

OIL CONSERVATION DIVISION
PROPOSED
VULNERABLE AREA ORDER
(April 7, 1992)

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Case No. 10436 Exhibit No. 14
Submitted by OCD
Hearing Date April 9, 1992

(I) Within the counties of San Juan, Rio Arriba, Sandoval and McKinley, State of New Mexico, there is hereby designated a "VULNERABLE AREA" defined as follows:

(a) That area within the valleys of the San Juan, Animas, La Plata, Chama and Navajo Rivers which is bounded by the topographic line on either side of the river that is 100 vertical feet above the river channel measured perpendicular to the river channel;

(b) Those areas that lie between the above-named rivers and the following ditches:

Highland Park Ditch	Greenhorn Ditch
Hillside Thomas Ditch	Lower Animas Ditch
Cunningham Ditch	Farmers Mutual Ditch
Farmers Ditch	Citizens Ditch
Halford Independent Ditch	Hammond Ditch;

(c) That area which is within the drainage bottoms of all major perennial and ephemeral surface water drainages bounded by the topographic line on either side of the drainage that is 50 vertical feet above the drainage channel measured perpendicularly to the drainage channel;

(d) The following areas, which shall be known as Wellhead Protection Areas:

- (1) Those areas that lie within 1,000 horizontal feet of a public water supply and;
- (2) Those areas that lie within 200 feet of all other fresh water wells and springs.
- (3) Wellhead Protection Area shall not include areas around water wells which are drilled after the effective date of this order if such water wells are located within the distances specified in Subsection (I)(d)(1) & (2) to an existing source of oil or natural gas waste.

- (e) Those lands which constitute the Vulnerable Area as defined in paragraphs (I)(a), (b) &(c) which are within the extent of known oil and gas production are delineated on United States Geological Survey Quadrangle Maps which are maintained in the Santa Fe Division Office.
- (II) To protect fresh waters, Special Rules and Regulations governing the disposal of oil and gas wastes in the Vulnerable Area of San Juan, McKinley, Rio Arriba and Sandoval Counties are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS FOR THE DISPOSAL OF
OIL AND NATURAL GAS WASTES IN THE VULNERABLE AREA IN
SAN JUAN, MCKINLEY, RIO ARriba AND
SANDOVAL COUNTIES, NEW MEXICO**

RULE 1. APPLICABILITY

These rules shall apply to the disposal of all oil and natural gas waste within the Vulnerable Area whether such wastes are disposed of within or without said areas.

RULE 2. DEFINITIONS

- (a) **Aquifer:** An aquifer is a saturated permeable geologic unit (a geological formation, group of formations, or part of a formation) that can transmit significant quantities of water under ordinary hydraulic gradients.

For purposes of this definition, the word significant means that the water from the aquifer is used for or may presumed to be usable for municipal, industrial, domestic, agricultural, or stock watering purposes.

- (b) **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/l) or less of total dissolved solids. The water in lakes and playas shall be protected from contamination even though it may contain more than 10,000 mg/l of TDS unless it can be shown that hydrologically connected fresh water will not be adversely affected.
- (c) **Public Water Supply** shall mean all fresh water wells which supply 25 people or more at least 60 days out of the year.
- (d) **Oil and Natural Gas Wastes** shall mean those wastes produced in conjunction with the production, refining processing and transportation of crude oil and/or natural gas and commonly collected at field storage, processing or disposal facilities, and waste collected at gas processing plants, refineries and other processing or transportation facilities.
- (e) **Field Storage, Processing or Disposal Facilities** include but are not limited to: separators, dehydrators, blowdown pits, workover pits, burn pits, lease tanks, commingled tank batteries, LACT units, community or lease salt water disposal systems, gathering and transmission line drip pits.

- (f) Pit: That below grade or surface excavation which receives any type of oil and gas waste as described above.

RULE 3. PROHIBITIONS

- (a) Disposal of oil and natural gas wastes produced within the Vulnerable Area into unlined pits or onto the ground surface is prohibited.

- (b) Current discharges of oil and natural gas wastes to unlined pits within the Vulnerable Area will be eliminated pursuant to the following schedule:

- (1) All discharges of oil and natural gas wastes to unlined pits located in the areas defined in Subsections (I)(a), (I)(b) and (I)(d)(1) will be eliminated within one (1) year of the effective date of this order.

- (2) All discharges of oil and natural gas wastes to unlined pits located in the areas defined in Subsection (I)(d)(2) and discharges which are within the following major tributaries of the respective river systems will be eliminated within two (2) years of the effective date of this order:

(i) San Juan River

Armenta Canyon	Laguna Seca Draw
Benito Canyon	Locke Arroyo
Bloomfield Canyon	Malpais Arroyo
West Fork	
Bloomfield Canyon	Mansfield Canyon
Caballo Canyon	Manzanares Canyon
Cabresto Canyon	Many Devils Wash
Canon Bancos	Munzo Canyon
Canon Largo	Negro Andy Canyon
Carracas Canyon	Ojo Amarillo Canyon
Chaco River/Chaco Wash	Potter Canyon
Chavez Canyon	Pump Canyon
Collidge Canyon	Rattlesnake Wash
Cottonwood Canyon	Red Wash
Creighton Canyon	Ruins Canyon
Dain Arroyo	Salt Creek Wash
Eagle Nest Wash	Shiprock Wash
Eul Canyon	Shumway Arroyo
Farmington Glade	Slane Canyon
Frances Creek	Little Slane Canyon
Gallegos Canyon	Stevens Arroyo
Gobernador Canyon	Stewart Canyon
Green Canyon	Sullivan Canyon
Hare Canyon	Tom Gale Canyon

Head Canyon
Horn Canyon
Kutz Canyon
La Fragua Canyon
La Jara Canyon

Vaca Canyon
Valdez Canyon
Vaughan Arroyo
Wright Canyon

(ii) Animas River

Arch Rock Canyon
Barton Arroyo
Blancett Arroyo
Bohanan Canyon
Calloway Canyon
Cook Arroyo
Cox Canyon
Ditch Canyon
Estes Arroyo
Flora Vista Arroyo
Hampton Arroyo
Hart Canyon

Hood Arroyo
Johnson Arroyo
Jones Arroyo
Kiffen Canyon
Knowlton Canyon
Kochis Arroyo
Miller Canyon
Rabbit Arroyo
Tucker Canyon
Williams Arroyo
Wyper Arroyo

(iii) La Plata River

Barker Arroyo
Conner Arroyo
Cottonwood Arroyo
Coyne Arroyo
McDermott Arroyo

Murphy Arroyo
Pickering Arroyo
Thompson Arroyo
Two Cross Arroyo

(3) All discharges of oil and natural gas wastes to unlined pits in any remaining surface water tributaries within the Vulnerable Area will be eliminated within three (3) years from the effective date of this order.

(c) After the effective date of this order, no oil and natural gas wastes shall be removed from the Vulnerable Area for surface disposal except upon authorization of the Aztec District Manager to transport oil and natural gas wastes to such facilities as may be approved by the Division Director for acceptance of such wastes.

~~(e)~~ (d) No oil and natural gas wastes may be disposed of or stored in below grade tanks or lined pits except after application to and approval by the Division.

RULE 4. SURFACE DISPOSAL FACILITIES TO BE APPROVED

- (a) Disposal of oil and natural gas wastes to a centralized surface facility outside the Vulnerable Area may be approved by the Division pursuant to OCC Order R-7940A.
- (b) Upon application to the Division, the Director of the Division is hereby authorized to approve administratively the use of lined pits and below grade tanks within the Vulnerable Area for disposal or storage of oil and natural gas wastes upon a proper showing that the tank or lined pit will be constructed and operated in such a manner as to safely contain the wastes to be placed therein and to detect leakage therefrom.
- (c) Any existing lined pits or below-grade tanks installed prior to the effective date of this order shall be registered with the OCD within one (1) year after the effective date of this order. Any replacement of such lined pits or tanks shall be subject to the provisions set forth in Rule 4 (b).

RULE 5. PIT REGISTRATION

Within one (1) year of the effective date of this order, the owner/operator of any unlined pit outside the Vulnerable Area which receives greater than an average of five (5) barrels per day of oil and natural gas wastes must register such pit(s) with the Division.

RULE 6. PIT CLOSURE

All unlined pits in existence as of the effective date of this order which have received oil and natural gas wastes and for which discharges are to be eliminated shall be closed in a manner approved by the Oil Conservation Division. Applications or plans to close existing unlined pits in the Vulnerable Area shall be submitted to the Division for approval at any time, but no later than 60 days from the final date for elimination of the discharge pursuant to Rule 3 (b).

RULE 7. VARIANCES

- (a) The Director of the OCD may administratively approve a variance to Rule 3 (a) if the discharger can demonstrate that:
 - (1) the discharge quality does not exceed the New Mexico Water Quality Control Commission (WQCC) Ground Water Standards, or;

- (2) Fresh water at the discharge location will not be affected by the discharge at any future point of foreseeable beneficial use, and;
 - (3) the discharge is not located within a Wellhead Protection area defined in Subsection (I)(d).
- (b) For good cause shown, the Director of the OCD may administratively allow an extension of time for a period not to exceed two (2) years from that specified in Rule 3 (b) for elimination of discharges of oil and natural gas wastes to unlined pits.