

NM2 - 4

**PERMITS,
RENEWALS,
& MODS**



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

February 2, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. P-326-936-502

Mr. Albert R. Greer
Benson-Montin-Greer Drilling Corp.
4900 College Boulevard
Farmington, NM 87402

RE: OCD Rule 711 Permit Approval NM-02-0004
Benson-Montin-Greer Drilling Corp.
Centralized Surface Waste Management Facility
NW/4 NW/4 Section 20, Township 25 North, Range 1 East, NMPM,
Rio Arriba County, New Mexico

Dear Mr. Greer:

The permit application for the Benson-Montin-Greer Drilling Corp. (BMG) centralized surface waste management facility located in NW/4 NW/4 Section 20, Township 25 North, Range 1 East, NMPM, Rio Arriba 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. In addition, a \$25,000 cash collateral deposit for bond account No. 01-082086-27 has been submitted by BMG and approved by the Director. The application consists of the permit application Form C-137 dated September 29, 1997, inspection report response letter dated September 29, 1997, and ground water analysis dated November 4, 1997.

The construction, operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved treatment, evaporation and landfarm methods must receive prior OCD approval. BMG 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 Benson-Montin-Greer Drilling Corp. of liability should your operation result in actual pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Benson-Montin-Greer Drilling Corp. of responsibility for compliance with other federal, state or local laws and/or regulations.

Mr. Albert R. Greer
February 2, 1999
Page 2

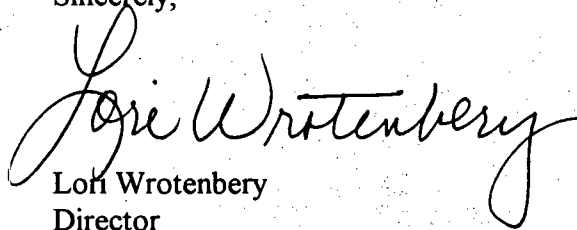
Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered non-hazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs, or open receptacles.

The Benson-Montin-Greer Drilling Corp. Centralized Surface Waste Management Facility Permit NM-02-0004 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,



Lori Wrotenberg
Director

LW/mjk

xc with attachments:
Aztec OCD Office

ATTACHMENT TO OCD 711 PERMIT APPROVAL
PERMIT NM-02-0004
BENSON-MONTIN-GREER DRILLING CORP.
SURFACE WASTE MANAGEMENT FACILITY
NW/4 NW/4 Section 20, Township 25 North, Range 1 East, NMPM,
Rio Arriba County, New Mexico
(February 2, 1999)

EVAPORATION POND OPERATION

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. The pond shall have a minimum freeboard of two feet (2'). A device shall be installed in the pond to accurately measure freeboard.
3. Pond inspection and maintenance will be conducted on a weekly basis or immediately following a consequential rainstorm or windstorm. If any defect is noted repairs will be made as soon as possible. If the defect will jeopardize the integrity of the pond additional wastes will not be placed into the pond until repairs have been completed.
4. The leak detection system will be inspected monthly and if fluid is present samples of the fluid will be compared with the fluids in the pond. Results will be recorded and maintained for OCD review. If analysis of pond and leak detection fluids are similar the OCD Santa Fe office will be notified within 48 hours. Within 72 hours of discovery, the permittee will submit a plan to the OCD Santa Fe and appropriate District offices that describes what procedures will be taken to investigate and repair the leak.
5. Sludge thickness in the base of the pond will be measured annually. Any sludge build-up in the bottom of the pond in excess of twelve inches (12") will be removed and landfarmed on site at the air strip landfarm.
6. 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 area will hold one and one-third the volume of the largest tank or all interconnected tanks. All existing tanks 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.
7. Below grade sumps will be cleaned and visually inspected annually. Results will be recorded and maintained for OCD review. If sump integrity has failed the OCD will be notified within

48 hours of discovery and the sump and contaminated soils will be removed and disposed of at an OCD-approved waste management facility. Soil remediation will follow OCD surface impoundment closure guidelines. The permittee will submit a report to the OCD Santa Fe and appropriate District offices that describes the investigation and remedial actions taken.

8. The produced water receiving and treatment area will be inspected weekly for tank, piping and berm integrity.
9. 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.
10. Liquid reduction technologies that may be used to eliminate pond waters include evaporation.
11. These conditions will be implemented if H_2S is ever detected at the evaporation pond:

Tests of ambient H_2S levels shall be conducted on a weekly basis. Test results will be recorded and retained. The tests will be conducted at four (4) locations around the pond at the top of the berm. The wind speed and direction shall be recorded in conjunction with each test.

- a. If an H_2S reading of 1.0 ppm or greater is obtained:
 - i. a second reading shall be taken on the downwind berm within one hour;
 - ii. the dissolved oxygen and dissolved sulfide levels of the pond shall be tested immediately and the need for immediate treatment determined; and
 - iii. tests for H_2S levels shall be made at the fence line down wind from the problem pond.
- b. If two (2) consecutive H_2S readings of 1.0 ppm or greater are obtained:
 - i. the operator shall notify the Aztec office of the OCD immediately;
 - ii. the operator shall commence hourly monitoring on a 24-hour basis; and
 - iii. the operator will obtain daily analysis of dissolved sulfides in the pond.
- c. If an H_2S reading of 10.0 ppm or greater at the facility fence line is obtained:

- i. the operator will 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 will initiate notification of all persons residing within one-half (½) mile of the fence line and assist public safety officials with evacuation as requested.

12. In order to prevent development of harmful concentrations of H₂S, the following procedures shall be followed:

- a. The facility will not accept produced water with possible H₂S content. Water with H₂S will be transported to an alternate approved OCD facility with the capacity to accept and treat H₂S contaminated water.

LANDFARM 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 twenty (20) feet of any pipelines crossing the landfarm 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.
3. The portion of the facility containing contaminated soils will be bermed to prevent runoff and runoff. A berm no less than one (1) foot above grade will be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for that specific region.

LANDFARM OPERATION

1. All contaminated soils to be landfarmed will be spread and disked within 72 hours of receipt.
2. Soils to be landfarmed will be spread on the surface in six-inch lifts or less.

3. Soils to be landfarmed will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.
4. Exempt contaminated soils will be placed in the landfarm 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.
5. Successive lifts of contaminated soils will not be spread on the landfarm 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.
6. 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 a 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.
7. Moisture will be added as necessary to enhance bioremediation 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.
8. Enhanced bio-remediation through the application of microbes (bugs) and/or fertilizers will only be permitted after prior approval from the OCD. Request for application of microbes will include the location of the area designated for the bio-remediation program, the composition of additives, and the method, amount and frequency of application.

TREATMENT ZONE MONITORING OF LANDFARM AREA

1. A treatment zone not to exceed three (3) feet beneath the landfarm 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.
2. The treatment zone soil samples will be analyzed using EPA approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and major cations/anions and eight (8) RCRA heavy metals annually.

3. 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 Benson-Montin-Greer Drilling Corp.
2. The facility is authorized to accept only:
 - a. Oilfield waste 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.
 - 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 portion of the facility.
6. No produced water shall 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.
7. 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 March 1 of each year.**
2. Results of the monthly testing of the leak detection system will be recorded and will be submitted to the OCD Santa Fe office for annual review **by March 1 of each year.**
3. Results of the annual maintenance on below grade sumps, and annual measurements of sludge thickness in the pond will be recorded and maintained for OCD review.
4. The applicant will notify the **OCD Aztec District office within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.
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 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 Benson-Montin-Greer Drilling Corp. in the amount of **\$25,000** for this facility.
2. Financial assurance must be submitted within thirty (30) days of this permit approval or on **March 3, 1999.**
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 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. Any water not evaporated will be hauled to a commercial disposal facility.
 - c. All liners will be removed.
 - d. Tanks at the location will be emptied and any waste will be hauled to a commercial disposal facility. The empty tanks will be removed.
 - e. Existing landfarm soils will be remediated until they meet the OCD standards in effect at the time of closure.
 - f. The soils beneath the landfarm will be characterized as to total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content to determine potential migration of contamination.
 - g. The soils beneath the evaporation pond and produced water 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.
 - h. Contaminated soils exceeding OCD closure standards for the site will be removed or remediated
 - i. 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.
 - j. 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

Benson-Montin-Greer Drilling Corp, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Benson-Montin-Greer Drilling Corp 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:

BENSON-MONTIN-GREER DRILLING CORP

Signature _____ Title _____ Date _____