,
Sections 16 through 21; and Sections 28 through 33;
TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM Sections 1 through 36;
TOWNSHIP 21 SOUTH, RANGE 30 EAST, NMPM Sections 1 through 36;
TOWNSHIP 21 SOUTH, RANGE 31 EAST, NMPM Sections 1 through 36;
TOWNSHIP 22 SOUTH, RANGE 29 EAST, NMPM Sections 1 through 36;
TOWNSHIP 22 SOUTH, RANGE 30 EAST, NMPM Sections 1 through 36;
TOWNSHIP 23 SOUTH, RANGE 29 EAST, NMPM Sections 1 through 3,
Sections 10 through 15, Sections 22 through 27, and Sections 34 through 36;
TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM Sections 1 through 19;

that area within San Juan, Rio Arriba, Sandoval, and McKinley Counties that is outside the valleys of the San Juan, Animas, Rio Grande, and La Plata Rivers, **which** are bounded by the topographic lines on either side of the rivers that are 100 vertical feet above the river channels, measured perpendicularly to the river channels, **and** is outside those areas that lie within 50 vertical feet, measured perpendicularly to the drainage channel, of all perennial and ephemeral creeks, canyons, washes, **arroyos**, and draws, and is outside the areas between the above-named rivers and the Highland Park Ditch, Hillside Thomas Ditch, **Cunningham** Ditch, Farmers Ditch, Halford

Independent Ditch, Citizens Ditch, or Hammond Ditch, provided that no **protectable** ground water is present or if present, will not be adversely affected; or

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

3. **Special Requirements for Below-grade Tanks.** All below-grade tanks constructed after April 15, 2004 shall be constructed with secondary containment and leak detection. The operator of any below-grade tank constructed prior to April 15, 2004 shall test its integrity annually and shall promptly repair or replace any below-grade tank that does not demonstrate integrity. Any such below-grade tank shall be equipped with leak detection at the time of any **major** repair.

4. **Sumps.** Operators shall test the integrity of all sumps annually, and shall promptly repair or replace any sump that does not demonstrate integrity. Sumps that can be removed from their emplacements may be tested by visual inspection. Other sumps shall be tested by appropriate mechanical means.

D. **Emergency Actions.**

1. **Permit Not Required.** In an emergency an operator may construct a pit without a permit to contain fluids, solids, or wastes if an immediate danger to fresh water, public health, or the environment exists.

2. **Construction Standards.** A pit constructed in an emergency shall be constructed, to the extent possible given the emergency, in a manner that is consistent with the requirements of Section 53 of 19.15.2 NMAC and that prevents the contamination of fresh water, and protects public health and the environment.

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

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

5. **"Emergency Pits."** Subsection (D) of 19.15.2.53 NMAC shall not be construed to allow construction or use of so-called "emergency pits," which are pits constructed as a precautionary matter to contain a spill in the event of a release. Construction or use of any such pit shall require a permit issued pursuant to Subsection 53 of 19.15.2 NMAC unless the pit is described in a Spill Prevention, Control and **Countermeasure** (SPCC) plan required by the United States Environmental Protection Agency, all fluids are removed from the pit within 24 hours, and the operator has filed a notice of the location of the pit with the division.

E. **Drilling Fluids and Drill Cuttings.** Drilling fluids and drill cuttings shall either be **recycled** or be disposed of as approved by the division and in a manner to prevent the contamination of fresh water and protect public health and the environment. The operator shall describe the proposed disposal method in the Application for Permit to Drill (form C-101) or the Sundry Notices and Reports on Wells (form C-103).

F. **Closure and Restoration.**

1. **Closure.** Except as otherwise specified in Subsection 53 of 19.15.2 NMAC, a pit or below-grade tank shall be properly closed within six months after cessation of use. As a condition of

a permit, the division may require the operator to file a detailed closure plan before closure may commence. The division for good cause shown may grant a six-month extension of time to accomplish closure. Upon completion of closure a Closure Report (form C-144), or Sundry Notices and Reports on Wells (form C-103) 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.

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 ponding of rainwater.

G. Exemptions; Additional Conditions.

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

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

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