



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



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SANTA FE, NEW MEXICO 87504
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August 3, 1994

CERTIFIED MAIL
RETURN RECEIPT NO. P-176-012-235

Mr. Brad F. Simmons
RMI Environmental Services, Inc.
2080 Afton Place
Farmington, New Mexico 87401

**Re: Commercial Disposal Facility
San Juan County, New Mexico**

Dear Mr. Simmons:

The Oil Conservation Division (OCD) has received and is in the process of reviewing the above-referenced application for a commercial disposal facility, used to evaporate produced water, located in Section 11, Township 32 North, Range 7 West, NMPM, San Juan County, New Mexico. The following comments and requests for additional information are based on review of the application dated April 25, 1994 and received by the OCD on May 5, 1994, and supplemental information dated July 5, 1994. In order for the review process to continue the OCD requires the following information and commitments:

1. The OCD requires all commercial and centralized disposal facilities to comply with a Hydrogen Sulfide (H₂S) Prevention and Contingency Plan. The Contingency Plan will include the following conditions:
 - A. Daily tests will be conducted and records made of the Ph in the pond. If the Ph falls below 8.0, remedial steps will be taken immediately to raise the Ph to 8.0.
 - B. Weekly tests will be conducted and records made of the dissolved sulfide concentration in the pond.
 - C. Dissolved oxygen monitoring of all commercial and centralized ponds will be conducted a minimum of twice daily that includes measurements of the dissolved oxygen one foot off the bottom of the pond. If the residual dissolved oxygen

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concentration falls below 0.5 ppm an aeration system will be installed and operated to provide sufficient oxygen to the pond. Tests will be conducted and records made to determine the dissolved oxygen levels in the pond according to the following procedure:

- i. Tests will be conducted at the beginning and end of each day, or at least twice every twenty-four hour period.
 - ii. The sample for each test will be taken one foot from the bottom of the pond.
 - iii. The location of each test will vary around the pond.
 - iv. If any test shows a dissolved residual oxygen level of less than 0.5 parts per million (ppm), immediate steps will be taken to oxygenate the pond and create a residual oxygen level to at least 0.5 ppm. Remedial measures may include adding chemicals or increased aeration.
- D. Tests of ambient H₂S levels will be conducted and records made. Such tests will be made at varying locations around the berm of the pond and around the perimeter of the facility. Tests will be conducted twice per day. The wind speed and direction will be recorded in conjunction with each test.
- E. If an H₂S reading of 0.1 ppm or greater is obtained:
- i. A second reading will be taken on the down wind berm within one hour;
 - ii. The dissolved oxygen and dissolved sulfide levels of the pond shall be tested immediately and the need for immediate treatment will be determined;
 - iii. Tests for H₂S levels will be made at the fence line, downwind from the pond.
- F. If two consecutive H₂S readings of 0.1 ppm or greater are obtained:
- i. The operator will notify the OCD Aztec office immediately;
 - ii. The operator will commence hourly monitoring on a 24-hour basis;
 - iii. The operator will obtain daily analysis of dissolved sulfides in the ponds.

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- G. If an H₂S reading of 10.0 ppm or greater at the facility fence line is obtained:
- i. The operator will immediately notify the OCD and the following public safety agencies:

State Police
County Sheriff
 - ii. The operator will initiate notification of all persons residing within one-half (1/2) mile of the fence line and assist public safety personnel with evacuation as requested.
2. In your correspondence of July 5, 1994 you stated that the inlet feed flow system "will provide isothermal de-stabilization, enhanced circulation and continuous oxygenation from the pond bottom to the water surface". Describe in detail and provide engineering calculations detailing how this will ensure homogenous oxygenation of the proposed four-acre pond. Provide detailed diagrams of the inlet flow system and how it will be controlled.
 3. In your correspondence of July 5, 1994 you stated that the original application design for the leak detection system had changed and that the revised design was included. Provide a detailed diagram of the lay-out pattern of the detection laterals and main collector pipes.
 4. The OCD requires all tanks containing materials other than freshwater will be bermed to contain one and one-third (1-1/3) the capacity of the largest tank within the berm or one and one-third the total capacity of all interconnected tanks and an impermeable liner will be placed below the tank(s).
 5. Provide copies of the Domestic Return Receipts for proof of notification portion of the application.
 6. In the original application the topographic map included was not detailed enough. Provide a detailed plat showing the location of the facility in relation to governmental surveys (1/4 1/4 section, township, and range), highways or roads giving access to the facility site, watercourses, water wells and dwellings within one mile of the site.
 8. Provide engineering calculations to substantiate the freeboard you proposed in the application. Calculations should be obtained from the U.S. Army Corps of Engineers "Shore Protection Manual" for breaking wave height in a sustained 50 mile per hour wind.

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9. Pursuant to OCD Rule 711.A.10., closure bonding requirements are being adjusted based upon experience with the closure of other similar-type facilities. Submit a disinterested third party detailed cost estimate to:
 - a) empty the contents of the pond based upon maximum capacity.
 - b) transport and dispose of the water, sludges and the liners.
 - c) to remove all piping, liners, surface equipment and all other equipment.
 - d) to recontour and revegetate the property to its original condition.

The specific bonding will be adjusted for inflation over the duration of the six-year expected life of the facility.

10. Provide balance sheets and income statements for the past seven (7) years detailing the financial history of RMI.
11. Has RMI ever filed for bankruptcy or had legal action instituted by creditors against RMI. Provide this information.
12. Provide the OCD with a list of the corporate officers and shareholders and their respective mailing addresses.

Submission of the above requested information will allow the review of the application to continue.

If you have any questions call me at (505) 827-5824.

Sincerely,



Chris Eustice
Geologist

cc: Frank Chavez, OCD Aztec Office
Denny Foust, OCD Aztec Office
Elyse Gold, BLM Farmington Office