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

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

CASE NO. 9882 Order No. R-9166

APPLICATION OF CONTROLLED RECOVERY INC. FOR AN OIL TREATING PLANT PERMIT, SURFACE WASTE DISPOSAL AND AN EXCEPTION TO ORDER NO. R-3221, LEA COUNTY, NEW MEXICO.

## ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 4, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this  $27 \rm th$  day of April, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Decretory Paragraph No. (3) of Division Order No. R-3221, as amended, 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 water course, or in any other place or in any manner which would constitute a hazard to any fresh water supplies.
- (3) The aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

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- (4) The State Engineer has designated all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (5) The applicant, Controlled Recovery Inc., seeks authority to construct and operate a surface waste disposal facility and an oil treating plant for the purpose of treating and reclaiming sediment oil and for the collection, disposal, evaporation, or storage of produced water, drilling fluids, drill cuttings, completion fluids and other non-hazardous oilfield related waste in unlined surface pits at a site in the S/2 N/2 and the N/2 S/2 of Section 27, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico.
- (6) The applicant proposes to install and operate an effective system, consisting of separating tanks, a water disposal pit, a solids disposal pit, and associated skimming, heat, and/or chemical separating equipment for the removal and reclamation of oil and basic sediments from the produced water to be disposed of, and a settling area to separate other solid waste.
- (7) The proposed plant and method of processing will efficiently process, treat, and reclaim the aforementioned waste oil, thereby salvaging oil which would otherwise be unrecoverable.
- (8) No interested party appeared at the hearing in opposition to the application.
- (9) A naturally occurring salt lake (Laguna Toston) is located in the S/2 of Section 21 and the N/2 of Section 28, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico, and is approximately three-quarters of a mile from the proposed disposal area.
- (10) The hydrogeologic evidence presented in this case establishes that:
  - a) Triassic redbeds, comprised of the Chinle Shale, Santa Rosa sandstone, and the Dewey Lake formation, underlies both Laguna Toston and the proposed water disposal site;

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- b) Shales within the Triassic redbeds underlying the proposed waste disposal site and Laguna Toston are virtually impermeable and therefore prevent vertical seepage of the waters from the site and Laguna Toston into sand stringers within the redbeds which may contain fresh water;
- c) The surface of the Triassic redbeds is depressed in the vicinity of the waste disposal site and Laguna Toston thus creating a "collapse feature";
- The major flow of surface and subsurface water within the boundaries of the "collapse feature" is toward Laguna Toston;
- e) Seepage from the impoundments at the proposed waste disposal site will infiltrate into the subsurface and migrate toward Laguna Toston;
- f) After the seepage reaches Laguna Toston, practically all of the seepage will evaporate;
- g) There is no present or reasonably foreseeable beneficial use of the waters of Laguna Toston;
- h) There are no known sources of potable groundwater in sediments underlying the Triassic redbeds at Laguna Toston;
- i) The utilization of the proposed disposal site adjacent to Laguna Toston for the disposal of water produced in conjunction with the production of oil or gas, or both, and other non-hazardous oilfield waste products, including drill cuttings and drilling muds should not constitute a hazard to any fresh water supplies.
- (11) The applicant should be authorized to utilize the unlined pits described in Finding Paragraph Nos. (5) and (6) above, for the disposal of water produced in conjunction with the production of oil or gas, or both, and other non-hazardous oilfield waste products, including drill cuttings and drilling muds.
- (12) The maximum fill level in both of the above-described pits should be limited to a plane below the crest of the dikes surrounding the pits in order to preclude over-tapping of the dikes.

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- (13) The proposed oil treating plant and disposal facility should be constructed in accordance with the engineering plat and topographic map presented as evidence in this case and in accordance with such additional conditions and requirements as may be directed by the Division Director, and should be operated and maintained in such a manner as to preclude spills and fires, and protect persons and livestock.
- (14) Prior to initiating operations, the facility should be inspected by a representative of the Hobbs district office of the Division in order to determine the adequacy of fences, gates and cattleguards necessary to preclude livestock and unauthorized persons from entering and/or utilizing said facility, and also to determine the adequacy of dikes and berms needed to assure safe plant operation.
- (15) The Director of the Division should be authorized to administratively grant approval for the expansion or modification of the proposed treating plant.
- (16) Authority for operation of the treating plant and disposal facility should be suspended or rescinded whenever such suspension or rescission should appear necessary to protect human health or property, to protect fresh water supplies from contamination, to prevent waste, or for non-compliance with the terms and conditions of this order or Division Rules and Regulations.
- (17) Prior to constructing said facility, the applicant should be required to submit to the Santa Fe office of the Division a surety or cash bond in the amount of \$25,000 in a form approved by the Division.
- (18) Authority for operation of the treating plant and disposal facility should be transferrable only upon written application and approval by the Division Director.
- (19) The granting of this application should not endanger designated fresh water supplies, and will prevent waste by allowing the recovery of otherwise unrecoverable oil.

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### IT IS THEREFORE ORDERED THAT:

(1) The applicant, Controlled Recovery Inc., is hereby authorized to construct and operate a surface waste disposal facility complete with unlined surface pits and an oil treating plant at a site in the S/2 N/2 and the N/2 S/2 of Section 27, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico, for the purpose of treating and reclaiming sediment oil and for the collection, disposal, evaporation, or storage of produced water, drilling fluids, drill cuttings, completion fluids and other non-hazardous oilfield related waste.

PROVIDED HOWEVER THAT, the proposed oil treating plant and disposal facility shall be constructed in accordance with the engineering plat and topographic map presented as evidence in this case and in accordance with such additional conditions and requirements as may be directed by the Division Director, and shall be operated and maintained in such a manner as to preclude spills and fires, and protect persons and livestock.

PROVIDED FURTHER THAT, prior to initiating operations, the facility shall be inspected by a representative of the Hobbs district office of the Division in order to determine the adequacy of fences, gates and cattleguards necessary to preclude livestock and unauthorized persons from entering and/or utilizing said facility, and also to determine the adequacy of dikes and berms needed to assure safe plant operation.

- (2) The maximum fill level in both of the proposed unlined surface pits shall be limited to a plane below the crest of the dikes surrounding the pits in order to preclude over-tapping of the dikes.
- (3) The Director of the Division shall be authorized to administratively grant approval for the expansion or modification of the proposed treating plant.
- (4) Authority for operation of the treating plant and disposal facility shall be suspended or rescinded whenever such suspension or rescission should appear necessary to protect human health or property, to protect fresh water supplies from contamination, to prevent waste, or for non-compliance with the terms and conditions of this order or Division Rules and Regulations.
- (5) Prior to constructing said facility, the applicant shall submit, to the Santa Fe office of the Division, a surety or cash bond in the amount of \$25,000 in a form approved by the Division.

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- (6) Authority for operation of the treating plant and disposal facility shall be transferrable only upon written application and approval by the Division Director.
- (7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

**Director** 

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