

**NM2 - 8**

**PERMITS,  
RENEWALS,  
& MODS**

# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

Joanna Prukop  
Cabinet Secretary  
Reese Fullerton  
Deputy Cabinet Secretary

Mark Fesmire  
Division Director  
Oil Conservation Division



March 23, 2009

Martin Nee  
EH&S Manager  
XTO Energy Inc.  
382 Road 3100  
Aztec, New Mexico 87410

**RE: Request to Transfer Permits NM-02-0008 and NM-02-0001  
To XTO Energy Inc.  
From Coronado Energy E&P Company, LLC**

Dear Mr. Nee:

The New Mexico Oil Conservation Division (OCD) has reviewed XTO Energy Inc. request, dated February 23, 2009, to transfer the above-referenced permits to XTO Energy Inc. (XTO) from Coronado Energy E&P Company, LLC. The OCD hereby approves the transfer of the following:

**Permit NM-02-0008 for Pond #1  
NE/4, NW/4, Section 31, Township 32 North, Range 8 West, NMPM,  
San Juan County, New Mexico**

**Permit NM-02-0001 for Pond #2  
SE/4, NW/4, Section 26, Township 32 North, Range 9 West, NMPM,  
San Juan County, New Mexico**


to XTO in accordance with Subsection E of 19.15.36.12 NMAC.



Please be advised that approval of this request does not relieve the XTO of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve XTO of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact Edward Hansen of my staff at (505) 476-3489 or [edwardj.hansen@state.nm.us](mailto:edwardj.hansen@state.nm.us).

Sincerely,



Wayne Price  
Bureau Chief  
Environmental Bureau

WP:EJH:ejh

cc: OCD District III Office, Aztec  
John H. Benton, Coronado Energy E&P Company, 1099 18<sup>th</sup> St., Suite 1900, Denver, CO  
80128



February 23, 2009

Brad Jones  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505

Regarding: Permit No.'s NM-02-0008 & NM-02-0001

Dear Mr. Jones,

Pursuant to NMAC 19.15.36.12 (E), XTO Energy Inc. (XTO) herein requests approval to transfer the permits for the centralized waste management facility evaporation ponds listed below. Upon your approval, XTO will submit the necessary financial assurance and begin operating them March 1, 2009. XTO purchased the properties from El Paso Exploration and Production Company on January 30, 2009. XTO is a publicly traded company with no officers or directors owning twenty five percent or more of the shares.

Described below are the pond permit numbers and their respective locations.

Pond #1

Permit No. NM-02-0008

NE/4 of NW/4 of Sec 31, T-32N, R-8W, Lat 36° 36' 50", Long 107° 43' 00"

Pond #2

Permit No. NM-02-0001

SE/4 of NW/4 of Sec 26, T-32N, R-9W, Lat 36° 57' 27", Long 107° 45' 10"

Through the normal course of operations, please feel free to contact me with any request that might arise regarding these permits. I can be reached by phone at (505) 333-3100 or by e-mail at martin\_nec@xtoenergy.com.

In the event of an emergency, please contact Lyndon Harrison in our Durango, Colorado Field Office at (970) 247-7708 or (970) 749-9316. This local field office will be responsible for the day-to-day operations of the ponds and record keeping.

XTO appreciates your consideration of this request regarding the above mentioned permits. Should you require any further information feel free to contact me at the number given above.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Martin Nec', with a long horizontal flourish extending to the right.

Martin Nec  
EH&S Manager  
XTO Energy Inc.  
San Juan Division

Cc: Kim Champlin, XTO  
File

## TRANSFER OF PERMIT

### FACILITY INFORMATION:

**Surface Waste Management Facility Permit(s):** NM-02-001 and NM-2-008

**Legal Description:** Section 31, Township 32 North, Range 8 West, NMPM, and  
Section 26, Township 32 North, Range 9 West, NMPM

**Location:** San Juan County, New Mexico

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RECEIVED

**From:** Company Name: Peoples Energy Production – TX, L.P.  
Company Address: 909 Fannin Street, Suite 1300  
Houston, Texas 77010

**To:** Company Name: Coronado Energy E&P Company, LLC  
Company Address: 1099 18<sup>th</sup> Street, Suite 1900  
Denver, CO 80128

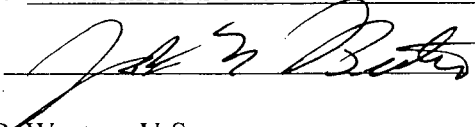
### CERTIFICATION:

Coronado Energy E&P Company, LLC, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coronado Energy E&P Company, LLC further acknowledges that the Division for good cause shown as necessary to protect fresh water, human health, and the environment may change such terms and conditions administratively. The undersigned also attests to the fact that he or she understands 19.15.1.41 NMAC which states "Any person who conducts any activity pursuant to a permit, administrative order or other written authorization or approval from the division shall comply with every term, condition and provision of such permit, administrative order, authorization or approval."

Accepted:

Coronado Energy E&P Company, LLC

Print Name: John H. Benton

Signature: 

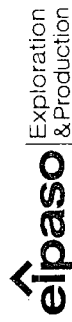
Title: VP, Western U.S.

Mailing Address: 1099 18<sup>th</sup> Street, Suite 1900, Denver, CO 80202

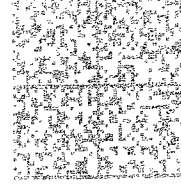
Contact Telephone Number: 303.291.6400

Date: 9/17/08

Permit #: NM-02-001 and NM-2-008



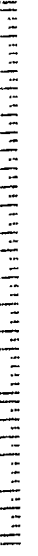
El Paso E&P Company, L.P.  
1099 18<sup>th</sup> Street, Suite 1900, Denver, Colorado 80202



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Brad A Jones  
Environmental Bureau  
NM Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

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# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera  
Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

March 27, 2002

**CERTIFIED MAIL**

**RETURN RECEIPT NO. 7001-1940-0004-7923-3941**

Mr. Lance Harmon  
Koch Exploration Company, LLC  
P.O. Box 2256  
Wichita, KS 67201

**RE: Transfer of Centralized Surface Waste Management Facility Permits NM-02-0001 and NM-02-0008 from Koch Exploration Company to Koch Exploration Company, LLC SE/4 NW/4 Section 26, Township 32 North, Range 9 West, NMPM, and NE/4 NW/4 Section 31, Township 32 North, Range 8 West, NMPM, San Juan County, New Mexico**

Dear Mr. Harmon:

The New Mexico Oil Conservation Division (OCD) has received a request from Koch Exploration Company, LLC dated January 17, 2002 to transfer ownership of the Koch Exploration Company surface waste management facilities referenced above to Koch Exploration Company, LLC. The request is **hereby approved** in accordance with OCD Rule 711.

Please note that the OCD has received and approved the replacement financial assurance from Koch Exploration Company, LLC. Please refer to the OCD letter to Koch Exploration Company, LLC dated March 20, 2002 regarding financial assurance.

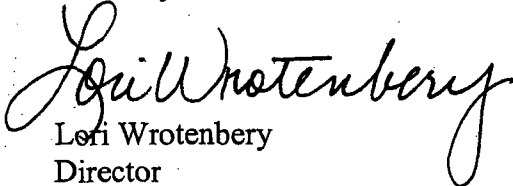
All modifications and alternatives to the approved disposal methods must receive prior OCD approval. Koch Exploration Company, LLC is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this transfer does not relieve Koch Exploration Company, LLC of liability should their operation result in pollution of surface waters, ground water or the environment. In addition, OCD approval does not relieve Koch Exploration Company, LLC of responsibility for compliance with other federal, state or local laws and/or regulations.

Mr. Lance Harmon  
Koch Exploration Company, LLC  
March 27, 2002  
Page 2

If there are any questions, please contact Martyne Kieling at (505) 476-3488.

Sincerely,

A handwritten signature in cursive script, reading "Lori Wrotenbery". The signature is written in dark ink and is positioned to the left of the printed name and title.

Lori Wrotenbery  
Director

LW/mjk

xc: Aztec OCD Office  
Donald L. Johnson, Koch Exploration Company, LLC, P.O. Box 489, Aztec, NM 87410





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Jennifer A. Salisbury**

Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil Conservation Division**

September 15, 2000

**CERTIFIED MAIL**

**RETURN RECEIPT NO. 7099-3220-0000-5051-1088**

Mr. Stan Bennett  
Koch Exploration Company  
P.O. Box 1478  
Houston, TX 77251-9970

**RE:   OCD Rule 711 Permit Approval NM-02-0008**  
**Koch Exploration Company,**  
**Centralized Evaporation Pond # 1**  
**NE/4 NW/4 Section 31, Township 32 North, Range 8 West, NMPM,**  
**San Juan County, New Mexico.**

Dear Mr. Bennett:

The permit application for the Koch Exploration Company (Koch) centralized surface waste management facility located in NE/4 NW/4 Section 31, Township 32 North, Range 8 West, NMPM, San Juan County, New Mexico **is hereby approved** in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. A \$50,000 blanket bond, Surety Bond No. 400JZ6303, has been submitted by Koch and approved by the Director. The application consists of the permit application Form C-137 dated July 27, 1998, inspection report response letter dated July 23, 1998, and materials already on file with the OCD.

The operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved evaporation methods must receive prior OCD approval. Koch is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve Koch of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Koch of responsibility for compliance with other federal, state or local laws and/or regulations.

Mr. Stan Bennett  
September 15, 2000  
Page 2

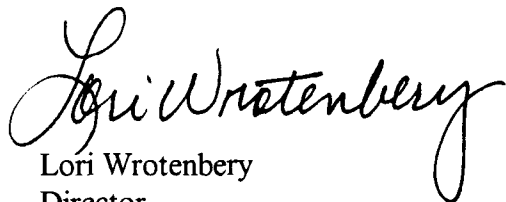
Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered non-hazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

The facility is subject to periodic inspections by the OCD. The conditions of this permit will be reviewed by the OCD no later than five (5) years from the date of this approval and the facility will be inspected at least once a year.

Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.**

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

Sincerely,



Lori Wrotenbery  
Director

LW/mjk

xc with attachments:

Aztec OCD Office  
Donald Johnson, Koch Exploration Company

**ATTACHMENT TO OCD PERMIT APPROVAL**  
**Permit NM-02-0008**  
**KOCH EXPLORATION COMPANY**  
**CENTRALIZED WASTE MANAGEMENT FACILITY**  
**NE/4 NW/4 Section 31, Township 32 North, Range 8 West, NMPM,**  
**San Juan County, New Mexico.**  
**(September 15, 2000)**

**EVAPORATION POND OPERATION**

1. The facility must be fenced and have a sign at the entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.
2. The pond must have a minimum freeboard of two feet (2'). A liner marking or other device must be installed in the pond to accurately measure freeboard.
3. Pond inspection and maintenance must be conducted on a weekly basis or immediately following a consequential rainstorm or windstorm. If any defect is noted repairs must be made as soon as possible. If the defect will jeopardize the integrity of the pond additional wastes may not be placed into the pond until repairs have been completed. Records of such inspections must be made available to the OCD upon request.
4. The outside walls of all levees must be maintained in such a manner to prevent erosion. Inspection of the outside walls of the levees must be made weekly.
5. The spray evaporation system will be operated such that all spray remains within the confines of the lined portion of the pond. An anemometer with automatic shutdown must be installed and utilized such that the spray system will not operate when winds, sustained or in gusts, cause windborn drift to leave the confines of the pond.
6. The pond leak detection system sumps must be inspected weekly. Results must be recorded and maintained at the facility for OCD review. If fluids are found in the sump, the following steps must be undertaken:
  - a. the operator must notify the Aztec office within 24 hours;
  - b. the fluids must be sampled and analyzed and a comparison made to the fluids in the pond to determine the source; and
  - c. the fluids must be immediately and continuously removed from the sump. Such fluids may be returned to the pond.

7. If a leak is determined to exist in the primary liner, the operator will immediately undertake the following measures under the direction of the OCD:
  - a. introduction of fluids into the pond must cease;
  - b. enhanced evaporation must commence, provided atmospheric conditions are such that the spray system can be operated in accordance with the provisions of this permit;
  - c. fluids must be removed from the pond using evaporation, injection or transportation to another authorized facility until the fluid level is below the location of the leak in the liner; and
  - d. the liner must be repaired and tested and the leak detection system must be completely drained before introduction of fluids into the pond resumes.
8. Sludge thickness in the base of the pond must be measured annually. Any sludge build-up in the bottom of the pond in excess of twelve inches (12") must be removed and disposed of at an OCD-approved waste management facility.
9. All new or replacement above ground tanks located at the facility and containing materials other than fresh water must be placed on an impermeable pad and be bermed so that the containment area will hold one and one-third the volume of the largest tank or all interconnected tanks whichever is greater. All existing tanks must be labeled as to contents and hazards and must be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks whichever is greater.
10. Below grade sumps must be cleaned and visually inspected annually. Results must be recorded and maintained for OCD review. If sump integrity has failed the OCD must be notified within 48 hours of discovery and the sump and contaminated soils must be removed and disposed of at an OCD-approved waste management facility. Soil remediation must follow OCD surface impoundment closure guidelines. Koch must submit a report to the OCD Santa Fe and Aztec District offices that describes the investigation and remedial actions taken.
11. The produced water receiving and treatment area must be inspected weekly for tank, piping and berm integrity.
12. To protect migratory birds, all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered nonhazardous to migratory birds.

13. Liquid reduction technologies that may be used to eliminate pond waters include evaporation, enhanced evaporation and injection.
14. Tests to determine dissolved oxygen levels in the pond must be conducted on a weekly basis. Test results must be recorded and retained. The sample for each test must be taken one foot from the bottom of the pond and the location of each test must vary around the pond. The OCD Aztec Office will be notified immediately if any test shows a dissolved residual oxygen level of less than 0.5 ppm.
15. Tests of ambient H<sub>2</sub>S levels must be conducted on a weekly basis. Test results must be recorded and retained. The tests must be conducted at four (4) locations around the pond at the top of the berm. The wind speed and direction must be recorded in conjunction with each test.
  - a. If an H<sub>2</sub>S reading of 1.0 ppm or greater is obtained:
    - i. a second reading must be taken on the downwind berm within one hour;
    - ii. the dissolved oxygen and dissolved sulfide levels of the pond must be tested immediately and the need for immediate treatment determined; and
    - iii. tests for H<sub>2</sub>S levels must be made at the fence line down wind from the problem pond.
  - b. If two (2) consecutive H<sub>2</sub>S readings of 1.0 ppm or greater are obtained:
    - i. the operator must notify the Aztec office of the OCD immediately;
    - ii. the operator must commence hourly monitoring on a 24-hour basis; and
    - iii. the operator must obtain a daily analysis of dissolved sulfides in the pond.
  - c. If an H<sub>2</sub>S reading of 10.0 ppm or greater at the facility fence line is obtained:
    - i. the operator must immediately notify the Aztec office of the OCD and the following public safety agencies:

New Mexico State Police  
San Juan County Sheriff  
San Juan County Fire Marshall; and
    - ii. the operator must initiate notification of all persons residing within one-half

(½) mile of the fence line and assist public safety officials with evacuation as requested.

### **WASTE ACCEPTANCE CRITERIA**

1. The facility is authorized to accept only produced waters that are generated in the State of New Mexico by Koch Exploration Company.
2. The facility is authorized to accept only produced waters that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.
3. At no time may any OCD-permitted surface waste management facility accept wastes that are determined to be RCRA Subtitle C hazardous wastes by either listing or characteristic testing.
4. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.
5. No produced water may be received at the facility from motor vehicles unless the transporter has a valid Form C-133, "Authorization to Move Produced Water," on file with the Division.
6. Comprehensive records of all material disposed of at the surface waste management facility must be maintained by the permit holder.

### **REPORTING AND RECORD KEEPING**

1. Results of weekly inspections of the pond and its leak detection system and the produced water receiving and treatment area must be recorded and maintained for OCD review
2. Results of testing of the evaporation pond for H<sub>2</sub>S, dissolved sulfides and dissolved oxygen must be recorded and maintained for OCD review.
3. Results of annual maintenance on below grade sumps and annual measurements of sludge thickness in the pond must be recorded and maintained for OCD review.
4. The applicant must notify the **OCD Aztec office within 24 hours** of any fire, break, leak, spill, blow out, or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

5. The applicant must file forms C-117, C-118, and C-120 with the appropriate OCD office.
6. All records of testing and monitoring must be retained for a period of five (5) years.
7. The OCD must be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.

### **FINANCIAL ASSURANCE**

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Koch Exploration Company in the amount of **\$25,000** for this facility or **\$50,000** for statewide financial assurance.
2. Financial assurance must be submitted within thirty (30) days of this permit approval or on **October 15, 2000**.
3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility may be reviewed by the OCD no later than five (5) years from the date of this approval.

### **CLOSURE**

1. The OCD Santa Fe and Aztec offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility, a closure plan must be submitted to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.
2. The closure plan to be submitted must include the following procedures:
  - a. When the facility is to be closed no new material will be accepted.
  - b. The soils beneath the evaporation pond and liquids receiving and treatment area will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.
  - c. Contaminated soils exceeding OCD closure standards for the site will be removed or remediated.

- d. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, and fences for future alternative uses the structures may be left in place.
- e. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

### **CERTIFICATION**

Koch Exploration Company, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Koch Exploration Company further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect ground water, surface water, human health and the environment.

Accepted:

KOCH EXPLORATION COMPANY

Signature  Title **G. Stanley Bennett**  
**Attorney-in-Fact** Date 9/22/2000





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



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

October 6, 1993

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-242-012**

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

**RE:   OCD RULE 711 PERMIT APPROVAL  
      CENTRALIZED KOCH POND NO. 1  
      SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Scates:

The permit application for the Koch Exploration Company, Centralized Disposal Facility located in the NE/4 NW/4, Section 31, Township 32 North, Range 8 West, NMPM, San Juan County, New Mexico, is hereby approved in accordance with the Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. The application consists of the original application dated August 19, 1993.

The operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved disposal methods must receive prior OCD approval. You are required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility does not relieve you of liability should your operation result in actual pollution of surface or ground waters or the environment actionable under other laws and/or regulations. In addition, the OCD approval does not relieve you of liability for compliance with any other laws and/or regulations.

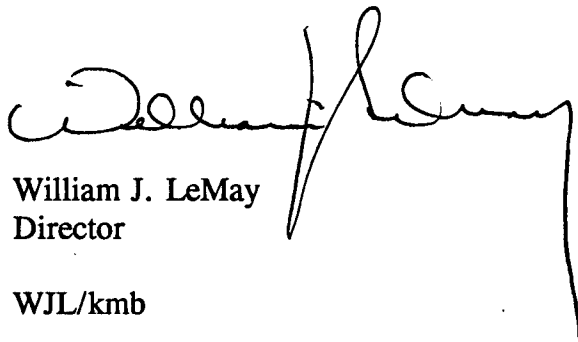
Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered nonhazardous to migratory birds.

Mr. Michael Scates  
October 6, 1993  
Page 2

This permit approval is for a period of five (5) years. This approval will expire on October 6, 1998 and you should submit an application for renewal in ample time before that date. The Division shall have the authority to administratively change this permit to protect fresh water, human health and the environment.

If you have any questions, please do not hesitate to contact Kathy Brown at (505) 827-5884.

Sincerely,

A handwritten signature in black ink, appearing to read 'William J. LeMay', with a long horizontal stroke extending to the right.

William J. LeMay  
Director

WJL/kmb

Attachment

xc: Denny Foust, OCD Aztec Office  
Don Ellsworth, BLM Farmington

**ATTACHMENT TO OCD 711 PERMIT APPROVAL  
KOCH EXPLORATION COMPANY  
CENTRALIZED POND NO. 1 DISPOSAL FACILITY  
(October 6, 1993)**

**FACILITY DESIGN & CONSTRUCTION**

1. The pond will be constructed so that the inside grade of the levee is no steeper than 2:1 and the outside grade of the levee is no steeper than 3:1. The top of the levee will be at least eighteen inches (18") wide.
2. Liner markings or some other device will be installed to accurately measure freeboard.
3. The evaporation pond will be lined with synthetic materials consisting of an impermeable 30 mil membrane (XR-5) for the primary liner and a 30 mil PVC membrane for the secondary liner. No substitution of different materials will be made without prior approval of the Division.
4. Leak Detection:
  - a. A leak detection system of an approved design will be installed between the primary and secondary liner. The OCD will be notified at least 48 hours in advance of the scheduled installation of the primary liner to afford the opportunity for a Division representative to inspect the leak detection system.
  - b. A network of slotted or perforated drainage pipes will be installed between the primary and secondary liners. The main collector pipes will be not less than two inch (2") diameter and the laterals will be not less than one inch (1") diameter pipe. The network will be of sufficient density so that no point in the pond bed is more than twenty feet (20') from such drainage pipe or lateral thereof.
  - c. The material placed between the pipes and laterals will be sufficiently permeable to allow transport of the fluids to the drainage pipe. The slope for all drainage lines and laterals will be at least six inches (6") per fifty feet (50'). The slope of the pond bed will also conform to these values to assure fluid flow towards the leak detection system. The drainage pipe will convey any fluids to a corrosion-proof sump located outside the perimeter of the pond.
5. Preparation of Pond Bed for Installation of Liners:
  - a. The bed of the pond and inside grade of the levee will be smooth and compacted, free of holes, rocks, stumps, clods, or any other debris which may rupture the liner. If necessary to prevent rocks from damaging the liner, the pond bed will be covered with a compacted layer of sand or other suitable materials.

- b. A trench will be excavated on the top of the levee the entire perimeter of the pond for the purpose of anchoring flexible liners. This trench will be located a minimum of nine inches (9") from the slope break and will be a minimum of twelve inches (12") deep.
  - c. The liner will rest smoothly on the pond bed and the inner face of the levees, and will be of sufficient size to extend down to the bottom of the anchor trench and come back out a minimum of two inches (2") from the trench on the side furthest from the pond. Wrinkles or folds will be placed at each corner of the pond in accordance with manufacturer's specifications to allow for contraction and expansion of the membrane due to temperature variations. The liner will be properly vented.
  - d. An anchor of used pipe or other similar material will be placed over the liner in the anchor trench and the trench back-filled. The anchor trench will extend the entire perimeter of the pond.
  - e. The geotextile membrane layers placed on top of the secondary liner will be done in such a manner that the risk of tearing the liner is minimized.
  - f. Fluid discharge points into the pond will be constructed so that no fluid force is directed toward the liner.
- 6. Upon completion of construction of the pond, "as-built" completion diagrams certified by a registered engineer will be submitted and approved by the Division prior to commencement of operations.
  - 7. A fence will be constructed and maintained around the perimeter of the facility so as to prevent livestock and people from entering the facility area. The fence will not be constructed on the levee and adequate space will be provided between the fence and levee for passage of maintenance vehicles.
  - 8. A sign will be posted on the fence at the entrance to the facility. The sign will be legible from at least fifty (50) feet and contain the following information: a) name of the facility, b) location by quarter-quarter section, township and range, and c) emergency phone numbers.
  - 9. Above ground tanks which contain materials other than fresh water will be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks.
  - 10. All below grade tanks and sumps will be constructed with secondary containment and leak detection.

FACILITY OPERATIONS

1. The facility will be inspected a minimum of one time per week. The facility will be secured when no attendant is present.
2. Only produced water from the Koch Gardner 2C, 3C, 4C, and 6C wells will be disposed of at the facility. Water from any other Koch owned wells may only be accepted after prior OCD approval.
3. No produced water will be received at the facility unless the transporter has a valid Form C-133 (Authorization to Move Produced Water) on file with the Division.
4. All produced water will be unloaded (piped or trucked) into tanks and the oil removed prior to disposal into the pond. Oil recovered will be stored in closed storage tanks or drums and then transferred to an OCD approved oil reclamation facility. Per Division General Rule 310, oil shall not be stored or retained in earthen reservoirs or in open receptacles. Any oil which is accidentally discharged into the pond will be removed within twenty-four (24) hours.
5. The pond will have a minimum freeboard of two (2) feet. If overtopping occurs at any time, the freeboard will be increased to prevent a reoccurrence.
6. The spray evaporation system will be operated such that all spray remains within the confines of the lined portion of the pond. An anemometer with automatic shutdown will be installed and utilized such that the spray system will not operate when winds, sustained or in gusts, cause windborn drift to leave the confines of the pond berm.
7. 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.
8. The leak detection monitor well for the evaporation pond will be inspected a minimum of weekly or when an attendant inspects the facility. Records of such inspections will be made and kept on file for two (2) years from the date of record. If fluids are found in the sump the following steps will be immediately undertaken:
  - a. The operator will notify the OCD Aztec Office within twenty-four (24) hours of discovery.
  - b. The fluids will be sampled and analyzed to determine the source.

- c. The fluids will be immediately and continuously removed from the sump. Such fluids may be returned to the pond.
- 9. If a leak is determined to exist in the primary liner, the operator will immediately undertake the following contingency measures under the direction of the OCD:
  - a. Introduction of fluids into the pond will cease.
  - b. Enhanced evaporation will commence, provided atmosphere conditions are such that the spray systems can be operated in accordance with the provisions of this permit.
  - c. Fluids will be removed from the pond utilizing evaporation and transportation to another authorized facility, until the fluid level is below the location of the leak in the liner.
  - d. The liner will be repaired and tested and the leak detection system will be completely drained before resuming introduction of fluids into the pond.
- 10. The outside walls of all levees will be maintained in such a manner to prevent erosion. Inspections of the outside walls of the levees will be made weekly and after any rainfall of consequence.

#### H2S PREVENTION & CONTINGENCY PLAN

- 1. Tests will be conducted and records made to determine the dissolved oxygen levels in the pond. The sample for each test will be taken one foot from the bottom of the pond and the location of each test will vary around the pond. Tests will be conducted monthly. The OCD Aztec Office will be notified immediately if any test shows a dissolved residual oxygen level of less than 0.5 ppm.
- 2. Tests of ambient H2S levels will be conducted and records made. Such tests will be made at varying locations around the pond levee. Tests will be conducted a minimum of one time per week or when an attendant inspects the facility. The wind speed and direction will be recorded in conjunction with each test.
- 3. If an H2S reading of 0.1 ppm or greater is obtained:
  - a. A second reading will be taken on the down wind berm within one hour.

- b. The dissolved oxygen and dissolved sulfide levels of the pond will be tested immediately and the need for immediate treatment determined.
  - c. Tests for H<sub>2</sub>S levels will be made at the fence line, downwind from the pond.
4. If two consecutive H<sub>2</sub>S readings of 0.1 ppm or greater are obtained:
- a. The operator will notify the OCD Aztec Office immediately.
  - b. The operator will commence hourly monitoring on a 24-hour basis.
  - c. The operator will obtain daily analysis of dissolved sulfides in the pond.
  - d. The operator will implement the approved treatment plan so as to reduce dissolved sulfides in the pond and eliminate H<sub>2</sub>S emissions.
5. If an H<sub>2</sub>S reading of 10.0 ppm or greater at the facility fence line is obtained:
- a. The operator will immediately notify the OCD Aztec and Santa Fe Offices and the following public safety agencies:
    - State Police
    - County Sheriff
    - County Fire Marshall
  - b. The operator will initiate notification of all persons residing within one-half (1/2) mile of the fence line and assist public safety officials with evacuation as requested.

NOTE\* Requirements for H<sub>2</sub>S monitoring and treatment may be administratively modified by the OCD based upon actual operating experiences.

#### RECORDS & REPORTING

- 1. The operator will keep and make available for inspection all H<sub>2</sub>S monitoring and treatment records. Such records will be maintained for a period of two years from the date of reading. Zero H<sub>2</sub>S reading do not need to be reported to the OCD. If H<sub>2</sub>S is observed at any time, the OCD may require submittal of all subsequent H<sub>2</sub>S readings.

2. The operator will keep and make available for inspection all leak detection monitoring records. Such records will be maintained for a period of two years from the date of reading.
3. The operator will file forms C-117-A, C-118, and C-120-A with the Santa Fe District Office as required by OCD Rules 1118 and 1120.
4. The OCD will be notified of any break, spill, blow out, or fire or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

#### CLOSURE

1. The OCD will be notified when operation of the facility is discontinued for a period in excess of six (6) months or when the facility is to be dismantled.
2. When the facility is to be closed, no new material will be accepted. The operator will provide for removal of all fluids and/or wastes, closure of all pits and ponds, and cleanup of any contaminated soils and/or waters pursuant to OCD approval. The area will be reseeded with natural grasses and allowed to return to its natural state.
3. Closure and waste disposal will be in accordance with the statues, rules and regulations in effect at the time of closure.