Entered September 10, 1968

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION ON ITS OWN MOTION TO CONSIDER THE AMENDMENT OF ORDER NO. R-3221, THE COMMISSION'S SALT WATER DISPOSAL ORDER.

> CASE No. 3807 Order No. R-3221-C

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 17, 1968, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>10th</u> day of September, 1968, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That effective upon various dates, Orders (1), (2), and (3) of Commission Order No. R-3221, dated May 1, 1967, prohibits, in that area encompassed by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the disposal, subject to minor exceptions, of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, or in any other place or in any manner which will constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.

(3) That Order (4) of said Order No. R-3221 authorizes limited utilization of unlined surface pits in areas not affected by Orders Nos. R-1224-A, R-2526, R-2788, or R-3164. -2-CASE No. 3807 Order No. R-3221-C

(4) That Order (5) of said Order No. R-3221 authorizes utilization of certain impervious lined pits in use at the effective date of said order.

(5) That Order (8) of said Order No. R-3221 authorizes temporary disposal in surface pits during certain contingencies.

(6) That in order to provide more uniform provisions among the various salt water disposal orders of the Commission and to ease the administration of said orders, Order (4) of said Order No. R-3221 should be amended to also authorize, in those areas subject to Orders Nos. (1) and (3) of said Order No. R-3221, the utilization of unlined surface pits in those areas affected by Orders Nos. R-1224-A, R-2526, and R-3164 for the disposal of limited quantities of water.

(7) That the utilization of lined evaporation pits is feasible and in the interest of good conservation practices, provided they are properly designed, constructed, and maintained.

(8) That the utilization of properly designed, constructed, and maintained lined evaporation pits should be authorized in all areas subject to Order No. R-3221.

(9) That in order to prevent waste caused by burdensome delay or expenses upon operators of development wells, Order (8) of said Order No. R-3221 should be amended to also authorize temporary storage or disposal of water in surface pits during the evaluation of all newly completed wells.

IT IS THEREFORE ORDERED:

(1) That Order (4) of Order No. R-3221 is hereby amended to read in its entirety as follows:

"(4) That in those areas subject to the provisions of Orders Nos. (1) and (3) above, and in those areas affected by Orders Nos. R-1224-A, R-2526, and R-3164, surface pits may be utilized for the disposal of a maximum of one barrel of produced water per day for each developed 40-acre tract served by said pits, provided however, that in no event shall said surface pit disposal exceed 16 barrels per day, and provided further, that this authorization shall not apply to that area affected by Order No. R-2788." -3-CASE No. 3807 Order No. R-3221-C

(2) That Order (5) of Order No. R-3221 is hereby amended to read in its entirety as follows:

"(5) The use of lined evaporation pits in those areas affected by Orders Nos. (1), (2), and (3) above, and in those areas affected by Orders Nos. R-1224-A, R-2526, R-2788, and R-3164 is hereby prohibited except as follows:

"A. Continued disposal of water in impervious lined pits which were previously constructed pursuant to the provisions of Orders Nos. R-1224-A, R-2526, R-2788, and R-3164, and which were inspected and approved by a Commission representative prior to use, shall be permitted after October 10, 1968, only if the operator of any such lined pit shall have obtained a permit for such use from the appropriate district office of the Commission. The permit shall be applied for in accordance with the provisions of paragraph B-8 below and shall be valid only for so long as the pit is properly maintained to ensure its continued imperviousness.

"B. Under certain circumstances, the District Supervisor of the appropriate district office of the Commission may issue a permit authorizing the use of newly constructed lined pits for evaporation or storage of produced water.

To qualify for and to sustain a permit authorizing the operator to utilize newly constructed lined evaporation pits:

- The lease or leases served by the installation should have a settled or decreasing rate of water production.
- 2. The installation must provide adequate storage capacity to safely contain all water produced, taking into account those months during which evaporation rates are normally at their minimum and must provide at least 600 square feet of evaporative surface for each barrel (42 U.S. Gallons) of produced water to be placed in said pit on a daily average basis throughout the year.
- 3. The installation must provide a header pit, or other appropriate scheme, lined with a suitable oil-resistant material to trap any oil carried with the water, constructed and operated in a

-4-CASE No. 3807 Order No. R-3221-C

> manner to prevent said oil from reaching the evaporation pit, and the surface of the evaporation pit must be maintained free of oil.

- 4. Evaporation and header pits must be constructed with underlying gravel-filled sumps and laterals, or other suitable devices, for the detection of leakage; the Commission shall be given an opportunity to inspect same prior to being lined with an impervious material, at least 30 mils in thickness, which is resistant to hydrocarbons, salts, and aqueous acids and alkalis. The material must also be fungus- and rot-resistant and must be sun-resistant, or provision made to protect it from the sun.
- 5. Each lined pit installation shall be identified by a sign, posted on or near said installation which shall show the name of the lease, name of the operator, the location by guarter-quarter section, township and range, and the permit number of the permit authorizing the installation. In addition, the installation must be adequately fenced, with the corners securely braced, and the fence maintained in good repair.
- 6. Whenever there is evidence that leakage is occurring, the pit or pits must be emptied and repaired to the satisfaction of the Commission before disposal therein may be resumed.
- 7. Any salt remaining in a lined pit must, upon termination of use of said pit for disposal purposes, be disposed of in a manner that will afford reasonable protection against contamination of fresh water supplies, and the pit shall be filled, leveled, and compacted as soon as practicable after termination of such use.
- 8. Application for a permit to utilize a lined evaporation pit shall be in triplicate on a form prescribed by the Commission (a copy of which is attached hereto and made a part hereof as Exhibit "A") and shall be filed with and

-5-CASE No. 3807 Order No. R-3221-C

> approval obtained from the District Supervisor of the appropriate district office of the Commission prior to commencement of construction. Application forms and minimum specifications for the design and construction of lined evaporation pits are available at the district and Santa Fe offices of the Commission.

"C. The Commission may from time to time make such tests and require the furnishing of such evidence as it deems necessary to determine that any lined evaporation pit is maintained in satisfactory condition. The Commission may suspend or revoke by administrative order the permit authorizing a lined evaporation pit whenever it reasonably appears to the Commission that such suspension or revocation would serve to protect fresh water supplies from pollution."

(3) That Order (8) of Order No. R-3221 is hereby amended to read in its entirety as follows:

"(8) That the District Supervisor of the appropriate district office of the Commission is hereby empowered to authorize temporary storage or disposal in surface pits for a period not to exceed 30 days during such contingencies as injection system failures and evaluation of newly completed wells. Authority for said disposal shall only be granted on an individual case basis and only after the volume and quality of the water produced and the proximity of fresh water supplies have been taken into consideration. Any unlined pit used for temporary storage during an emergency must be emptied as soon as the emergency is ended."

(4) That Order (9) of Order No. R-3221 is hereby amended to read in its entirety as follows:

"(9) That subject to the provisions of Orders Nos. (4) and (5) above, the provisions of this order are in addition to the provisions of Orders Nos. R-1224-A, R-2526, R-2788, and R-3164 of the Commission and nothing herein contained shall be construed as abridging or altering in any manner the provisions of said orders." -6-CASE No. 3807 Order No. R-3221-C

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION ່ຜ DAVID F. CARGO, Chairman 2 YTON B. HAYS Member enl Λ A. L. PORTER, Jr., Member & Secretary 1

SEAL

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APPLICATION FOR PERMIT

PERMIT NO.

TO	UTILIZE	A	LINED	EVAPORATION	PIT

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New Mexico Oil Conservation Commission					
Name of Operator					
Address					
Name of lease upon which evap- oration pit will be located					
Location of evaporation pit: Unit LetterSectionTownshipRange					
Lease(s) which will be producing into pit					
Pool(s) which will be producing into pit					
Analysis of disposal water: Chloridesppm. Total dissolved solidsppm. (If more than one pool will be producing into pit, give water analysis for each pool.)					
Quantity of water to be disposed of into this pitbarrels per day.					
Water production from these same wells six months ago bpd. Three months ago bpd (If more than one pool will be producing into pit, give water production data for each)					
Method of hydrocarbon entrapment to be employed: Settling tankHeader pit					
If settling tank is to be used, give size and number of barrels					
If header pit is to be used, give dimensions and depth					
Header pit lining materialThickness					
Dimensions of Evaporation Pit ("A" and "B" on diagram)					
Number of square feet contained in above					
Depth (Top of levee to floor of pit"D" on diagram)					
Material to be used as linerThickness					
Does manufacturer recommend protection of material from direct sunlight? YesNo					
If yes, what means will be provided to so protect the material?					
Is material resistant to hydrocarbons? YesNo					
Is material resistant to acids and alkalis? YesNoNO_NO					
Is material resistant to salts? YesNoNO_NO					
Is-material resistant to fungus? YesNo					
Is material rot-resistant? YesNo					
Will joints in material be fabricated in the field? YesNo					
If yes, describe method to be used in joining material					
Attach manufacturer's brochure describing the qualities of the lining material.					
Describe the leakage detection system to be used					
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and further, that the subject evaporation pit and appurtenances, when installed, will be kept in good repair, and that all due diligence will be exercised in keeping the surface of the water free of oil and other debris.					
Name Title Date					
Approved by Title Date					

