

**NM2 - 3**

**PERMITS,  
RENEWALS,  
& MODS**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor  
Betty Rivera  
Cabinet Secretary

March 27, 2002

Lori Wrotenberg

Director  
Oil Conservation Division

**CERTIFIED MAIL**

**RETURN RECEIPT NO. 7001-1940-0004-7923-3927**

Mr. Buddy Shaw  
BP America Production Company  
200 Amoco Court  
Farmington, NM 87401

**RE: Transfer of Centralized Surface Waste Management Facility Permits NM-02-0002, NM-02-0003, NM-02-0007, and NM-02-0011 from Amoco Production Company to BP America Production Company  
SW/4, Section 28, Township 32 North, Range 10 West, NMPM,  
SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,  
NW/4 of Section 33, Township 32 North, Range 10 West, NMPM, and  
E/2 NW/4 of Section 4, Township 29 North, Range 8 West, NMPM,  
San Juan County, New Mexico**

Dear Mr. Shaw:

The New Mexico Oil Conservation Division (OCD) has received a request from BP America Production Company dated December 31, 2001 to transfer ownership of the Amoco Production Company surface waste management facilities referenced above to BP America Production Company. 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 BP America Production Company. Please refer to the OCD letter to BP America Production Company dated February 20, 2002 regarding financial assurance.

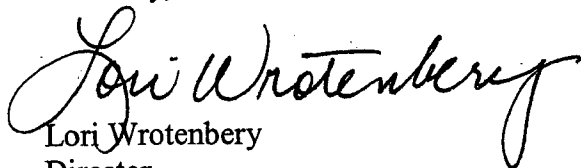
All modifications and alternatives to the approved disposal methods must receive prior OCD approval. BP America Production Company is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

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

Mr. Buddy Shaw  
BP America Production Company  
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 that reads "Lori Wrotenberg". The signature is fluid and extends across the width of the name.

Lori Wrotenberg  
Director

LW/mjk

xc: Aztec OCD Office

**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. 12707  
ORDER NO. R-11660**

**APPLICATION OF BP/AMOCO PRODUCTION COMPANY FOR PERMIT  
MODIFICATION AND AN EXEMPTION TO CERTAIN PROVISIONS OF OIL  
CONSERVATION DIVISION RULE 711, SAN JUAN COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on August 23, 2001, at Santa Fe, New Mexico before Examiner Michael E. Stogner.

NOW, on this 20th day of September, 2001, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

**FINDS THAT:**

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, BP/Amoco Production Company ("BP/Amoco"), seeks modification of New Mexico Oil Conservation Division ("Division or OCD") Rule 711 Permit Approval NM-02-0003 for the BP Crouch Mesa Centralized Waste Management Facility, located in the SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, and an exemption from the provisions of Division Rule 711 to permit it to accept wastes generated outside New Mexico at this centralized surface waste management facility.

(3) The Crouch Mesa Centralized Waste Management Facility was approved by the Division, subject to certain conditions, pursuant to the provisions of Rule 711 by OCD Rule 711 Permit Approval NM-02-0003, dated November 30, 1998.

(4) Pursuant to this approval, BP/Amoco is authorized to accept exempt and "non-hazardous" non-exempt oil field wastes that are generated in the State of New Mexico by Amoco Production Company.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of BP/Amoco Production Company ("BP/Amoco") for an exemption from the provisions of Division Rule 711 and modification of OCD Rule 711 Permit Approval NM-02-0003, dated November 30, 1998, for the BP Crouch Mesa Centralized Waste Management Facility, located in the SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, is hereby approved. This approval shall allow the BP/Amoco Crouch Mesa Centralized Management Facility to accept wastes generated outside the state of New Mexico at the Red Mesa Pump Station located in the State of Utah, and the Tonalea Pump Station and the Cameron Pump Station located in the State of Arizona, which are parts of the former Line 90 crude oil pipeline.

(2) All other provisions of Division Rule 711 and OCD Rule 711 Permit Approval NM 02-0003 shall remain in full force and effect.

(3) Jurisdiction of this case 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.



SEAL

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
LORI WROTENBERY  
Director

6. BP Amoco seeks authorization to bring to this facility for remediation crude oil contaminated soils from five former BP Amoco crude oil pump stations which

are part of former Line 90 crude oil pipeline that runs from New Mexico to California. Two of these crude oil pump stations are located in New Mexico, two are located in Arizona and one is located in Utah.

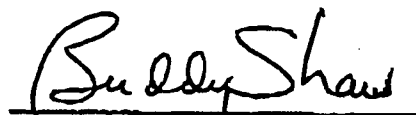
7. The pipeline has been sold to Questar Southern Trails Pipeline Company and is now being converted to a natural gas pipeline.

8. BP Amoco's remediation efforts at these five sites are being overseen by The Navajo EPA and by the Oil Conservation Division for the two sites in New Mexico.


9. BP Amoco has fully complied with all requirements of OCD Permit Approval NM-02-0003.

10. BP Amoco has complied with the requirements of Rule 711 including the Financial Assurance Requirements of Rule 711(3).

FURTHER AFFIANT SAYETH NOT.

  
Buddy Shaw

SUBSCRIBED AND SWORN before me on this 22 day of August, 2001.

  
State of New Mexico  
San Juan County  
My Commission Expires:  
6-16-2005

  
Notary Public



Facsimile Transmission  
10 7 77 G 13 03

Date: 07/07/98 Time Sent: 12:15  
This transmission consists of: 8 pages

TO	Colin W U.S. Corp.	FROM	Brian J. Shaw BP
	FAX Number (760) 505-1013 FAX Operator's Number for Confirmation		FAX Teletype Number (505) 344-4444 Voice Telephone Number



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 G. PACIFIC  
SANTA FE, NEW MEXICO 87305  
(505) 827-7131

November 30, 1998

141 G. 25

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-326-936-499**

Mr. Buddy Shaw  
Amoco Production Company  
200 Amoco Court  
Farmington, New Mexico 87401

**RE: OCD Rule 711 Permit Approval NM-02-0003**  
**Amoco Production Company**  
**Crouch Mesa Centralized Surface Waste Management Facility**  
**SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,**  
**San Juan County, New Mexico.**

Dear Mr. Shaw:

The permit application for the Amoco Production Company (Amoco) centralized surface waste management facility located in the SW/4 SE/4 of Section 2, Township 29 North, Range 12 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. This permit approval is conditional upon the receipt and approval by the Director of financial assurance in the amount of \$25,000 for this facility or a \$50,000 blanket bond for all of Amoco's centralized surface waste management facilities. A \$50,000 blanket bond #365133 has been submitted by Amoco and approved by the Director. The application consists of the permit application Form C-137 dated March 27, 1998 and materials from the original permit application already on file with the OCD.

The construction, operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved landfarming methods must receive prior OCD approval. Amoco 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 Amoco Production Company of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Amoco Production Company of responsibility for compliance with other federal, state or local 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 non-hazardous to migratory birds. In



Mr. Buddy Shaw  
Page 2  
November 30, 1998


addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs, or open receptacles.

The Amoco Crouch Mesa Centralized Surface Waste Management Facility Permit NM-02-0003 will be reviewed at least once every five (5) years from the date of this approval letter. The facility is subject to periodic inspections by the OCD.

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,

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

Lori Wrotenbery  
Director

LW/mjk

xc with attachments:  
Aztec OCD Office

**ATTACHMENT TO OCD 711 PERMIT APPROVAL**  
**PERMIT NM-02-003**  
**AMOCO PRODUCTION COMPANY**  
**SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,**  
**San Juan County, New Mexico**  
**(November 25, 1998)**

**LANDFARM AND COMPOST CONSTRUCTION**

1. The facility will be fenced and have a sign at the entrance. The sign will 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. Contaminated soils will not be placed within one hundred (100) feet of the boundary of the facility.
3. Contaminated soils will not be placed within twenty (20) feet of any pipeline crossing the landfarm/compost facility. In addition, no equipment will be operated within ten (10) feet of a pipeline. All pipelines crossing the facility will have surface markers identifying the location of the pipelines.
4. The portion of the facility containing contaminated soils will be bermed to prevent runoff and runoff. A perimeter berm no less than four (4) feet above grade will be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells will be contained with three (3) foot berms and individual compost piles or landfarms within each cell will be contained within two (2) foot berms.
5. All above ground tanks located at the facility and containing materials other than fresh water will be labeled as to contents and hazards and will be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks.

**LANDFARM AND COMPOST OPERATION**

1. Disposal will occur only when an attendant is on duty. The facility will be secured when no attendant is present.
2. All contaminated soils received at the facility for land farming will be spread and disked within 72 hours of receipt.
3. Soils to be landfarmed will be spread on the surface in lifts of six inches or less.
4. Soils to be landfarmed will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
5. All contaminated soils received at the facility for composting will be placed into compost piles or cells within 72 hours of receipt. Individual compost piles or cells will be labeled. Weekly temperature measurements will be taken on each compost cell, recorded, and maintained for OCD review. Compost piles will be turned as necessary to enhance biodegradation.

6. Exempt contaminated soils will be placed in the landfarm and compost facility so that they are physically separate (i.e., bermed) from non-exempt contaminated soils. There will be no mixing of exempt and non-exempt soils.
7. Successive lifts of contaminated soils will not be spread on the landfarm or compost facility until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 100 ppm and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility for OCD review.
8. Prior to removal of remediated soils from the facility, the soils will be tested for TPH, BTEX and benzene content. The remediated soils may only be moved to another location when the level of TPH in the remediated soil is less than 100 ppm, BTEX is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses, destination and volume of remediated soils removed from the facility will be maintained at the facility for OCD review. Authorization from the OCD Santa Fe office will be obtained prior to removal of the remediated soils to sensitive areas.  
  
Amoco may request alternate remediation levels for soils to be used or deposited at a location if remediation standards described in the OCD surface impoundment closure guidelines are met. Alternate remediation levels shall be subject to approval on a case-by-case basis. Requests shall be submitted to the Santa Fe OCD office for review.
9. Moisture will be added as necessary to enhance bio-remediation and to control blowing dust. There will be no ponding, pooling or run-off of water allowed. Any ponding of precipitation will be removed within twenty-four (24) hours of discovery.
10. Enhanced bio-remediation through the application of microbes and/or fertilizers (livestock manure) will be permitted at this facility. Records shall be maintained on the composition of additives, and the method, amount and frequency of application. These records will be subject to OCD review.

#### TREATMENT ZONE MONITORING OF LANDFARM AND COMPOSTING AREA

1. In the event that any new cells are opened, one (1) background soil sample will be taken from the center portion of the new landfarm or compost cell two (2) feet below the native ground surface prior to operation. The sample will be analyzed for total petroleum hydrocarbons (TPH), major cations/anions, volatile aromatic organics (BTEX), and heavy metals using approved EPA methods.
2. A treatment zone not to exceed three (3) feet beneath the landfarm and compost native ground surface will be monitored. A minimum of one random soil sample will be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample will be taken between two (2) to three (3) feet below the native ground surface.
3. The treatment zone soil samples will be analyzed using approved EPA methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and major cations/anions and heavy metals annually.
4. After obtaining the soil samples the boreholes will be filled with an impermeable material such as cement or bentonite.

## **WASTE ACCEPTANCE CRITERIA**

1. The facility is authorized to accept only exempt and "non-hazardous" non-exempt oilfield wastes that are generated in the State of New Mexico by Amoco Production Company.
2. The facility is authorized to accept only:
  - a. Oilfield waste that is exempt from RCRA Subtitle C regulations and that does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.
  - b. "Non-hazardous" non-exempt oilfield waste on a case-by-case basis after conducting a hazardous waste characterization including corrosivity, reactivity, ignitability, and toxic constituents and receiving OCD approval. The test for hazardous characteristics for a particular waste may be effective for an extended period of time from the date of analysis if approved by the OCD. In addition, the generator must certify that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.
3. At no time will 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 will supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.
5. No free liquids or soils with free liquids will be accepted at the landfarm and composting facility.
6. Comprehensive records of all material disposed of at the surface waste management facility will be maintained by the permit holder.

## **REPORTING AND RECORD KEEPING**

1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe office for annual review by November 30 of each year.
2. Background sample analytical results from new wells will be submitted to the OCD Santa Fe office for review by November 30 of each year.
3. The applicant will notify the OCD Aztec District office within 24 hours 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.
4. Authorization from the OCD Santa Fe office will be obtained prior to removal of the remediated soils to sensitive areas.
5. All records of testing and monitoring will be retained for a period of five (5) years.
6. The OCD will be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.

7. The OCD Santa Fe and Aztec District offices 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. A closure plan for the facility will be provided.

### FINANCIAL ASSURANCE

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Amoco Production Company in the amount of \$25,000 for this facility or in the amount of \$50,000 to cover all of Amoco Production Company's surface waste management facilities.
2. Financial assurance must be submitted within thirty (30) days of this permit approval or on December 30, 1998.
3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will 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 District offices 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. Upon cessation of operations for six (6) consecutive months, the operator shall complete cleanup of constructed facilities and restoration of the facility site within the following six (6) months, unless an extension of time is granted by the Director.
2. A closure plan for the facility will be provided including the following OCD closure procedures:
  - a. When the facility is to be closed no new material will be accepted.
  - b. Existing landfarm and compost soils will be remediated until they meet the OCD standards in effect at the time of closure.
  - c. The soils beneath the landfarm and compost cells will be characterized as to the total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content in order to determine potential migration of contamination beneath the facility.
  - d. Contaminated soils exceeding OCD closure standards for the site will be removed or remediated according to a site specific remediation plan to be developed by the owner/operator.
  - e. 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, or fences for future alternative uses the structures, berms, or fences may be left in place.
  - f. 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.

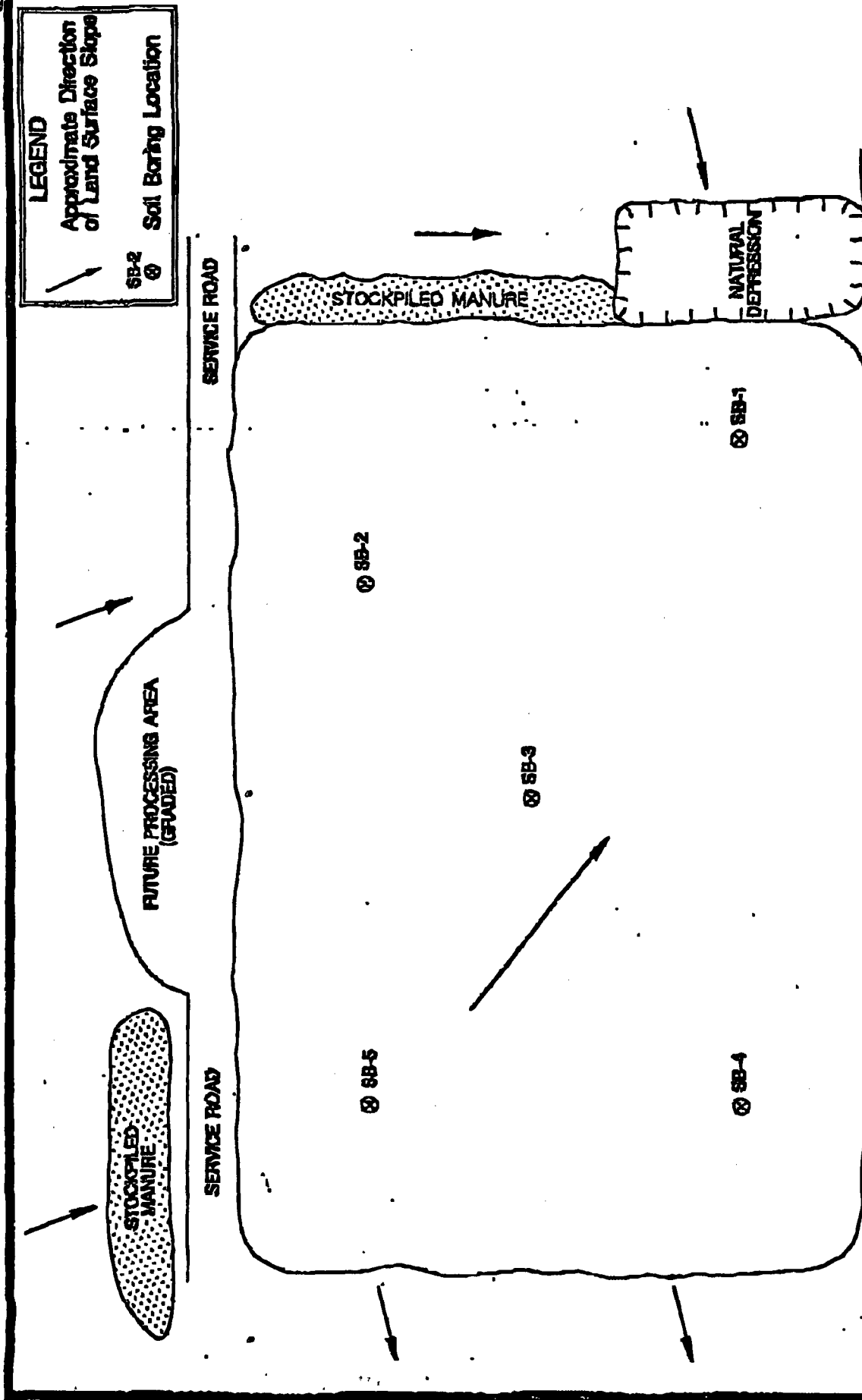
**CERTIFICATION**

Amoco Production Company, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Amoco Production 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.

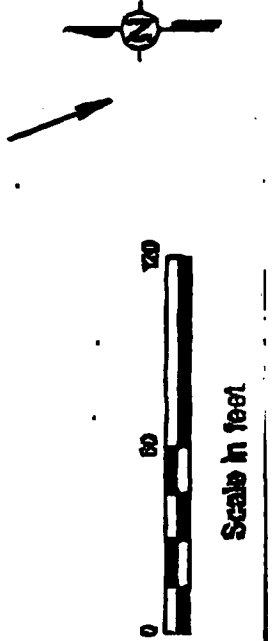
Accepted:



AMOCO PRODUCTION COMPANY



Site Assessment	
<b>SITE MAP</b>	
Arrows	Compassing Site, NMA
<b>FIGURE 2</b>	



**GeoWest  
Golden, Inc.**



BEFORE EXAMINER STOGNER

OIL CONSERVATION DIVISION

TSP Amoco EXHIBIT NO. 1

CASE NO. 12707



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

**IN THE MATTER OF THE APPLICATION OF  
BP AMOCO PRODUCTION COMPANY FOR  
PERMIT MODIFICATION AND AN  
EXEMPTION TO CERTAIN PROVISIONS OF  
OIL CONSERVATION DIVISION RULE 711.  
SAN JUAN COUNTY, NEW MEXICO.**

**CASE NO. 12707**

**AFFIDAVIT OF COLIN WASTENEYS**

STATE OF NEW YORK    )  
                              )    ss.  
COUNTY OF ERIE        )

Colin Wasteneys, being first duly sworn on oath, states as follows:

1. My name is Colin Wasteneys. I reside in Buffalo, New York. I am a senior geologist employed by URS Corporation.
2. URS Corporation provides environmental consulting services to BP Amoco concerning the remediation of approved wastes at its Crouch Mesa Centralized Waste Management Facility located in the SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico.
3. The Crouch Mesa Centralized Waste Management Facility was approved by the Oil Conservation Division by OCD Rule 711 Permit Approval NM-02-0003 authorizes BP Amoco to accept certain oilfield wastes that are generated in New Mexico.
4. OCD Rule 711 Permit Approval NM-02-0003 authorizes the Crouch Mesa Centralized Waste Management Facility to accept exempt and non-hazardous non-exempt oil field wastes that are generated in the State of New Mexico by Amoco Production Company. Pursuant to this permit BP Amoco conducts land farming operations at this facility
5. BP Amoco seeks authorization to bring to this facility for remediation crude oil contaminated soils from five former BP/Amoco crude oil pump stations which are part of the former Line 90 crude oil pipeline that runs from Bisti, New Mexico to Long Beach, California. Three of these pump stations are located outside of New Mexico.

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION
BP Amoco EXHIBIT NO. <u>2</u>
CASE NO. <u>12707</u>

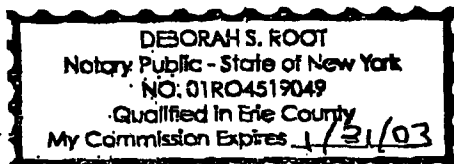
6. BP Amoco seeks modification of OCD Rule 711 Permit Approval NM-02-0003 to permit it to bring to this facility for land farming oil contaminated soils from the Red Mesa Pump Station located in the State of Utah and the Tonalea Pump Station and the Cameron Pump Station located in the State of Arizona. Attached to this Affidavit is a plat which shows the former line 90 crude oil pipeline, and each of the pump stations which are the subject of this application.

7. Modification of OCD Rule 711 Permit Approval NM-02-0003 will result in the efficient management of these approved wastes in a manner which will not impair fresh water nor adversely impact the public health or the environment.

FURTHER AFFIANT SAYETH NOT.

  
Colin Wasteneys

SUBSCRIBED AND SWORN before me on this 22 day of August, 2001.



  
Notary Public

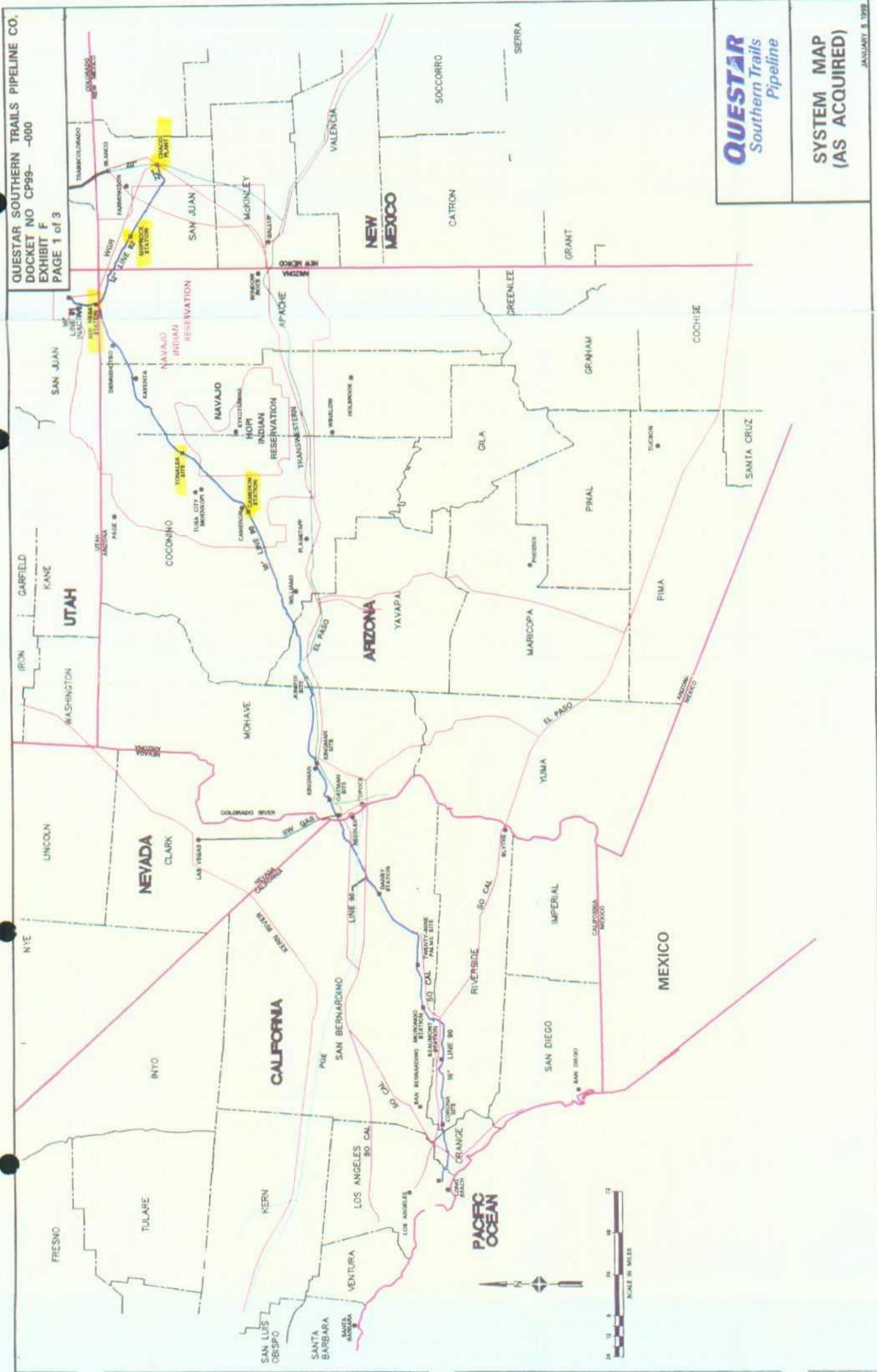
My Commission Expires:

1/31/03

**QUESTAR**  
Southern Trails  
Pipeline

SYSTEM MAP  
(AS ACQUIRED)

JANUARY 8, 1999





STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

November 30, 1998

**CERTIFIED MAIL**

**RETURN RECEIPT NO. P-326-936-499**

Mr. Buddy Shaw  
Amoco Production Company  
200 Amoco Court  
Farmington, New Mexico 87401

**RE:   OCD Rule 711 Permit Approval NM-02-0003**  
**Amoco Production Company**  
**Crouch Mesa Centralized Surface Waste Management Facility**  
**SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,**  
**San Juan County, New Mexico.**

Dear Mr. Shaw:

The permit application for the Amoco Production Company (Amoco) centralized surface waste management facility located in the SW/4 SE/4 of Section 2, Township 29 North, Range 12 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. This permit approval is conditional upon the receipt and approval by the Director of financial assurance in the amount of \$25,000 for this facility or a \$50,000 blanket bond for all of Amoco's centralized surface waste management facilities. A \$50,000 blanket bond #365133 has been submitted by Amoco and approved by the Director. The application consists of the permit application Form C-137 dated March 27, 1998 and materials from the original permit application already on file with the OCD.

The construction, operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved landfarming methods must receive prior OCD approval. Amoco 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 Amoco Production Company of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Amoco Production Company of responsibility for compliance with other federal, state or local 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 non-hazardous to migratory birds. In

Mr. Buddy Shaw

Page 2

November 30, 1998

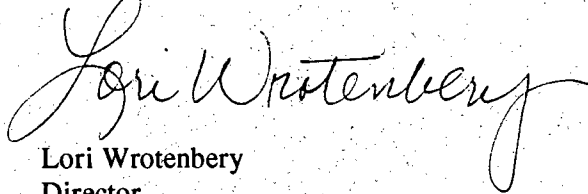
addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs, or open receptacles.

The Amoco Crouch Mesa Centralized Surface Waste Management Facility Permit NM-02-0003 will be reviewed at least once every five (5) years from the date of this approval letter. The facility is subject to periodic inspections by the OCD.

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,

A handwritten signature in cursive script, reading "Lori Wrotenbery".

Lori Wrotenbery  
Director

LW/mjk

xc with attachments:  
Aztec OCD Office

**ATTACHMENT TO OCD 711 PERMIT APPROVAL**  
**PERMIT NM-02-003**  
**AMOCO PRODUCTION COMPANY**  
**SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,**  
**San Juan County, New Mexico**  
**(November 25, 1998)**

**LANDFARM AND COMPOST CONSTRUCTION**

1. The facility will be fenced and have a sign at the entrance. The sign will 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.
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3. Contaminated soils will not be placed within twenty (20) feet of any pipeline crossing the landfarm/compost facility. In addition, no equipment will be operated within ten (10) feet of a pipeline. All pipelines crossing the facility will have surface markers identifying the location of the pipelines.
4. The portion of the facility containing contaminated soils will be bermed to prevent runoff and runoff. A perimeter berm no less than four (4) feet above grade will be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells will be contained with three (3) foot berms and individual compost piles or landfarms within each cell will be contained within two (2) foot berms.
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**LANDFARM AND COMPOST OPERATION**

1. Disposal will occur only when an attendant is on duty. The facility will be secured when no attendant is present.
2. All contaminated soils received at the facility for land farming will be spread and disked within 72 hours of receipt.
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STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

November 30, 1998

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-326-936-499**

Mr. Buddy Shaw  
Amoco Production Company  
200 Amoco Court  
Farmington, New Mexico 87401

**RE:   OCD Rule 711 Permit Approval NM-02-0003**  
**Amoco Production Company**  
**Crouch Mesa Centralized Surface Waste Management Facility**  
**SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,**  
**San Juan County, New Mexico.**

Dear Mr. Shaw:

The permit application for the Amoco Production Company (Amoco) centralized surface waste management facility located in the SW/4 SE/4 of Section 2, Township 29 North, Range 12 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. This permit approval is conditional upon the receipt and approval by the Director of financial assurance in the amount of \$25,000 for this facility or a \$50,000 blanket bond for all of Amoco's centralized surface waste management facilities. A \$50,000 blanket bond #365133 has been submitted by Amoco and approved by the Director. The application consists of the permit application Form C-137 dated March 27, 1998 and materials from the original permit application already on file with the OCD.

The construction, operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved landfarming methods must receive prior OCD approval. Amoco 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 Amoco Production Company of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Amoco Production Company of responsibility for compliance with other federal, state or local 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 non-hazardous to migratory birds. In

Mr. Buddy Shaw

Page 2

November 30, 1998

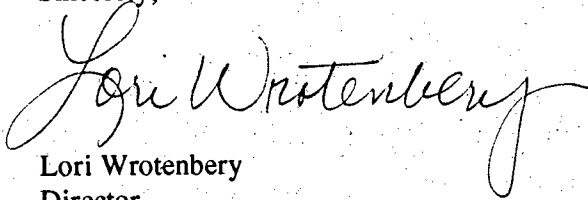
addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs, or open receptacles.

The Amoco Crouch Mesa Centralized Surface Waste Management Facility Permit NM-02-0003 will be reviewed at least once every five (5) years from the date of this approval letter. The facility is subject to periodic inspections by the OCD.

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. Kielling at (505) 827-7153.

Sincerely,



Lori Wrotenberg  
Director

LW/mjk

xc with attachments:  
Aztec OCD Office



**ATTACHMENT TO OCD 711 PERMIT APPROVAL**  
**PERMIT NM-02-003**  
**AMOCO PRODUCTION COMPANY**  
**SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,**  
**San Juan County, New Mexico**  
**(November 25, 1998)**

**LANDFARM AND COMPOST CONSTRUCTION**

1. The facility will be fenced and have a sign at the entrance. The sign will 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. Contaminated soils will not be placed within one hundred (100) feet of the boundary of the facility.
3. Contaminated soils will not be placed within twenty (20) feet of any pipeline crossing the landfarm/compost facility. In addition, no equipment will be operated within ten (10) feet of a pipeline. All pipelines crossing the facility will have surface markers identifying the location of the pipelines.
4. The portion of the facility containing contaminated soils will be bermed to prevent runoff and runoff. A perimeter berm no less than four (4) feet above grade will be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells will be contained with three (3) foot berms and individual compost piles or landfarms within each cell will be contained within two (2) foot berms.
5. All above ground tanks located at the facility and containing materials other than fresh water will be labeled as to contents and hazards and will be bermed to contain one and one-third the volume of the largest tank or all interconnected tanks.

**LANDFARM AND COMPOST OPERATION**

1. Disposal will occur only when an attendant is on duty. The facility will be secured when no attendant is present.
2. All contaminated soils received at the facility for land farming will be spread and disked within 72 hours of receipt.
3. Soils to be landfarmed will be spread on the surface in lifts of six inches or less.
4. Soils to be landfarmed will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
5. All contaminated soils received at the facility for composting will be placed into compost piles or cells within 72 hours of receipt. Individual compost piles or cells will be labeled. Weekly temperature measurements will be taken on each compost cell, recorded, and maintained for OCD review. Compost piles will be turned as necessary to enhance biodegradation.

6. Exempt contaminated soils will be placed in the landfarm and compost facility so that they are physically separate (*i.e.*, bermed) from non-exempt contaminated soils. There will be no mixing of exempt and non-exempt soils.
7. Successive lifts of contaminated soils will not be spread on the landfarm or compost facility until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 100 ppm and the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations will be maintained at the facility for OCD review.
8. Prior to removal of remediated soils from the facility, the soils will be tested for TPH, BTEX and benzene content. The remediated soils may only be moved to another location when the level of TPH in the remediated soil is less than 100 ppm, BTEX is less than 50 ppm, and the benzene is less than 10 ppm. Comprehensive records of the laboratory analyses, destination and volume of remediated soils removed from the facility will be maintained at the facility for OCD review. Authorization from the OCD Santa Fe office will be obtained prior to removal of the remediated soils to sensitive areas.

Amoco may request alternate remediation levels for soils to be used or deposited at a location if remediation standards described in the OCD surface impoundment closure guidelines are met. Alternate remediation levels shall be subject to approval on a case-by-case basis. Requests shall be submitted to the Santa Fe OCD office for review.
9. Moisture will be added as necessary to enhance bio-remediation and to control blowing dust. There will be no ponding, pooling or run-off of water allowed. Any ponding of precipitation will be removed within twenty-four (24) hours of discovery.
10. Enhanced bio-remediation through the application of microbes and/or fertilizers (livestock manure) will be permitted at this facility. Records shall be maintained on the composition of additives, and the method, amount and frequency of application. These records will be subject to OCD review.

#### **TREATMENT ZONE MONITORING OF LANDFARM AND COMPOSTING AREA**

1. In the event that any new cells are opened, one (1) background soil sample will be taken from the center portion of the new landfarm or compost cell two (2) feet below the native ground surface prior to operation. The sample will be analyzed for total petroleum hydrocarbons (TPH), major cations/anions, volatile aromatic organics (BTEX), and heavy metals using approved EPA methods.
2. A treatment zone not to exceed three (3) feet beneath the landfarm and compost native ground surface will be monitored. A minimum of one random soil sample will be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample will be taken between two (2) to three (3) feet below the native ground surface.
3. The treatment zone soil samples will be analyzed using approved EPA methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and major cations/anions and heavy metals annually.
4. After obtaining the soil samples the boreholes will be filled with an impermeable material such as cement or bentonite.

## WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only exempt and "non-hazardous" non-exempt oilfield wastes that are generated in the State of New Mexico by Amoco Production Company.
2. The facility is authorized to accept only:
  - a. Oilfield waste that is exempt from RCRA Subtitle C regulations and that does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.
  - b. "Non-hazardous" non-exempt oilfield waste on a case-by-case basis after conducting a hazardous waste characterization including corrosivity, reactivity, ignitability, and toxic constituents and receiving OCD approval. The test for hazardous characteristics for a particular waste may be effective for an extended period of time from the date of analysis if approved by the OCD. In addition, the generator must certify that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.
3. At no time will 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 will supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.
5. No free liquids or soils with free liquids will be accepted at the landfarm and composting facility.
6. Comprehensive records of all material disposed of at the surface waste management facility will be maintained by the permit holder.

## REPORTING AND RECORD KEEPING

1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe office for annual review by November 30 of each year.
2. Background sample analytical results from new cells will be submitted to the OCD Santa Fe office for review by November 30 of each year.
3. The applicant will notify the OCD Aztec District office within 24 hours 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.
4. Authorization from the OCD Santa Fe office will be obtained prior to removal of the remediated soils to sensitive areas.
5. All records of testing and monitoring will be retained for a period of five (5) years.
6. The OCD will be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.

7. The OCD Santa Fe and Aztec District offices 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. A closure plan for the facility will be provided.

### **FINANCIAL ASSURANCE**

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Amoco Production Company in the amount of \$25,000 for this facility or in the amount of \$50,000 to cover all of Amoco Production Company's surface waste management facilities.
2. Financial assurance must be submitted within thirty (30) days of this permit approval or on December 30, 1998.
3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will 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 District offices 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. Upon cessation of operations for six (6) consecutive months, the operator shall complete cleanup of constructed facilities and restoration of the facility site within the following six (6) months, unless an extension of time is granted by the Director.
2. A closure plan for the facility will be provided including the following OCD closure procedures:
  - a. When the facility is to be closed no new material will be accepted.
  - b. Existing landfarm and compost soils will be remediated until they meet the OCD standards in effect at the time of closure.
  - c. The soils beneath the landfarm and compost cells will be characterized as to the total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content in order to determine potential migration of contamination beneath the facility.
  - d. Contaminated soils exceeding OCD closure standards for the site will be removed or remediated according to a site specific remediation plan to be developed by the owner/operator.
  - e. 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, or fences for future alternative uses the structures, berms, or fences may be left in place.
  - f. 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**

Amoco Production Company, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Amoco Production 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:

AMOCO PRODUCTION COMPANY

**RECEIVED**

DEC 0 1998

**ATTACHMENT TO OCD 711 PERMIT APPROVAL  
PERMIT NM-02-003  
AMOCO PRODUCTION COMPANY  
SW/4 SE/4 of Section 2, Township 29 North, Range 12 West, NMPM,  
San Juan County, New Mexico  
(November 25, 1998)**

Environmental Bureau  
Oil Conservation Division

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5. No free liquids or soils with free liquids will be accepted at the landfarm and composting facility.
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## REPORTING AND RECORD KEEPING

1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe office for annual review by November 30 of each year.
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3. The applicant will notify the OCD Aztec District office within 24 hours 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.
4. Authorization from the OCD Santa Fe office will be obtained prior to removal of the remediated soils to sensitive areas.
5. All records of testing and monitoring will be retained for a period of five (5) years.
6. The OCD will be notified prior to the installation of any pipelines or wells or other structures within the boundaries of the facility.



7. The OCD Santa Fe and Aztec District offices 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. A closure plan for the facility will be provided.

#### **FINANCIAL ASSURANCE**

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Amoco Production Company in the amount of \$25,000 for this facility or in the amount of \$50,000 to cover all of Amoco Production Company's surface waste management facilities.
2. Financial assurance must be submitted within thirty (30) days of this permit approval or on December 30, 1998.
3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will 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 District offices 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. Upon cessation of operations for six (6) consecutive months, the operator shall complete cleanup of constructed facilities and restoration of the facility site within the following six (6) months, unless an extension of time is granted by the Director.
2. A closure plan for the facility will be provided including the following OCD closure procedures:
  - a. When the facility is to be closed no new material will be accepted.
  - b. Existing landfarm and compost soils will be remediated until they meet the OCD standards in effect at the time of closure.
  - c. The soils beneath the landfarm and compost cells will be characterized as to the total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content in order to determine potential migration of contamination beneath the facility.
  - d. Contaminated soils exceeding OCD closure standards for the site will be removed or remediated according to a site specific remediation plan to be developed by the owner/operator.
  - e. 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, or fences for future alternative uses the structures, berms, or fences may be left in place.
  - f. 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**

Amoco Production Company, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Amoco Production 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:

*B. Shaw*

AMOCO PRODUCTION COMPANY

*12-4-98*



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



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

November 18, 1992

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

CERTIFIED MAIL  
RETURN RECEIPT NO. P-667-241-917

Mr. Buddy D. Shaw  
Amoco Production Company  
200 Amoco Court  
Farmington, New Mexico 87401

RE: **Produced Water Test - Composting**  
**Amoco Crouch Mesa Centralized Landfarm**  
**San Juan County, New Mexico**

Dear Mr. Shaw:

The Oil Conservation Division (OCD) has received your request dated October 26, 1992, for authorization to test the use of produced water at your Crouch Mesa Centralized Landfarm located in the SW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Based on the information provided in your request, the use of produced water at the referenced site is hereby approved subject to the following conditions.

1. A maximum of 1000 barrels of water will be used in one designated windrow.
2. The maximum level of total dissolved solids allowed in the produced water will be 15,000 ppm.
3. The source of the produced water will be from the Blanco Mesaverde, Basin Dakota and Pictured Cliffs Formations. No Fruitland Coal water will be used.
4. The windrow used to test produced water will have quarterly monitoring of the treatment zone as specified in the attached OCD permit approval dated July 28, 1992. In addition to analyzing for total petroleum hydrocarbons and volatile aromatic organics the soil sample will be analyzed for general chemistry using approved EPA methods.

Mr. Buddy D. Shaw  
November 18, 1992  
Page 2

Please be advised that this approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters, or the environment actionable under other laws and/or regulations.

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

Sincerely,

A handwritten signature in cursive script that reads "Kathy M. Brown". The signature is written in dark ink and is positioned above the printed name and title.

Kathy M. Brown  
Geologist

Attachment

xc: Denny Foust, OCD Aztec Office



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

July 28, 1992

BRUCE KING  
GOVERNOR

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

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-242-126**

Mr. B.D. Shaw, Environmental Coordinator  
Amoco Production Company  
200 Amoco Court  
Farmington, New Mexico

Re: Compost Facility  
San Juan County, New Mexico

Dear Mr. Shaw:

The application for a permit to construct and operate a centralized soils remediation facility located in the SW/4 SE/4, Section 2, Township 29 North, Range 12 West, San Juan County New Mexico, is hereby approved under the conditions contained in the enclosed attachments. The permit consists of the application dated April 6, 1992, and information dated April 20, 1992, April 21, 1992 and June 10, 1992 submitted as supplements to the application.

The application was submitted pursuant to Oil Conservation Division (OCD) Rule 711 A(1). It is approved pursuant to OCD Rule 711 A(4). Please be advised that approval of this permit 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.

This permit has a term of five years and must be renewed if continued operations are desired. This permit will expire on July 28, 1997 and a renewal application should be submitted in ample time before that date.

If you have any questions please call Roger Anderson at (505) 827-5812.

Sincerely:

William J. LeMay  
Director

Attachment

xc: Denny Foust- Aztec

ATTACHMENT TO SOILS REMEDIATION PERMIT  
AMOCO PRODUCTION COMPANY  
(July 28, 1992)

COMPOSTING OPERATION

1. Disposal at the facility will only occur when an attendant is on duty. The facility will be secure when no attendant is present
2. Only contaminated soils from Amoco operations will be accepted at the facility.
3. Only solids which are non-hazardous by RCRA Subtitle C exemption or by characteristic testing will be accepted at the facility. Solids from operations not currently exempt under RCRA Subtitle C or mixed exempt/non-exempt solids will be tested for appropriate hazardous constituents. Test results must be submitted to the OCD along with a request to receive the non-exempt solids, and a written OCD approval (case specific) must be obtained prior to disposal. Any non-oilfield wastes which are RCRA Subtitle C exempt or are non-hazardous by characteristic testing will only be accepted on a case-by-case basis and with prior OCD approval.
4. Comprehensive records of all material disposed of at the facility will be maintained at the facility. The records for each load will include: 1) the origin, 2) analysis for hazardous constituents if required, 3) transporter, and 4) exact cell location.
5. Bio-remediation through the application of microbes will only be permitted in the designated area. The microbes will be mixed with water and applied to the contaminated soils. There will be no ponding, pooling or run-off of water allowed during the application phase or afterwards. Any change in the composition (i.e. chemical additives), process or location of the bio-remediation program must receive prior OCD approval.
6. No free liquids or soils with free liquids will be accepted at the facility.

TREATMENT ZONE MONITORING

1. A treatment zone not to exceed two (2) feet beneath the original land surface will be monitored. A minimum of one random soil sample will be taken from each individual cell six (6) months after the first contaminated soils are received in the cell and then annually thereafter. The sample will be taken at two to three (2-3) feet below the native ground surface.

2. The soil samples will be analyzed for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) using approved EPA methods.
3. After obtaining the soil samples the boreholes will be filled with an impermeable material such as bentonite cement.
4. Any cells that have moisture added to them will be analyzed on a quarterly basis following the requirements above.

#### REPORTING

1. Analytical results from the treatment zone monitoring will be submitted to the OCD Santa Fe Office within thirty (30) days of receipt from the laboratory.
2. 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

When the facility is to be closed no new material will be accepted. Existing soils will be remediated until they meet the OCD standards in effect at the time of closure. The area will then be reseeded with natural grasses and allowed to return to its natural state. Closure will be pursuant to all OCD requirements in effect at the time of closure.