

NM2 - 8

**INSPECTIONS &
DATA**



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

June 16, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. P-326-936-454

Mr. Michael Scates
Koch Exploration Company
P.O. Box 2256
Wichita, KS 67201

RE: 711 Centralized Waste Management Facility Inspection (NM-02-0008)
Koch Exploration Company, Koch #1 Evaporation Pond
NE/4 NW/4 of Section 31, Township 32 North, Range 8 West, NMPM,
San Juan County, New Mexico

Dear Mr. Scates:

The New Mexico Oil Conservation Division (OCD) inspected Koch Exploration Company (Koch #1) waste management facility evaporation pond #1 on June 12, 1997. The Koch #1 evaporation pond is located in the NE/4 NW/4 of Section 31, Township 32 North, Range 8 West, NMPM, San Juan County, New Mexico

Overall the OCD found Koch #1 to be a well maintained facility. The OCD inspection and current file review of Koch #1 indicates some permit deficiencies. Attachment 1 lists the permit deficiencies found at Koch #1 during the inspection and the new Rule 711 requirements that are not on file. Attachment 2 contains photographs taken during the inspection. Koch #1 shall provide the OCD with a detailed description of how the corrections will be made and a time table of when each of the corrections will be completed. A response is required by Koch #1 to these deficiencies by August 17, 1998.

Pursuant to Order R-10411-B the OCD General Rule 711 has been revised. The OCD is currently in the process of re-permitting all surface waste management facilities under the new Rule 711. Koch #1's waste management facility is included under the new Rule 711. A copy of Order R-10411-B along with the new financial assurance forms is included with this report. A permit application, Form C-137 (Attachment 3), shall be filed with the OCD according to the instructions in Attachment 1, Section 20.

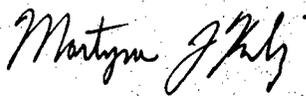
Please be advised that the financial assurance requirements have changed under the new Rule 711. The amount will be \$25,000 for a centralized surface waste management facility or \$50,000 for

Mr. Michael Scates
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a state wide blanket financial assurance (see Rule 711.B.1.i and 711.B.3). Koch #1 must have financial assurance in place for the approved amount prior to receiving a new waste management facility permit.

If you have any questions please do not hesitate to contact me at (505) 827-7153.

Sincerely,



Martyne J. Kieling
Environmental Geologist

Attachments

xc: Aztec OCD Office
Donald L. Johnson, Koch Exploration Company

ATTACHMENT 1
INSPECTION REPORT
JUNE 16, 1997
KOCH EXPLORATION COMPANY, KOCH #1
(NE/4 NW/4 of Section 31, Township 32 North, Range 8 West, NMPM)
SAN JUAN COUNTY, NEW MEXICO

1. **Pond Freeboard:** Liner markings or some other device shall be installed to accurately measure freeboard. Pond freeboard shall be a minimum one and a half (1 ½) feet below the top of the lowest point on the levee. The pond must be maintained below freeboard level at all times.

The evaporation pond is lacking freeboard markers that accurately measure the two foot (2') freeboard height (see pictures 2, 3, 4 and 6). Water level was well below freeboard at the time of inspection.

2. **Pond Levee:** The top of the levee shall be level, ponding of water should not occur, and the outside grade of the levee should be maintained to minimize erosion and maintain proper levee width.

The levee top was in excellent condition (see pictures 2, 3, 4 and 6). Levee sides have experienced some rill erosion (see picture 5). Terrace along levee sides seems to have brought the erosion under control. The levee will need to be monitored after precipitation events.

3. **Leak Detection System:** The top of the leak detection monitor well must be above the top of the levee. The monitor well should be covered. In addition, the leak detection monitor well shall be inspected weekly.

The evaporation pond leak detection system is in good working order.

4. **Sludge Build-up:** Any sludge build-up in the bottom of the pond in excess of twelve inches (12") will be removed and disposed of at an OCD approved disposal facility.

Sludge thickness at the bottom of the pond should be routinely measured. Koch will measure the sludge thickness on the bottom of the pond. The pond has developed an extensive algae bloom which may cause future H₂S problems or excessive sludge buildup (see picture 4).

5. **Security:** The facility shall be secured when no attendant is present, to prevent any unauthorized dumping. Securing the facility may include locks on tank valves, a

perimeter fence and locked gate or other similar security measures.

Facility has a perimeter fence and locking gate (see picture 1).

6. Signs: The facility shall have a sign in a conspicuous place at the facility. The sign shall be maintained in legible condition and shall be legible from at least fifty (50) feet and contain the following information: a) name of facility, b) location by quarter-quarter section, township and range, and c) emergency phone number.

The facility has clearly labeled sign posted within view (see picture 1).

7. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets should also be stored on an impermeable pad and curb type containment.

There were no drums or containers stored on site.

All drums and chemical containers should be clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill or ignite.

8. Process Area: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

Overall yard maintenance practices at the facility were good (see pictures 1, 2, 3, 4, 5 and 6).

9. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm so that leaks can be identified.

The berms around the above ground tanks need to be repaired and increased either in height or area to hold the appropriate volume (see picture 2 and 6). The emergency containment can be directed into the evaporation pond if so desired (see picture 3).

10. Open Top Tanks and Pits: To protect migratory birds, all tanks exceeding 16 feet in diameter, and exposed pits and ponds shall be screened, netted, covered or otherwise

rendered nonhazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoir, or in open receptacles.

The evaporation pond did not contain any oil (see pictures 3, 4 and 6). Netting is not required on the evaporation pond as long as it is kept oil free.

11. **Above Ground Saddle Tanks:** Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

There were no saddle tanks at this facility.

12. **Tank Labeling:** All tanks, drums and containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill or ignite.

The above ground tanks are not appropriately labeled as to their contents or the hazards of the contents (see pictures 2 and 6). Hazard placards are required on all above ground tanks not containing fresh water.

13. **Below Grade Tanks/Sumps:** All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing and/or visual inspection of cleaned out tanks or sumps, or other OCD approved methods.

There were no below grade sumps at any tank valves. All valve catchment barrels were above ground.

14. **Underground Process/Wastewater Lines:** All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter. Companies may propose various methods for testing such as pressure testing or other OCD approved methods.

Any underground process/wastewater lines must have a mechanical integrity testing proposal.

15. **Housekeeping:** All systems designed for spill collection/prevention should be inspected frequently to ensure proper operation and to prevent overtopping or system failure.

The facility tanks were clean with no overtopping stains (see pictures 2 and 6).

Overall yard maintenance and spill prevention/cleanup was good.

16. Trash and Potentially Hazardous Materials: All trash and potentially hazardous materials should be properly disposed of.

There was no trash at the facility.

17. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the appropriate OCD District Office.

There were no spills evident at this facility.

18. Naturally Occurring Radioactive Material (NORM): All generators submitting waste to a New Mexico Oil Conservation Division Permitted Commercial or Centralized 711 Waste Management Facility must include a Naturally Occurring Radioactive Material status declaration. The generator must declare that the waste was tested for Naturally Occurring Radioactive Material (NORM) and does not contain NORM at regulated levels pursuant to 20 NMAC 3.1 Subpart 1403.C and D.

Under the new 711 Waste Management Facility Permit waste must be accompanied with a signed NORM declaration from the waste generator.

19. Produced Water Well Locations : Produced water from all well production locations that supply water to the evaporation pond shall be listed according to name and legal location.

According to Koch's permit approval issued October 6, 1993 produced water from specific wells were permitted to be disposed of at Koch #1 evaporation pond. Additional wells may have been added with prior OCD approval. There are no requests for additional wells on file or approvals on file. Please submit all well names and locations that dispose of water at Koch #1.

20. Application Requirements for Permit Under the New Rule 711: An application, Form C-137, for a permit renewal shall be filed in DUPLICATE with the Santa Fe Office of the Division and ONE COPY with the appropriate OCD district office. The application shall comply with Division guidelines and shall include:

- (a) The names and addresses of the applicant and all principal officers of the business if different from the applicant;

Please submit with C-137 application.

- (b) A plat and topographic map 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 sources, and dwellings within one (1) mile of the site;

This is already on file with the OCD.

- (c) The names and addresses of the surface owners of the real property on which the management facility is sited and surface owners of the real property of record within one mile of the site;

This is already on file with the OCD.

- (d) A description of the facility with a diagram indicating location of fences and cattle guards, and detailed construction/installation diagrams of any pits, liner, dikes, piping, sprayers, and tanks on the facility;

This is already on file with the OCD.

- (e) A plan for management of approved wastes;

This is already on file with the OCD.

- (f) A contingency plan for reporting a cleanup of spills or releases;

Please submit an updated contingency plan that incorporates both the evaporation pond and tank separator system.

- (g) A routine inspection and maintenance plan to ensure permit compliance;

Please submit an updated inspection and maintenance plan that incorporates the evaporation pond and tank separator system.

- (h) A Hydrogen Sulfide (H₂S) Prevention and Contingency Plan to protect public health;

A Hydrogen Sulfide (H₂S) Prevention and Contingency Plan is already on file and is in the current October 6, 1993 permit.

- (i) A closure Plan including a cost estimate sufficient to close the facility to protect public health and the environment; said estimate to be based upon the use of equipment normally available to a third party contractor;

Please submit with C-137 application.

- (j) Geological/hydrological evidence, including depth to and quality of groundwater beneath the site, demonstrating that disposal of oil field wastes will not adversely impact fresh water;

This is already on file with the OCD.

- (l) Certification by an authorized representative of the applicant that information submitted in the application is true, accurate and complete to the best of the applicant's knowledge.

Please submit with C-137 application.

KOCH #1 711 FACILITY INSPECTION (PHOTOS BY OCD)



PHOTO NO. 1

DATE:06/12/97

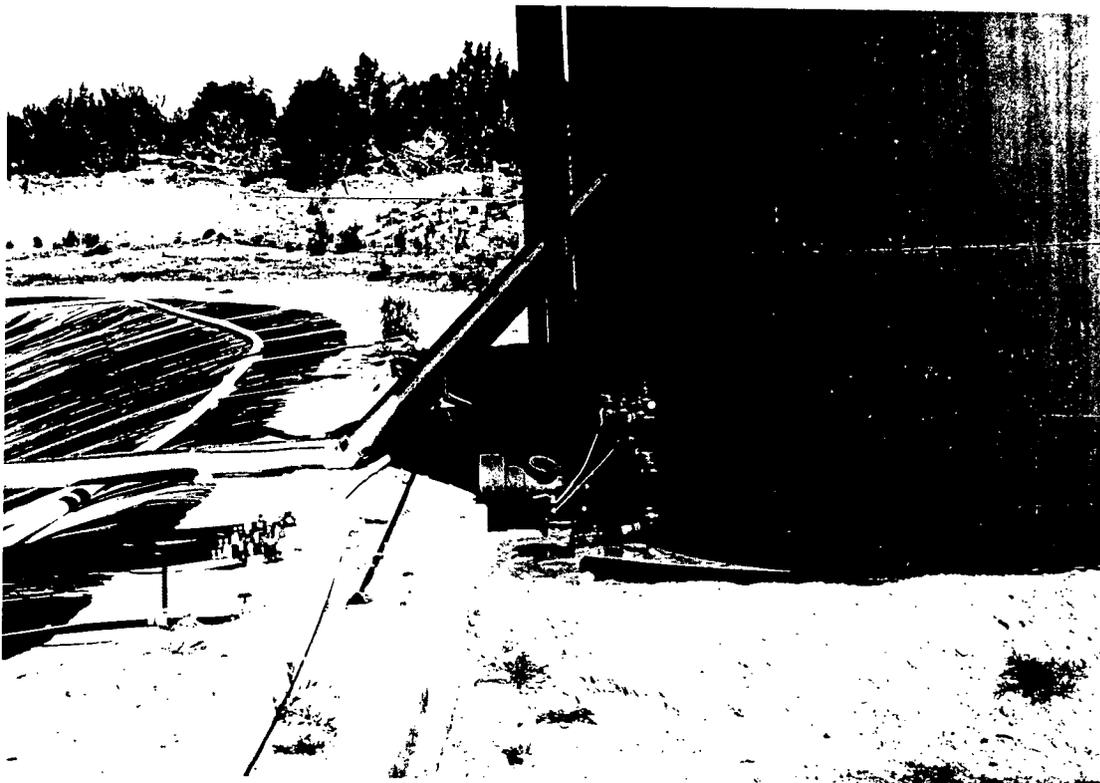


PHOTO NO. 2

DATE:06/12/97

KOCH #1 711 FACILITY INSPECTION (PHOTOS BY OCD)



PHOTO NO. 3 DATE:06/12/97



PHOTO NO. 4 DATE:06/12/97

KOCH #1 711 FACILITY INSPECTION (PHOTOS BY OCD)



PHOTO NO. 5 DATE: 06/12/97

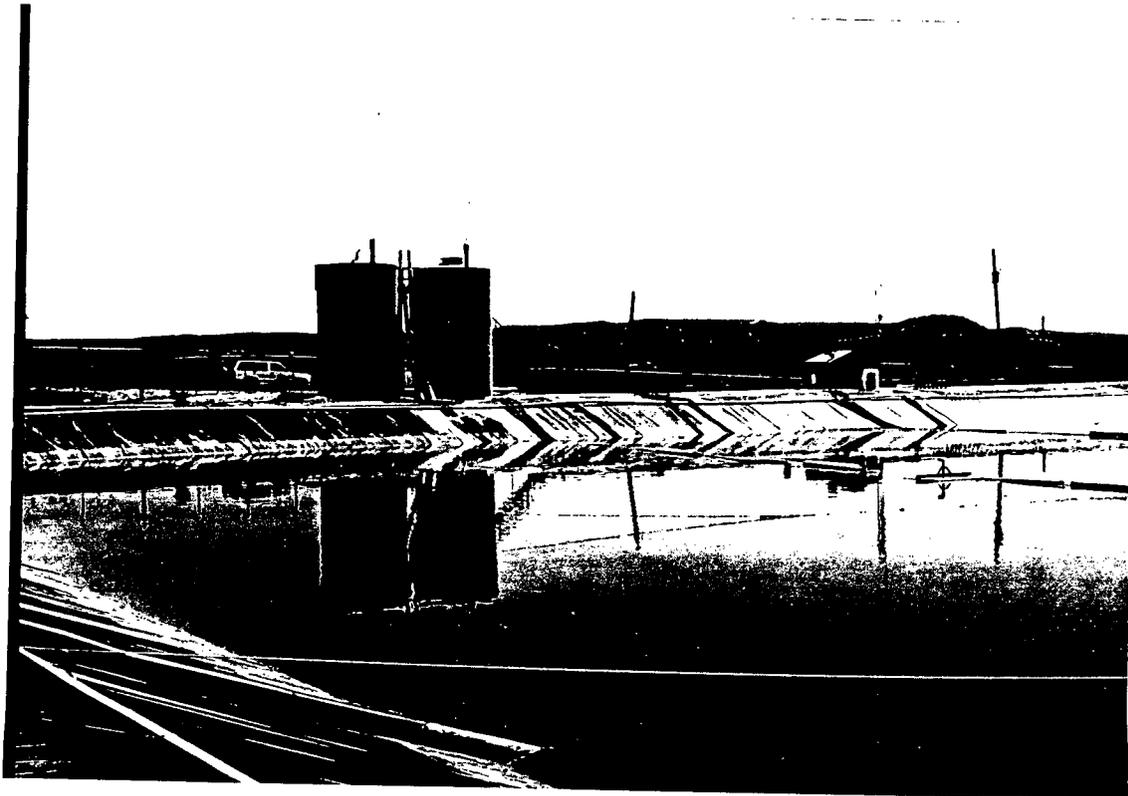


PHOTO NO. 6 DATE:06/12/97



Koch Pond #1

6/12/97

KOCH EXPLORATION CO.

KOCH EVAPORATION POND #1

NE 1/4 NW 1/4

SEC. 31, T22N, RBW-NMRM

SAN JUAN CO., N.M.

EMERGENCY:

OFFICE 505-334-9111

PAUL JOHNSON, MOBILE 305-320-0319

HL WE 505-334-3252

DAVE MOHLEY, MOBILE 505-320-0893

KEN CAGLE, MOBILE 505-320-1018

Koch Pond #1

6/12/97



Koch Pond #1

6/12/97



Koch Pond #1

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Koch Pond #1

6/12/97



Koch Pond #1

6/12/97