

ORDINANCE No. 02-05

An ordinance of the County of Otero, New Mexico, enacting an addition to the Otero County (Interim) Comprehensive Land Use Plan that contains specific stipulations and requirements for oil and gas production and exploration on lands within the political boundaries of Otero County, New Mexico, for the purpose of protecting the fresh water aquifers and watersheds from pollution, for the use and enjoyment of the citizens of Otero County and their municipalities. INCORPORATE LANGUAGE FROM COLFAX COUNTY INTO PURPOSE.

Whereas, the County of Otero is charged with the health and well being of the citizens of the county (NMSA 78, 4-37-1), and,

Whereas, the increasing population and shortages of water due to drought and the scarcity of fresh water production for the ~~municipal~~ citizens use has demonstrated a dire need for potable water, and,

Whereas, there is a bonafide need to protect the watersheds and fresh water aquifers for the citizens of the County of Otero against, as much as possible, pollution from fluid minerals exploration and production and incidental damages to watersheds that could occur with these associated activities, and,

Whereas, the U. S. Department of the Interior-Bureau of Land Management, Oil Conservation Division, New Mexico Environmental Department and other federal and state agencies which have jurisdiction over these matters are ~~solicited~~ soliciting to the help of the County of Otero enforce the stipulations set forth in Ordinance #02-05.

Now, therefore the County of Otero enacts Ordinance #02-05 as an addition to the Otero County (Interim) Comprehensive Land Use Plan in order to further protect the watersheds and fresh water aquifers for the use, benefit, and enjoyment of the citizens of the County of Otero from pollution most generally associated with the methods employed for oil and gas exploration and production.

Now, therefore, be it ordained by the Otero County Commission, governing body for the County of Otero, New Mexico, that the following stipulations and requirements pertaining to Ordinance # 02-05 in the following form, are hereby enacted:

Section 1. Notifications of Proposed Activity ~~Permit~~ Required.

- A. Notification by the applicant of any, and all, iterations of Notice of Intent, Notice of Staking, and APD Permit. ~~and any related applications and permits from BLM, OCD, or any other governmental agency, shall be provided to the County of Otero by the applicant within 5 business days of the filing or receipt of the subject documents.~~
- B. Partner with Governmental agencies to be provided with notification of issuance of permits/permissions granted to applicants.

~~It shall be unlawful for any person to commence any drilling operation, any re-entry or workover, or any other construction, operation, or activity within the confines of the County of Otero without first having filed copies of all permits necessary for an application~~

~~to drill or for associated oil and gas activities. However, no permits shall be required for routine daily operations, or maintenance activities, which do not disturb the surface. (Any operations commenced without issuance of a permit shall be considered an offense punishable by a maximum fine of \$500.00 per day for each day that such operation exists without first having obtained the required permit) ??~~

~~(A) Permit required under this section shall be filed with the office of the County Administrator.~~

~~(B) The permits filed shall include full information including the following:~~

~~(1) The date of the application~~

~~(2) The name of the applicant~~

~~(3) The address of the applicant~~

~~(4) The type of activity for which the permit is sought~~

~~(5) The site of the proposed activity, including the following information:~~

~~(i) Name of lease holder~~

~~(ii) Location where proposed activity is to be performed described by quarter, section, township and range.~~

~~(6) The name of the person who will act as liaison between the permittee and the County Administrator (County Manager or designee).~~

~~(7) Any special or specified hazards associated with the activity for which the permit is sought~~

~~(C) In the event an emergency arises during the time that the county offices are closed, which emergency requires immediate action, the operator may begin the necessary activity without notification provided, however, on the next day that the county offices are open, the operator advises the County Administrator (County Manager or designee) of the emergency and submits documentation at that time pursuant to this section.~~

Section 2. Maintenance of Facilities.

All facilities constructed within the confines of the County of Otero, including without limitation, pipelines, tank batteries, pumping stations, compressor, drilling operations, well heads and other operations, shall be maintained using prudent operator standards consistent with applicable rules set forth by any agency of government, state or federal, with proper jurisdiction, that provide for the protection of sensitive areas (ACEC's) or resources such as the water aquifers beneath the Great Salt Basin of southern Otero County.

Section 3. Reporting of Spills and Leaks.

(Request for OCD definition of what a “leak” or “spill” consists ‘OF’ – the following was contained in the definitions section of the OCD Rulebook:

(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.)

Pursuant to the provisions of Section 4. Reporting Requirements, any person operating a facility shall report any and all leaks or spills occurring within the confines of the County of Otero to the County Administrator (County Manager or designee) immediately upon discovery, but in any event, such leak or spill shall be reported not more than fifteen (15) days from the occurrence.

Any such leak or spill shall be remedied in a manner acceptable to the ~~BLM, EPA, or NMED or the~~ appropriate ~~county~~ authority. Any such leak or spill shall be remedied as soon as possible as is reasonably practicable, but in no event shall remediation operations be commenced later than thirty (30) days from the date the occurrence is first discovered and reported. The appropriate authority may, upon showing of good cause, grant an extension to the thirty (30) day requirement referenced in this section.

It shall be unlawful for any person to fail to report a leak or spill under this Chapter. It shall be unlawful to fail to take action to remediate any spill or leak as required by this Section 3. Reporting Spills and Leaks. If remediation operations are not commenced within thirty (30) days from the date such spill or leak is first discovered and reported (it shall be a separate offense for each day after said thirty (30) days until the remediation operation is commenced, and upon conviction thereof, the offender shall be subject to a maximum ~~fine~~ of \$500.00 per day for each day after said thirty (30) days until the remediation operation is completed)?? Provided, however, if the appropriate authority has granted an extension, no offense will occur until the expiration of any such extension.

Any operator, or employee, contractor, agent or representative of an operator, who has knowledge of a spill or leak, and fails to report same to the appropriate authority within the times specified herein ~~shall~~ may be charged with a misdemeanor and subject to a fine of ~~\$500.00 or ninety (90) days in jail or both.~~ up to \$10,000.00 plus court costs. (Per Magistrate Court Clerk in Alamogordo.)

Section 4. Reporting Requirements.

An accident report is required for each leak or spill subject to this chapter in which there is a release of gas, solids or liquid resulting in any of the following:

- (a) Explosion or fire not intentionally set by the operator
- (b) Release of five (5) ~~gallons~~ barrels or more of liquid, except that no report is required for a release of less than five (5) barrels resulting from a maintenance activity if the release is:
 - (1) Not otherwise reportable under this Chapter;

- (2) Confined to company property or right of way; and
- (3) Collected on site and immediately cleaned up in accordance with known best management practices.
- (c) Death of any person
- ~~(d) Personal injury necessitating hospitalization;~~
- (ed) Estimated property damage, including cost of cleanup and recovery, value of lost product, and damage to ~~the property of surface owner~~, or any combination of the aforementioned, exceeding \$5,000. Calculations of property damage for any category of property (water, land, etc.) must give due consideration for cumulative loss of value during the life of the property in question.

An operator shall provide all of the following minimum information, to the extent known, when reporting any leak or spill.

- (a) The name of the individual reporting the leak or spill.
- (b) The name of the operator who has sustained the leak or spill.
- (c) The date and time of the spill or leak.
- (d) The date and time the leak or spill was discovered.
- (e) The date and time cleanup or remediation was commenced.
- (f) The location of the leak or spill, including all of the following information:
 - (i) facility, well name or lease name
 - (ii) quarter quarter quarter section
 - (iii) Section number, township and range
- (g) Full disclosure of all material leaked or spilled, including all applicable MSDS information
- (h) The volume of the leak or spill
- (i) The volume of the leak or spill which is recovered including records from the operator who recovered the spilled or leaked material
- (j) The remediation or cleanup measures taken and full disclosure made of disposal methods and location the contamination is transported to for disposal.

- (k) The cause of the leak or spill
- (l) distance from the leak or spill to the nearest city well, domestic well, or fresh water impoundment.

Section 5. Leakage Surveys. (Request to define “Leakage Survey”).

Each operator must conduct a leakage survey of any and all facilities within the confines of the County of Otero using practices and equipment consistent with a prudent operator standard at intervals not exceeding fifteen (15) months, but at least once each calendar year. The results of each such survey shall be filed with the appropriate authority within thirty (30) days of the completion of the survey.

It shall be unlawful to fail to provide an annual survey report to the appropriate authority within thirty (30) days from the date the survey was performed, and each day of failure thereafter shall be considered a separate offence, and upon conviction thereof the offender shall be subject to a maximum of \$500.00 per day that report remains un-filed.

(Mark Fesmire to provide information about Surface Facilities, Flow Lines, Injection Wells, and Production Wells for inclusion here.)

Section 6. Definitions.

The following definitions shall apply to any activity within the confines of the County of Otero.

- (a) Appropriate authority means that individual designated by ordinance, statute, or regulation together with any individual authorized to act on behalf of the County of Otero or other authority having jurisdiction (BLM, OCD, NMED, EPA, etc.)
- (b) Brine means all nonpotable water resulting, obtained, or produced from the exploration, drilling, or production of oil or gas, or both. ~~(NEED PPM! 3000)~~ Brine is water containing 10,000PPM TDS or greater.
- (c) Central production facility means production equipment which has been consolidated at a central location that provides for the commingling of oil of gas production, or both, from 2 or more prorated wells or production units.
- (d) County Administrator (County Manager or designee) means person or persons charged with conducting day to day business of the County of Otero.
- (e) Drilling operations means all of the physical and mechanical aspects of constructing a well for the exploration or production of oil or gas, or both, for injection of fluids associated with the production of oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas derived from oil or gas, and includes all of the following:
 - (i) moving drilling equipment onto the drill site.

- (ii) penetration of the ground by the drill bit and drilling of the well bore.
 - (iii) casing and sealing of the well bore.
 - (iv) constructions of well sites and access roads.
 - (v) workovers and recompletions.
 - (vi) plugging and abandonment
- (f) Facility means any operation conducted within the confines of the County of Otero including without limitation, pipelines, drilling operations, reentry or workovers, tanks, holding facilities, treatment facilities, pumping and compressor stations, and any other facility used in the exploration for production of oil and gas.
- (g) 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 PPM 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 PPM of TDS unless it can be shown that hydrologically connected fresh ground water will not be adversely affected.
- ~~(g)~~(h) Operation of oil and gas well means the process of producing oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas, including all of the following:
- (i) production, pumping and flowing.
 - (ii) processing.
 - (iii) gathering.
 - (iv) compressing.
 - (v) treating.
 - (vi) transporting.
 - (vii) conditioning.
 - (viii) brine removal and disposal.
 - (ix) separating.

- (x) storing.
- (xi) injecting.
- (xii) testing.
- (xiii) reporting.
- (xiv) maintenance and use of surface facilities.
- (xv) secondary recovery.
- (xvi) plugging and abandonment

~~(h)~~(i) Operations means any activity conducted within the confines of the County of Otero and includes "drilling operations" and "operation of oil and gas wells".

~~(h)~~(j) Operator means any person who conducts operations.

~~(h)~~(k) Permits means a permit, or permits, required by the County of Otero, or other appropriate authorities, for operations within the boundaries of the County of Otero on private, state, or federal lands.

~~(h)~~(l) Person means any individual, firm, joint venture, partnership, corporation, association, cooperative association, a joint stock association, and including any trustee, receiver, assignee, or personal representative thereof.

~~(h)~~(m) Pipe means any pipe or tubing used in the movement or transportation of gases, petroleum products, brine water and any other substance, and includes pipe-type holders.

~~(m)~~(n) Pipeline means all parts of those physical facilities through which substances move in the water facilities filed, including pipe, valves, and other appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.

~~(n)~~(o) Surface facility means a facility used in the injection of fluids or in the production, processing or treatment of oil or gas, or both, including any of the following:

- (i) pumping equipment.
- (ii) fluid disposal equipment.
- (iii) facility piping.
- (iv) load outs.
- (v) separators.

- (vi) storage tanks.
- (vii) treatment equipment.
- (viii) compressors.

~~(p)~~ Waste, in addition to its ordinary meaning, includes all of the following:

- (i) the definition of waste promulgated by any authority having jurisdiction and/or by the New Mexico Oil Conservation Division as found at ~~19 NMAC 15.A (83)~~ 70-2-3 as amended from time to time.
- (ii) damage to underground fresh water or mineral waters, natural brines, or other mineral deposits from operations for the recovery, development, and production and handling of oil and gas.
- (iii) the unnecessary damage to or destruction of the surface, soils, animal, property, or other environmental values from or by oil and gas operations.
- (iv) the unnecessary endangerment of public health, safety, or welfare from or by oil and gas operations.

OCD DEFINITIONS (q):

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

- (i) 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;
- (ii) 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;
- (iii) 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;

(iv) 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 Subparagraphs (a), (b), and (c) of this definition and causes waste by violating Section 70-2-16 of the Oil and Gas Act; 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.

This section not to be included in final document. It is for clarification purposes only!

From "WATER DESALINATION AND REUSE STRATEGIES FOR NEW MEXICO – New Mexico Water Resources Research Institute, September 2004" speaking about the ground water resources of the Tularosa Basin:

Water with a salinity of 1000ppm total dissolved solids (TDS) is considered almost fresh while water with a salinity of 20,000ppm TDS is nearly as salty as sea water.

Section 7. Material Safety Data Sheets.

Any operator conducting operations within the confines of the County of Otero shall file with the County Administrator (County Manager or designee) Material Safety Data Sheets (MSDS) for any and all substances used, produced, transported and otherwise present in operations conducted within the confines of the County of Otero.

Minimum Information Contained in an MSDS as Required by OSHA:

- The materials identity, including its chemical and common names (brandname,, etc.)**

- Hazardous ingredients (even in parts as small as 0.1%)
- Cancer-causing ingredients (even in parts as small as 0.1%)
- List of physical and chemical hazards (stability, reactivity) and characteristics (flammable, explosive, corrosive, etc.)
- List of health hazards, including:
 - Acute effects such as burns or unconsciousness, which occur immediately
 - Chronic effects such as allergic sensitization, skin problems, or respiratory disease, which build up over a period of time.
- If the material is listed as a carcinogen by OSHA, IARC, or NTP.
- Limits to which workers can be exposed, the primary routes of entry into the body, specific target organs likely to sustain damage, and medical problems that can be aggravated by exposure.
- Precautions and safety equipment.
- Emergency and first aid procedures.
- Specific fire fighting information.
- Procedures for cleanup of spills and leaks.
- Precautions for safe handling and use, including personal hygiene.
- Identity of the organization responsible for creating the MSDS, date of issue, and emergency phone number.

Section 8. Disposal Wells.

From and after the effective date of this ordinance, no person shall drill a disposal well, or convert an existing well into a disposal well, add any additional hookups to existing disposal wells, or construct any disposal facility within the confines of the County of Otero, without a ~~county issued~~ permit, or written permission, ~~by the County of Otero~~ issued by the applicable authority.

Section 9. Preventing Pollution and Waste.

Every person who conducts operations within the confines of the County of Otero shall use all and full precautions to prevent waste. Any person who conducts drilling operations for fluid minerals within the confines of the County of Otero shall case and cement the borehole through the deepest known or indicated fresh water aquifer no matter the depth of said aquifer. Fresh water aquifers will be identified by ~~a qualified, independent hydro-geological agent, such as Sandia Laboratories, Albuquerque, New Mexico.~~ the best or most current scientific data, in accordance with OMB standards.

Section 10. Drilling Mud Pits.

Any person who conducts operations in the County of Otero shall use a closed loop system. All cuttings and fluids will be removed from the site and properly disposed in accordance with any and all applicable state and/or federal statutes and regulations.

~~Section 11. Well Records, Service Company Records.~~

~~(A) — A person who drill, deepens, changes well status, or completes a well after the effective date of this ordinance, shall keep and preserve at the well, during drilling, deepening, changes in well status, or completion operations, accurate records recording all geologic strata penetrated, casing and cement used, and other information as may be requested by the County Administrator (County Manager or designee), for due cause, in connection with the drilling of the well.~~

~~(B) — When requested by the County Administrator (County Manager or designee), an operator of a well shall file a copy of service company records, including records of all the following:~~

~~(i) — mudding, cementing, and squeeze operations.~~

~~(ii) — acidizing.~~

~~(iii) — perforating.~~

~~(iv) — fracturing.~~

~~(v) — shooting.~~

~~(vi) — temperature surveys.~~

~~(vii) — bond logs.~~

~~(viii) — caliper surveys.~~

~~(ix) — wireline borehole and strata evaluations.~~

~~The County Administrator (County Manager or designee) may request the records directly from the service company.~~

~~(C) — An operator of a well shall make all such records and information available to the County Administrator (County Manager or designee) at all times. An operator shall protect the records from damage or destruction due to a preventable cause. All well data provided to the County Administrator (County Manager or designee), as required by these rules, shall be held confidential commencing with the receipt of a written request by the operator, and shall remain confidential to the extent allowed by law for ninety (90) days~~

~~after drilling completion. Information on volumes, concentrations, and times of releases, spills, or leaks of gas, brine, crude oil, oil or gas field waste, or products and chemicals used in association with oil and gas exploration, production, disposal, or development is not subject to confidentiality.~~

Section 12. Oil Brine, or Associated Oil or Gas Field Waste; Storage.

Any operator shall not retain oil, brine, or associated oil or gas field waste in earthen reservoirs or open receptacles. ~~and shall not bring same onto any active worksite.~~

Section 13. Well Sites and Surface Facilities.

A person shall use every reasonable precaution to stop and prevent waste. All wells, surface facilities, gathering lines, and flow lines shall be constructed and operated so that the materials contained in the facilities do not cause waste. An oil and gas operation shall not be commenced or continued at a location where it is likely that a substance may escape in a quantity sufficient to pollute the air, soil, surface waters, or ground waters, or to cause unnecessary endangerment of public health, safety, or welfare until the operator has complied with the methods and means to prevent pollution or eliminate the unnecessary endangerment of public health, safety, or welfare as specified by the County Administrator (County Manager or designee).

Section 14. Prevention of Pollution, Contamination, or Danger.

The storage, transportation, or disposal of brine, crude oil, or oil or gas field waste that results in, or that the County Administrator (County Manager or designee) determines may result in, pollution is prohibited. All operators shall ensure that wastes and brine are stored, transported and disposed of in a manner acceptable to the County Administrator (County Manager or designee) and consistent with all applicable state and federal laws and regulations.

Section 15. Monitoring of Injection and Disposal Wells.

- (A) The operator of any disposal well shall, on a weekly basis, monitor and record the injection pressure, injection rate, and cumulative volume of fluids injected. The operator shall report this data monthly to the County Administrator (County Manager or designee) unless the County Administrator (County Manager or designee) informs the operators in writing that the said reports may be submitted on a less frequent basis. The data shall be submitted in a form approved by the County Administrator (County Manager or designee). These reports are normally filed with OCD.
- (B) Operators of water disposal injection wells shall file an annual monitoring report summarizing the data of the monitoring required in subsection (A) of this section, on or before March 1 of each year for the previous calendar year.

- (C) The operator of a secondary recovery injection well shall, on a monthly basis, monitor and record the injection pressure, injection rate, and cumulative volume of the fluid injected. An operator of a secondary recovery injection well may conduct the monitoring and recording, required by this section, on a field or project basis by manifold monitoring, rather than on an individual well basis, if more than one (1) secondary recovery injection well operates with a single manifold, and if the operator demonstrates that manifold monitoring is comparable to individual well monitoring. The operator shall report the data annually to the County Administrator (County Manager or designee) in a form approved by the County Administrator (County Manager or designee), on or before March 1 of each year for the previous calendar year.
- (D) The operators of any injection well shall not operate an injection well unless the annual report is filed by March 1 for the previous year, and injection may not continue after failure to file on March 1 until the required report is submitted and written approval for resumed injection is received from the County Administration.
- (E) All injection well records shall be retained by the operator for a period of ten (10) years.
- (F) An operator of an injection well shall verbally notify the County Administrator of any pressure test failure, significant pressure changes, or other evidence of a leak in an injection well within 24 hours of the test failure, pressure change or evidence of a leak. If there is evidence that an injection well is not, or may not be, directing the injected fluid into the permitted injection strata, the operator shall immediately cease injection.
- (G) An operator shall submit written notice of the pressure test failure or other evidence of a leak to the County Administrator (County Manager or designee) within five (5) days of the occurrence. If injection has ceased pursuant to subsection (F) above, an operator shall not resume injection until the operator has tested or repaired the well, or both.
- (H) Nothing contained in this section shall be construed to permit the drilling of a disposal well, or conversion of an existing well into a disposal well, after the effective date of this ordinance.
- (I) Failure to file any of the reports required by this section shall be an offense. Operation of a well contrary to the terms of this section -- shall be an offence. For each day that a well is operated in violation of any of the terms of this section it shall be a separate offence punishable by a maximum fine of \$500.00 per day. ???

Section 15. Well Sites and Surface Facilities; Flammable and Combustible Material.

An operator of a well or other facility shall insure that the area around the well and surface facilities is kept clear of flammable and combustible material stored within a radius of 75 feet, or as approved by the County Administrator (County Manager or designee), using the

well or dike wall as the point of measurement. The County Administrator (County Manager or designee), if conditions warrant, may also require construction of a fire line around the outer edge of the cleared area. An operator shall ensure that the disposal of material resulting from the clearing operations is consistent with all applicable state and federal laws and regulations.

Section 16. Proximity of Pipelines to Water Wells, Domestic or Municipal Water Wells, or Fresh Water Impoundments.

Any pipeline installed within the near proximity to domestic or municipal water wells, or facilities, or fresh water impoundment, which pipeline will be used to transport oil, gas, produced water, brine water or any other liquid associated with the exploration or production of oil, gas, and other minerals shall be constructed to pass at least five hundred (500) feet from any aforementioned facilities of the County of Otero.

The provisions of Chapter ----, Oil and Gas Wells and Pipelines, in as much as said provisions are deemed applicable in the sole discretion of the County of Otero, shall govern all pipeline construction, all drilling operations, and construction or placement of any other facility for the exploration, production, storage or transportation of oil, gas, produced water, brine water or any other liquids associated with the exploration or production of oil, gas, and other minerals within the confines of the County of Otero, New Mexico.

Section 17. Secondary Containment Requirements and Construction Standards.

- (A) All wellheads and pump jacks installed after the effective date of this ordinance and surface facilities constructed after the effective date of this ordinance, shall provide for secondary confinement pursuant to the requirements of this section. The County Administrator (County Manager or designee) may require surface facilities for hydrocarbon, gas, brine injection, or brine handling constructed before the effective date of this ordinance to be upgraded to meet requirements of this section if the facility is substantially reconstructed.
- (B) An operator shall submit secondary containment plans to the County Administrator (County Manager or designee) for approval before construction of the facility. The secondary containment plans shall consist of a plot plan of the proposed facility and cross sections showing construction details of the sidewalls and floor or floors of all secondary containment areas, including the proposed overall dimensions of the facility. The County Administrator (County Manager or designee) shall approve or disapprove the secondary containment plans within 30 days of receipt of the plans.
- (C) An operator shall comply with all of the following minimum construction standards to meet the secondary containment requirements of this rule:
 - (1) An operator shall be required to prepare a hydro-geological investigation of the facility area to establish local background groundwater quality. The hydro-geological investigations shall include all of the following:

- (i) Water quality sampling pursuant to the parameters established in the New Mexico Quality Control Act.
 - (ii) A determination of the direction of groundwater flow and depth to the groundwater in the uppermost aquifer.
 - (iii) A chemical analysis showing the concentrations of benzene, ethyl benzene, toluene, and xylene.
 - (iv) A geologic description of earth materials, both horizontally and vertically, in the immediate vicinity of the proposed facility.
 - (v) All results of the hydro-geological investigations will be corroborated by an independent firm or agency not associated with the oil and gas industry that is qualified to make said investigations.
- (2) Each facility shall be required to have 1 of the following monitoring systems to detect leakage from hydrocarbon or brine storage secondary containment areas:
- (i) A minimum of 1 groundwater monitoring well down gradient, which is in close proximity to all hydrocarbon or brine storage secondary containment areas.
 - (ii) Tertiary containment underlying the secondary containment, which shall be constructed and sealed in a manner to capture any hydrocarbons or brine that may leak or seep through the secondary containment. A layer of permeable material and a monitoring tube shall be placed between the secondary and tertiary containment to allow monitoring to determine the presence of any leakage or seepage through the secondary containment.
- (3) A vessel that contains hydrocarbons or brine, or both, shall be elevated and placed on impervious pads or constructed so that any leakage can easily be detected. A vessel that is to be used on-site for 30 days or less shall, at a minimum, be placed on a leak-resistant material.
- (4) A hydrocarbon and brine storage vessel, including oil heating and treating equipment, shall be located in a secondary containment area and the containment volume shall be in compliance with the following minimum requirements, as applicable:
- (i) Containment areas shall be constructed to contain 150% of the largest storage vessel.
 - (ii) Precipitation and runoff flows shall be taken into consideration in the design of the secondary containment area.

- (5) The sidewalls and floor of the secondary containment and spill containment areas shall be constructed and sealed in a manner to prevent the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater.
- (6) A hydrocarbon and brine storage vessel shall not be erected, enclosed, or maintained closer than 200 feet from any drilling activities or producing well.
- (7) Oil heating or treating equipment shall not be erected, enclosed, or maintained closer than 75 feet from any drilling or producing well or oil storage tank or tank battery.
- (8) Dikes shall be maintained and the enclosure kept free of the following:
 - (i) oil.
 - (ii) emulsions.
 - (iii) tank bottoms (BSW-base solids and water).
 - (iv) brine.
 - (v) water.
 - ~~(v)~~(vi) vegetation
 - (vii) debris.
 - (viii) any flammable or combustible material.
- (9) The hydrocarbon, water and brine truck loading and unloading areas located outside of hydrocarbon or brine storage secondary containment areas shall have a spill containment capacity equal to double the volume of the hoses used to connect the truck to the tanks, but not less than a capacity of 5 barrels. The spill containment shall be constructed and sealed in a manner that prevents the seepage of hydrocarbons, water or brine into the surrounding soils, surface waters, or groundwater.
- (10) Brine disposal well truck unloading areas and commercial brine truck loading and unloading areas located outside of hydrocarbon or brine storage secondary containment areas shall be constructed and sealed in a manner that prevents the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater. In addition, a ramp shall be constructed to contain the unloading vehicle, its hoses, and connections within the ramp area. The ramp area shall contain a sump and be connected to a secondary containment area so that any spillage drains into the sump and into the secondary containment area. The spill containment ramp and sump shall have a combined capacity

of not less than 20 barrels.

- (11) Sumps shall be constructed of materials impervious to hydrocarbons and brines and resistant to damage and deterioration during use. Sumps shall be connected to the ramp area and the secondary containment area in a manner that prevents leakage.
- (12) Surface facilities for hydrocarbon and other liquids handling shall be constructed to meet all of the following minimum requirements:
 - (i) All transfer and injection pumps shall have leak containment.
 - (ii) All water, brine and hydrocarbon flow lines to a facility are considered part of that facility and are subject to the following requirements:
 - (a) All flow lines shall be pressure tested pursuant to the provisions of paragraph (iii) (a), (b), (c), (e), and (g) of this subdivision.
 - (b) An operator may elect to not perform the pressure testing of the flow lines, except flow lines that transport brine only, if the operator performs visual inspection of the entire flow line corridor every 3 months, and reports the results of the inspections to the County Administrator (County Manager or designee) annually by January 31 of each year for the previous calendar year.
 - (iii) All buried facility piping for the transport of liquids shall be pressure-tested pursuant to the following provision, as applicable:
 - (a) Piping made of non-corrodible or corrosion-protected material shall be pressure-tested every 3 years.
 - (b) All piping other than piping specified in subparagraph (a) of this paragraph shall be pressure-tested every 12 months.
 - (c) If buried piping is excavated for repair or relocation, then the disturbed portion shall be pressure-tested immediately pursuant to subparagraphs (d) and (e) of this paragraph.
 - (d) The pressure test shall be 100% of the normal oil and gas separator operating pressure. The pressure shall be stabilized at 90% of test pressure, at a minimum, and shall hold for a period of 15 minutes.

- (e) An operator shall provide certification to the County Administrator (County Manager or designee), within 30 days of a pressure test, that a pressure test was conducted and the facility piping passed the pressure test. If a facility's piping does not pass the pressure test, the County Administrator (County Manager or designee) shall be notified by the operator within 48 hours after the test. If the pressure test indicated that the facility's piping leaked, then the piping shall be repaired and tested before putting the piping back in service. After the repair of the piping, the operator shall report the repair to the County Administrator (County Manager or designee) and provide certification that the piping has been retested and is not leaking.
 - f) Single-phase gas lines are not subject to the pressure test requirements if the lines are protected by a liquid phase trap.
 - (g) The County Administrator (County Manager or designee) may approve or require other pressure testing or leak detection methods in place of the pressure testing required in this paragraph.
- (iv) At production or injection well facilities, all piping shall be routed above the ground and kept within the secondary containment area where practical. Piping that cannot be routed above the ground shall have its location marked with posts or with other location-identifying markers approved by the County Administrator (County Manager or designee) so that the buried piping can be easily located. Detailed site plans shall be provided to the County of Otero for these purposes.
 - (v) Brine injection wells shall have a working check valve on the flow line at or near the wellhead to avoid backflow.
 - (vi) All hydrocarbon, water and brine loading and unloading facility transfer lines that are not in use shall be secured to prevent spillage. A shutoff valve shall be installed at the truck connect point and at the storage vessels. At connect points, impermeable drip containment vessels shall be used and shall be an adequate size to contain all spillage and precipitation to avoid overflow.
- (C) Wellheads, flare pits, vents, and flare stacks shall have secondary containment and spill containment areas constructed in a manner to prevent the seepage of hydrocarbons, produced water or brine into the surrounding soils, surface waters, or groundwater. Secondary containment at the wellhead shall be constructed in a manner to capture any leakage of liquid that may occur. In addition, if the

wellhead is provided with a pump jack or is converted to a pump jack equipped with a gasoline or diesel-powered engine, then the engine shall also have secondary containment that is sufficient to prevent the seepage of any machine oils or fuels into the surrounding soils, surface waters, or groundwater.

- (D) Upon completion of the construction of the facility, but before its use, an operator shall certify, to the County Administrator (County Manager or designee), that the secondary containment area was constructed according to the approved plan. An operator shall ensure that an approved spill or loss response and remedial action plan is also on file with the County Administrator (County Manager or designee) before a facility is used.
- (E) Before any significant modification of the secondary containment area occurs, an operator of a well shall notify the County Administrator (County Manager or designee) and receive approval before making the modification. The County Administrator (County Manager or designee) shall approve or deny the request within 10 days of receipt of the request.
- (F) An operator of a well shall perform inspections at the facility at a frequency that is sufficient to ensure that the throughput of fluids in the system does not exceed the primary and secondary containment capacity between inspections. The operator shall perform at least 1 inspection per week.
- (G) The County Administrator (County Manager or designee) shall require the installation of an automatic facility shutdown system if the facility has a throughput of liquids in a 24-hour period that exceeds the containment volume of secondary containment area. The automatic shutdown system shall be designed to prevent liquids from overflowing the secondary containment area. A facility shall be exempt from the requirement of an automatic shutdown system if the facility has staff present 24 hours per day and is equipped with alarm systems on the tank or the tanks of the tank battery.
- (H) The monitoring system required by Section shall be kept in a functional condition so that water samples can be collected and water level measurements can be taken every 6 months. The water samples shall be tested for specific conductance as an indicator of dissolved solids, concentrations of chloride, and chemical analysis pursuant to subsection (C) (1) (iii) of this section, except the chemical analysis provided by subsection (G) (1) (iii) of this section shall not be required at monitoring systems at surface facilities where liquid hydrocarbons are not handled. The results of the sample analysis shall be provided to the County Administrator (County Manager or designee) as soon as the results are available. If the samples taken by the operator show substantial increases above background water quality, then the operator

shall, at a minimum, increase monitoring. If the samples confirm that hydrocarbons are present at levels above background, then the operator shall immediately take remedial action, in the form of containment and removal.

- (I) The collection of samples referred to in Section H will be taken by an independent agency such as Sandia Laboratories, Albuquerque, New Mexico to maintain true scientific measurements.
- (J) An operator shall provide a right of entry to the facility for monitoring at all times to any and all appropriate authorities.
- (K) Failure to comply with any of the provisions of this Section shall be an offense. For each day that a facility is operated in violation of this Section ---, it shall be a separate offense punishable by a maximum fine of \$500.00 per day.??

Section 18. Restoration of Well Site; Filling and Leveling of Cellars, Pits and Excavations.

An operator of a well shall fill and level the cellar and all pits and excavations, remove or eliminate debris, minimize erosion, and restore the well site as nearly as practicable to the original land contour or to a condition approved by the County Administrator (County Manager or designee) as soon as practical after the completion of plugging to the surface, but not more than 6 months after the completion of plugging to the surface. The site shall then be re-vegetated to match the surrounding natural vegetation. Failure to comply with this section shall be punishable by the maximum free allowable, compounded daily.

Section 19. Safety Measures.

If hazards to life or property, or both, exist, then an operator of a well shall post safety signs in conspicuous places around the well or surface facility. The County Administrator (County Manager or designee) may require the installation of fences, gates, or other safety measures.

Section 20. Use of Pits to Collect Waste Oil and Tank Bottoms Prohibited; Conveying, Storing, or Disposing of Waste Oil and Tank Bottoms.

An operator of a well shall not use earthen pits to collect waste oil and tank bottoms. An operator shall not convey, store, or dispose of waste oil and tank bottoms in a manner that causes waste to be disposed of at a known, approved waste disposal site. Operator shall identify such site and provide documentation of disposal to the County Administrator (County Manager or designee).

Section 21. Cleanup and Disposal of Losses.

An operator shall clean up and dispose of in a manner consistent with this chapter and all applicable state and federal laws and regulations, losses of oil, gas, brine or other

DOUG MOORE, Vice-Chairman

MICHAEL NIVISON, Member

**APPROVED AS TO LEGAL FORM
AND SUFFICIENCY**

DANIEL A. BRYANT, Otero County Attorney