#### STATE OF NEW MEXICO



# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

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

April 7, 1994

MW Petroleum Corporation c/o Apache Corporation 304 North Behrend Avenue Farmington, New Mexico 87401

Attn: Stan Phillips

Re: Division Order No.SWD-554

Dear Mr. Phillips,

Upon reviewing the above mentioned order, the Aztec district office of the Oil Conservation Division has requested an additional condition for the subject well. Prior to commencing injection operations into the Jicarilla Apache Tribal 124 Well No.7, the operator shall run a cement bond log to verify location and quality of cement squeeze operations.

This condition is hereby made part of Division Order No.SWD-554.

Sincerely,

William J. LeMan

Director

WJL/BES

cc: Oil Conservation Division - Aztec

NM State Land Office - Oil and Gas Division US Bureau of Land Management - Farmington

Jicarilla Tribal EPA

SWD-554



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

# REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

11 8 50

September 13, 1994

REPLY TO: 6W-SE

Certified Mail #Z 698 458 843 - Return Receipt Requested

Mr. Mark McCool MW Petroleum Corporation 304 North Behrend, Suite A Farmington, NM 87401

Re: Draft UIC Permit and Statement of Basis

Permit No. 06SNMJ1P9067 - Rio Arriba County, New Mexico

Dear Mr. McCool:

Your application for an underground injection control (UIC) permit has been received and evaluated by the Environmental Protection Agency (EPA), Region 6. Enclosed you will find a public notice, statement of basis, and draft permit which have been prepared under the authority of the Safe Drinking Water Act. If you have any comments regarding these documents, please forward them in writing to the address shown in the public notice. The notice will be published in the Farmington Daily Times.

Permits are also required by the Bureau of Land Management (BLM) and the New Mexico Oil Conservation District. If you have not yet obtained their permits, contact them at the addresses given below at your earliest convenience.

New Mexico Oil Conservation Division New Mexico Energy and Minerals Department Post Office Box 2088 Santa Fe, New Mexico 87501 Telephone: (505) 827-5802

New Mexico State Office Bureau of Land Management Post Office Box 1449 Santa Fe, NM 87504

Authorization to complete the work described in your permit application must be received by both the EPA and BLM prior to commencement of work.

If you have any questions, please have your staff contact Mr. Roger Hall of my staff at (214) 665-8093.

Sincerely yours,

Myron O. Knudson, P.E.

Director

Water Management Division (6W)

## Enclosures

cc: with enclosures:

BIA, Albuquerque, NM

BIA, Jicarllia Agency (Darrell Pafoya, Realty Office)

BLM, Farmington, New Mexico

NM Oil Conservation Division, Santa Fe, New Mexico

Rick Davis, EPA Field Office

Jicarilla Apache (Attn: Kurt Sandoval)

Mr. Bob Poirrier, Jr.

#### NOTICE OF UIC PERMIT APPLICATION

The Environmental Protection Agency (EPA) has received a complete Underground Injection Control (UIC) permit application number 06SNMJ1P9067, from MW Petroleum Corporation; 304 North Behrend, Suite A; Farmington, NM 87401, to convert well number 7 to a salt water disposal injection well located in Rio Arriba County, New Mexico, SW Quarter, Section 13, Township 25N, Range 04W. The application requests authorization to inject salt water into the Burro Canyon Sandstone at an injection interval depth of 8039 to 8189 feet for disposal. A maximum of 12,000 barrels/month will be injected at a maximum pressure of 1600 psig. The underground sources of drinking water in this area occur at 3,300 feet below ground surface.

EPA has issued emergency authorization to the permit applicant to inject salt water into the referenced well. The emergency authorization shall remain in effect until EPA issues a final decision on the permit application.

The permit application, supporting data submitted by the applicant, the EPA draft permit and statement of basis are available for public review Monday through Friday from 8:00 a.m. to 4:00 p.m. at the Jicarilla Apache Tribe; P.O. Box 507; Dulce, NM 87528 or at the Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202-2733. Comments on the permit application and draft permit should be submitted to the Dallas office within 30 days of the date of this notice.

Any interested person may request a public hearing on the draft permit. The request must be in writing and must include the requestor's statement of the issues cited for discussion at the hearing. The request for public hearing must also be submitted to the Dallas office. EPA will give at least 30 days notice of the public hearing, if a hearing is to be held.

The Environmental Protection Agency will consider all comments submitted either in writing or at a public hearing, when making its final permit decision. Any person that files comments on the draft permit, within the comment period, may appeal the final permit. Persons who did not comment on the draft permit may appeal only those changes made to the final permit subsequent to draft permit issuance.

Appeals must be submitted in writing to the Administrator within 30 days after a final permit decision has been issued. Such appeals must include that information required in 40 C.F.R. §124.19.

Submit appeals by mail to the following address:

U. S. Environmental Protection Agency Environmental Appeals Board (MC-1103B) 401 M Street, SW Washington, D.C. 20460

Hand deliver appeals (including Federal Express) to the following address:

U. S. Environmental Protection Agency Environmental Appeals Board Westory Building 607 14th Street, NW Suite 500 Washington, D.C. 20005

Phone Number: (202) 501-7060 Fax Number: (202) 501-7580

# Billing Instructions:

The publisher's affidavit of publication along with a copy of the published notice should be forwarded to the Environmental Protection Agency for payment at the address shown in the notice.

#### STATEMENT OF BASIS

For proposed Underground Injection Control Permit No. 06SNMJ1P9067 to convert well #7 to a salt water disposal injection well.

Issuing office: U.S. Environmental Protection Agency (6W-SE)

Region 6

1445 Ross Avenue

Dallas, Texas 75202-2733

Applicant:

MW Petroleum Corporation 304 North Behrend, Suite A Farmington, NM 87401

As described in the application, the well is located in Rio Arriba County, New Mexico, 0990' FSL, 0990' FWL, SW/4, Section 13, Township 25N, Range 04W.

- On the basis of preliminary staff review, the Environmental 2. Protection Agency has made a tentative determination to draft a permit for the conversion of this well as described in the application.
- 3. The following is an explanation of the derivation of the conditions of the draft permit and the basis for them as required under 40 CFR 124.7:

# Area of Review

The area around the proposed injection well or project must be evaluated to ensure that the proposed injection will not cause movement of fluid into a USDW through improperly sealed, completed, or abandoned wells. The permit applicant submitted information on all wells of public record penetrating the injection interval within 1/2 mile of the proposed injection and requested a maximum injection rate of 400 barrels per day (B/D).

EPA then calculated a "zone of endangering influence" (the lateral area around the proposed injection in which injection pressures may cause movement of fluid into a USDW) to be 2640 feet and found that there are no known improperly sealed, completed, or abandoned wells within this area.

# Well Location

The well must be sited so that injection is into a formation which is separated from underground sources of drinking water (USDWs) by a confining zone free of known open faults or fractures within the area of review. The proposed injection interval in the Burro Canyon Sandstone is at a depth of 8039 feet to 8189 feet below land surface and is approximately 4700 feet below the base of fresh water. A review of available data has shown no evidence of faults or fractures in the confining zone within the area of review.

# Construction Requirements

The well must be cased and cemented to prevent fluid movement into or between USDWs. The base of fresh water occurs at 3300 feet below land surface. Since the surface casing has already been set and cemented at 302 feet below land surface and the long string casing has been set at 8039 feet below the land surface and cemented back to surface with 1535 sacks of cement, this is adequate in this case.

## Operating Requirements

To assure the protection of USDWs adjacent the well bore, injection must be through an adequate tubing and packer. The packer must be set within 75 feet of the top of the injection interval. Since the top of the injection interval is 8039 feet, the packer in this well must be set inside the casing between 7964 and 8034 feet of depth below land surface.

Injection pressure at the wellhead shall be limited so that it does not initiate new fractures or propagate existing fractures in the confining zone adjacent to any USDW.

In this well, the maximum injection pressure at the wellhead shall not exceed 1600 psig, as calculated by the formula Pm = 0.2d where:

To assure that USDWs are protected from injection fluids, the well must maintain mechanical integrity.

Mechanical integrity must be demonstrated prior to operation and at least once every five years thereafter [40 CFR 144.52(a)(8) and 146.23(b)(3)].

# ENVIRONMENTAL PROTECTION AGENCY UNDERGROUND INJECTION CONTROL (UIC) PERMIT

Permit No. 06SNMJ1P9067 Well No. 7

## AUTHORIZATION TO CONVERT A WELL TO AN INJECTION WELL UNDER THE UIC PROGRAM JICARILLA APACHE

In compliance with the provisions of the Safe Drinking Water Act, (hereafter referred to as "the Act" or "SDWA") as amended (42 U.S.C. §300f et seg.),

MW Petroleum Corporation 304 North Behrend, Suite A Farmington, NM 87401

is authorized to convert a well to a Class II salt water disposal injection well in Rio Arriba County, New Mexico. This well is located at:

0990 feet from the South line and 0990 feet from the West line, SW Quarter, Section 13, Township 25N, Range 04W into the injection interval at a depth of 8039 feet to 8189 feet below land surface in the Burro Canyon Sandstone in accordance with the construction and operation requirements, injection pressure limits, reporting and monitoring requirements, and other conditions set forth in Parts I and II of this permit and the New Mexico Indian Lands Class II Underground Injection Control Program and Regulations.

Authorization to inject fluids into the well described in this permit shall be separately granted. Such authorization may be verbally granted by the Chief, UIC Permits and Enforcement Section when the operator has satisfactorily demonstrated compliance with special permit conditions I.A.1., I.A.2., I.A.3., and I.B.1. Any verbal authorization to inject will be followed by a written "Authorization to Inject" from the Director, Water Management Division (WMDD).

Signed this \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_

Myron O. Knudson, P.E.

Director

Water Management Division Environmental Protection Agency Region 6

## Part I. SPECIAL PERMIT CONDITIONS

# A. Construction Requirements

- 1. Surface casing shall be set at 302 feet below land surface and cemented back to the surface. The long string casing shall be set at 8039 feet below land surface and cemented back to the surface with 1535 sacks of cement.
- 2. The well shall be equipped with standard female fittings with cut-off valves connected to the tubing and the tubing/casing annulus so that the injection pressure and annulus pressure may be measured by an EPA representative by attaching a gauge having a standard male fitting.
- 3. Tubing and packer must be installed. The packer must be run on the tubing and set inside the casing between 7964 and 8034 feet of depth below the land surface.

## B. Operating Requirements

- 1. Authorization to inject will not be granted until the permittee shows to the satisfaction of the WMDD pursuant to 40 CFR 146.8 that the well has mechanical integrity. The well's mechanical integrity must be demonstrated prior to the start of injection and at least every five years thereafter. The permittee must notify the EPA Region 6 UIC office at least 14 days prior to mechanical integrity testing so that an EPA representative can witness the test.
- 2. Injection pressure at the wellhead shall not exceed 1600 psig.
- 3. The permittee is authorized to inject salt water for disposal.
- 4. Injection volume shall be limited to 12,000 barrels per month.
- 5. Within 30 days after the effective date of this permit and until "Authorization to Inject" has been issued, the permittee shall monitor static fluid level as follows:
  - a. At least once every three months, if the static fluid level is more than 3,400 feet below the land surface.

b. At least once a month if the static fluid level is less than 3,400 feet below the land surface.

The monitoring results shall be reported to the Regional Administrator (RA) with the annual operating report required in condition II.L.4. The permittee shall report monitoring results to the EPA Region 6 UIC office if the static fluid level is within 3,350 feet of the land surface in the area of the well. The report shall be provided orally within 24 hours of the time the permittee becomes aware of the circumstances. A written report shall be provided within five days of the time the permittee becomes aware of the circumstances. The written report must include proposed actions to protect underground sources of drinking water and a schedule to complete those actions.

## Part II. CONDITIONS APPLICABLE TO ALL PERMITS

# A. <u>Confidentiality</u>

Any information except the permittee's name and address and information concerning the existence, absence or level of contaminants in drinking water may be claimed as confidential. Any claim of confidentiality must be asserted at the time of submission. If no claim is made, EPA may make the information available to the public without further notice.

# B. Duty to Comply

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification.

Compliance with the terms of this permit does not constitute a defense to any action brought under Section 1431 of the Safe Drinking Water Act (SDWA) or any other law for any imminent or substantial endangerment to human health or the environment or for any breach of any other applicable legal duty.

2. The permittee need not comply with the provisions of this permit to the extent and for the duration such noncompliance is authorized in a temporary emergency permit under 40 CFR 144.34.

## C. Duty to Halt or Reduce Activity

It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

# D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

# E. Proper Operation and Maintenance

1. All injection wells must have and maintain mechanical integrity consistent with 40 CFR 146.8(b)(1) and 147.3010. Mechanical integrity must be demonstrated initially and also any time the tubing is removed from the well, the packer is reset, or a loss of mechanical integrity becomes evident during operation.

Further, the Regional Administrator (RA) may by written notice require the permittee to demonstrate mechanical integrity at any time. The permittee shall notify the EPA Region 6 UIC office of his intent to prove mechanical integrity at least 14 days prior to such demonstration. The permittee shall report the results of the mechanical integrity demonstration within 30 days after completion (unless the demonstration is witnessed by an EPA inspector, in which case the inspector will prepare the report).

2. If the permittee or the RA finds that the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity as defined by 40 CFR 146.8 and 147.3010 becomes evident during operation, the operation shall be halted immediately and shall not be resumed until the RA gives approval to recommence injection.

The permittee shall at all times properly 3. operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate engineering capability available, adequate funding, operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

# F. Permit Actions

- 1. This permit may be modified, revoked and reissued, or terminated for the following causes (see 40 CFR 144.39 and 144.40):
  - a) There are substantial changes to the facility or activity which occurred after permit issuance that justify revised or additional permit conditions.
  - b) The RA has received information (e.g., from monitoring reports, inspections) which warrants a modified permit.
  - c) The regulations or standards on which the permit was based have changed.
  - d) The RA has received notice of a proposed permit transfer.
  - e) An interested person requests in writing that a permit be modified and the RA determines that cause for modification exists.
  - f) Cause exists for termination under 40 CFR 144.40, but the RA determines that permit modification is appropriate.

The modification described in 40 CFR 144.39 must be followed to accomplish the modifications described in item "a" through "f" of this section.

- 2. Minor modifications do not require that the procedure listed in 40 CFR 144.39 be followed. Minor modifications consist of:
  - a) Correcting typographical errors;
  - b) Requiring more frequent monitoring or reporting;
  - Changing ownership or operational control (see 40 CFR 144.38, Permit Transfers); or
  - d) Changing quantities or types of injected fluids, provided:
    - (i) The facility can operate within conditions of the permit;
    - (ii) The facility classification would not change.

The filing of a request by the permittee for a permit modification, or a notification of planned change or anticipated noncompliance, does not stay any permit condition.

# G. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

## H. <u>Duty to Provide Information</u>

The permittee shall furnish to the RA within a reasonable time any information which the RA requests to determine whether cause exists for modifying, revoking and reissuing or terminating this permit. The permittee shall also furnish to the RA, upon request, copies of records required to be kept by this permit.

# I. <u>Inspection and Entry</u>

The permittee shall allow EPA representatives upon the presentation of credentials and other documentation to:

- Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records required by this permit are kept;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

## J. Monitoring and Records

- 1. Samples and measurements taken for the purpose of monitoring shall be representative of the injection activity. The operator shall monitor the injection pressure (psi) and rate (bbl/day) once a month. Reporting of monitoring results shall be in accordance with procedures and at intervals prescribed in condition II.L.4 of this permit.
- 2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample measurement, report or application. This period may be extended by request of the RA at any time.

The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years after the completion of any plugging and abandonment procedures specified under 40 CFR 144.28(c) and 144.28(j)(2). The RA may require the owner or operator to deliver the records to the RA at the conclusion of the retention period.

- 3. Records of monitoring information shall include:
  - a) The date, exact place, and time of sampling or measurements;
  - b) The individuals who performed the sampling or measurements;
  - c) The date(s) analyses were performed;
  - d) The individual(s) who performed the analyses;
  - e) The analytical techniques or methods used including quality assurance techniques employed to insure the generation of reliable data; and
  - f) The results of such analyses.
- 4. The owner/operator shall retain all monitoring records for three (3) years, unless an enforcement action is pending, and then until three (3) years after the enforcement action has been resolved.

## K. Signatory Requirements

All applications, reports, or information submitted to the RA shall be signed and certified (see 40 CFR 144.32) by the injection facility owner/operator or his duly authorized representative.

# L. Reporting Requirements

1. The owner/operator shall notify the EPA Region 6 UIC office within 30 days of the date on which injection commenced.

- 2. Planned changes The permittee shall give advance notice to the RA of any planned changes which may result in noncompliance.
- 3. Transfers This permit is not transferable to any person except after notice to the RA.
  - a) Permits may be transferred to another permittee:
    - (1) If the current permittee notifies the RA by certified mail at least 30 days before the proposed transfer date; and
    - (2) If the notice includes a written agreement between the existing and new permittees containing:
      - (i) A specific date for transfer of permit responsibility, coverage and liability; and
      - (ii) Assurance that the new permittee has a surety bond on file with BIA; and
    - (3) If the RA does not respond with a notice to the existing permittee that the permit will be modified.
  - b) If the conditions in paragraph (a) of this section are met, the transfer is effective on the date specified in paragraph (a)(2)(i).
- 4. Monitoring reports Monitoring results shall be reported annually on the EPA Annual Disposal/Injection Well Monitoring Report form or an identical format. The report shall specify the types of methods used to generate the monitoring data.

- 5. Compliance schedules Reports of compliance or noncompliance with, or any progress report on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each interim date and final date of compliance.
- 6. Twenty-four hour reporting - The permittee shall report to EPA Region 6 UIC office any noncompliance which may endanger an underground source of drinking water. report shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 7. The following shall be reported within 30 days of occurrence:
  - a) Any monitoring reports or other information required under paragraph 6 that is not available within five (5) days.
  - b) Any malfunction of the injection system including any mechanical failure or downhole problem involving well integrity, well workovers, or any noncompliance (40 CFR 144.27).
- 8. Other noncompliance The permittee shall report all instances of noncompliance not reported under paragraphs 6 and 7 of this section at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph L.6 of this section.

9. The permittee shall notify the EPA Region 6 UIC office within 30 days of the date injection has terminated.

10. Other information. When the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the RA, the permittee shall promptly submit such facts or information.

## M. Additional Conditions

- 1. The operator of a well shall not allow the movement of fluid containing any contaminant into underground sources of drinking water if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect human health.
- 2. The owner/operator shall notify the EPA Region 6 UIC office within 30 days of the date injection has terminated. The well must be plugged within two years after termination of injection. The RA may extend the time to plug, but only if no fluid movement into a USDW will occur, and the operator has presented a viable plan for utilizing the well within a reasonable time.
- 3. The permittee shall notify the EPA Region 6
  UIC office by certified mail at least fortyfive (45) days prior to the commencement of
  plugging operations. The notice must include
  that information prescribed at 40 CFR 146.10.
- 4. Plugging and Abandonment The well shall be plugged in a manner which will not allow movement of fluids either into or between underground sources of drinking water. Placement of cement plugs shall be accomplished by one of the methods described in 40 CFR 146.10 or some other method approved by the RA.

The well to be abandoned shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the RA, prior to the placement of the cement plug(s).

# N. Financial Responsibility

The permittee must demonstrate and maintain financial responsibility and resources to close, plug, and abandon the underground injection well.

# O. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

## P. <u>Severability</u>

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provisions to other circumstances, and the remainder of this permit, shall not be affected thereby.

#### Q. Appeals

Appeals to this permit must be made in writing to the Administrator the EPA within 30 days of its' effective date. An appeal must contain the information setout in 40 C.F.R. 124.19.

# R. Explanation of Terms

Terms used in this permit are defined as follows:

"RA" - Regional Administrator, Region 6 EPA

"UIC" - Underground Injection Control

"SDWA"/"the Act" - The Safe Drinking Water Act

"EPA Region 6" - U.S. Environmental Protection Agency (6W-SE) 1445 Ross Avenue Dallas, Texas 75202-2733 Telephone - (214) 655-7165

"Well Stimulation" - means several processes used to clean the wellbore, enlarge channels, and increase pore space in the interval to be injected thus making it possible for wastewater to move more readily into the formation, and includes (1) surging, (2) jetting, (3) blasting, (4) acidizing, (5) hydraulic fracturing.

Other references to program - specific terms, acronyms and abbreviations shall mean those terms as defined by the UIC program regulations, 40 CFR 124, 144, 145, 146, 147 and the Safe Drinking Water Act.



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

# 8 52

November 7, 1994

REPLY TO: 6W-SE

Certified Mail #P 239 540 970 - Return Receipt Requested

Mr. Mark McCool MW Petroleum Corporation 304 North Behrend, Suite A Farmington, NM 87401

Re: Underground Injection Control Permit

Permit No. 06SNMJ1P9067 - Rio Arriba County, New Mexico

Dear Mr. McCool:

Enclosed is a copy of the final permit referenced above. Please read the entire permit so that you can become familiar with the effective date and the conditions of the permit. Pay special attention to permit condition number I.B.1. which requires that the well pass the mechanical integrity test and that you receive an "Authorization to Inject" from this office prior to any future operation of this well.

"Authorization to inject" will not be granted until you have satisfactorily demonstrated compliance with special permit conditions I.A.1., I.A.2., I.A.3., and I.B.1.

Appeals to this final permit must be made in writing to the Administrator of the EPA within 30 days of its effective date. An appeal must be made in accordance with 40 C.F.R. 124.19.

The Regional Administrator will review each issued permit at least once every five (5) years to determine whether it should be modified or terminated.

Please be reminded that the Bureau of Land Management and the New Mexico Oil Conservation Division also require you to obtain their permits prior to commencement of the work described in your EPA application.

To schedule your well for testing or if you have any questions, please contact Ms. Donna Bunn in Dallas at (214) 665-8093.

Sincerely yours,

Chief

Water Supply Branch (6W-S)

Enclosure

BIA, Albuquerque, New Mexico BLM, Farmington, New Mexico NM Oil Conservation Division, Santa Fe, New Mexico cc:

Mr. Rick Davis, EPA Field Office

Jicarilla Apache (Attn: Kurt Sandoval)

# ENVIRONMENTAL PROTECTION AGENCY UNDERGROUND INJECTION CONTROL (UIC) PERMIT

Permit No. 06SNMJ1P9067 Well No. 7

# AUTHORIZATION TO CONVERT A WELL TO AN INJECTION WELL UNDER THE UIC PROGRAM JICARILLA APACHE

In compliance with the provisions of the Safe Drinking Water Act, (hereafter referred to as "the Act" or "SDWA") as amended (42 U.S.C. §300f et seq.),

MW Petroleum Corporation 304 North Behrend, Suite A Farmington, NM 87401

is authorized to convert a well to a Class II salt water disposal injection well in Rio Arriba County, New Mexico. This well is located at:

0990 feet from the South line and 0990 feet from the West line, SW Quarter, Section 13, Township 25N, Range 04W into the injection interval at a depth of 8039 feet to 8189 feet below land surface in the Burro Canyon Sandstone in accordance with the construction and operation requirements, injection pressure limits, reporting and monitoring requirements, and other conditions set forth in Parts I and II of this permit and the New Mexico Indian Lands Class II Underground Injection Control Program and Regulations.

Authorization to inject fluids into the well described in this permit shall be separately granted. Such authorization may be verbally granted by the Chief, UIC Permits and Enforcement Section when the operator has satisfactorily demonstrated compliance with special permit conditions I.A.1., I.A.2., I.A.3., and I.B.1. Any verbal authorization to inject will be followed by a written "Authorization to Inject" from the Director, Water Management Division (WMDD).

This permit shall become effective on November 7, 1994 for conversion and for injection on the date specified in the "Authorization to Inject." Upon authorization to inject, this permit shall remain in effect until the well is plugged and abandoned or the permit is terminated.

Signed this \_\_7th \_\_ day of November \_\_\_\_\_19 \_\_94

Myron O. Knudson, P.E.

Director

Water Management Division Environmental Protection Agency Region 6

## Part I. SPECIAL PERMIT CONDITIONS

# A. Construction Requirements

- 1. Surface casing shall be set at 302 feet below land surface and cemented back to the surface. The long string casing shall be set at 8039 feet below land surface and cemented back to the surface with 1535 sacks of cement.
- 2. The well shall be equipped with standard female fittings with cut-off valves connected to the tubing and the tubing/casing annulus so that the injection pressure and annulus pressure may be measured by an EPA representative by attaching a gauge having a standard male fitting.
- 3. Tubing and packer must be installed. The packer must be run on the tubing and set inside the casing between 7964 and 8034 feet of depth below the land surface.

# B. Operating Requirements

- 1. Authorization to inject will not be granted until the permittee shows to the satisfaction of the WMDD pursuant to 40 CFR 146.8 that the well has mechanical integrity. The well's mechanical integrity must be demonstrated prior to the start of injection and at least every five years thereafter. The permittee must notify the EPA Region 6 UIC office at least 14 days prior to mechanical integrity testing so that an EPA representative can witness the test.
- Injection pressure at the wellhead shall not exceed 1600 psig.
- 3. The permittee is authorized to inject salt water for disposal.
- 4. Injection volume shall be limited to 12,000 barrels per month.
- 5. Within 30 days after the effective date of this permit and until "Authorization to Inject" has been issued, the permittee shall monitor static fluid level as follows:
  - a. At least once every three months, if the static fluid level is more than 3,400 feet below the land surface.

b. At least once a month if the static fluid level is less than 3,400 feet below the land surface.

The monitoring results shall be reported to the Regional Administrator (RA) with the annual operating report required in condition II.L.4. The permittee shall report monitoring results to the EPA Region 6 UIC office if the static fluid level is within 3,350 feet of the land surface in the area of the well. The report shall be provided orally within 24 hours of the time the permittee becomes aware of the circumstances. A written report shall be provided within five days of the time the permittee becomes aware of the circumstances. The written report must include proposed actions to protect underground sources of drinking water and a schedule to complete those actions.

#### Part II. CONDITIONS APPLICABLE TO ALL PERMITS

## A. <u>Confidentiality</u>

Any information except the permittee's name and address and information concerning the existence, absence or level of contaminants in drinking water may be claimed as confidential. Any claim of confidentiality must be asserted at the time of submission. If no claim is made, EPA may make the information available to the public without further notice.

# B. Duty to Comply

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification.

Compliance with the terms of this permit does not constitute a defense to any action brought under Section 1431 of the Safe Drinking Water Act (SDWA) or any other law for any imminent or substantial endangerment to human health or the environment or for any breach of any other applicable legal duty.

2. The permittee need not comply with the provisions of this permit to the extent and for the duration such noncompliance is authorized in a temporary emergency permit under 40 CFR 144.34.

# C. Duty to Halt or Reduce Activity

It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

## D. <u>Duty to Mitigate</u>

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

## E. Proper Operation and Maintenance

1. All injection wells must have and maintain mechanical integrity consistent with 40 CFR 146.8(b)(1) and 147.3010. Mechanical integrity must be demonstrated initially and also any time the tubing is removed from the well, the packer is reset, or a loss of mechanical integrity becomes evident during operation.

Further, the Regional Administrator (RA) may by written notice require the permittee to demonstrate mechanical integrity at any time. The permittee shall notify the EPA Region 6 UIC office of his intent to prove mechanical integrity at least 14 days prior to such demonstration. The permittee shall report the results of the mechanical integrity demonstration within 30 days after completion (unless the demonstration is witnessed by an EPA inspector, in which case the inspector will prepare the report).

2. If the permittee or the RA finds that the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity as defined by 40 CFR 146.8 and 147.3010 becomes evident during operation, the operation shall be halted immediately and shall not be resumed until the RA gives approval to recommence injection.

3. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate engineering capability available, adequate funding, operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

# F. Permit Actions

- 1. This permit may be modified, revoked and reissued, or terminated for the following causes (see 40 CFR 144.39 and 144.40):
  - a) There are substantial changes to the facility or activity which occurred after permit issuance that justify revised or additional permit conditions.
  - b) The RA has received information (e.g., from monitoring reports, inspections) which warrants a modified permit.
  - c) The regulations or standards on which the permit was based have changed.
  - d) The RA has received notice of a proposed permit transfer.
  - e) An interested person requests in writing that a permit be modified and the RA determines that cause for modification exists.
  - f) Cause exists for termination under 40 CFR 144.40, but the RA determines that permit modification is appropriate.

The modification described in 40 CFR 144.39 must be followed to accomplish the modifications described in item "a" through "f" of this section.

- 2. Minor modifications do not require that the procedure listed in 40 CFR 144.39 be followed. Minor modifications consist of:
  - a) Correcting typographical errors;
  - b) Requiring more frequent monitoring or reporting;
  - c) Changing ownership or operational control (see 40 CFR 144.38, Permit Transfers); or
  - d) Changing quantities or types of injected fluids, provided:
    - (i) The facility can operate within conditions of the permit;
    - (ii) The facility classification would not change.

The filing of a request by the permittee for a permit modification, or a notification of planned change or anticipated noncompliance, does not stay any permit condition.

## G. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### H. <u>Duty to Provide Information</u>

The permittee shall furnish to the RA within a reasonable time any information which the RA requests to determine whether cause exists for modifying, revoking and reissuing or terminating this permit. The permittee shall also furnish to the RA, upon request, copies of records required to be kept by this permit.

# I. <u>Inspection and Entry</u>

The permittee shall allow EPA representatives upon the presentation of credentials and other documentation to:

- Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records required by this permit are kept;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

## J. Monitoring and Records

- 1. Samples and measurements taken for the purpose of monitoring shall be representative of the injection activity. The operator shall monitor the injection pressure (psi) and rate (bbl/day) once a month. Reporting of monitoring results shall be in accordance with procedures and at intervals prescribed in condition II.L.4 of this permit.
- 2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample measurement, report or application. This period may be extended by request of the RA at any time.

The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years after the completion of any plugging and abandonment procedures specified under 40 CFR 144.28(c) and 144.28(j)(2). The RA may require the owner or operator to deliver the records to the RA at the conclusion of the retention period.

- 3. Records of monitoring information shall include:
  - a) The date, exact place, and time of sampling or measurements;
  - b) The individuals who performed the sampling or measurements;
  - c) The date(s) analyses were performed;
  - d) The individual(s) who performed the analyses;
  - e) The analytical techniques or methods used including quality assurance techniques employed to insure the generation of reliable data; and
  - f) The results of such analyses.
- 4. The owner/operator shall retain all monitoring records for three (3) years, unless an enforcement action is pending, and then until three (3) years after the enforcement action has been resolved.

#### K. Signatory Requirements

All applications, reports, or information submitted to the RA shall be signed and certified (see 40 CFR 144.32) by the injection facility owner/operator or his duly authorized representative.

# L. Reporting Requirements

1. The owner/operator shall notify the EPA Region 6 UIC office within 30 days of the date on which injection commenced.

- 2. Planned changes The permittee shall give advance notice to the RA of any planned changes which may result in noncompliance.
- 3. Transfers This permit is not transferable to any person except after notice to the RA.
  - a) Permits may be transferred to another permittee:
    - (1) If the current permittee notifies the RA by certified mail at least 30 days before the proposed transfer date; and
    - (2) If the notice includes a written agreement between the existing and new permittees containing:
      - (i) A specific date for transfer of permit responsibility, coverage and liability; and
      - (ii) Assurance that the new permittee has a surety bond on file with BIA; and
    - (3) If the RA does not respond with a notice to the existing permittee that the permit will be modified.
  - b) If the conditions in paragraph (a) of this section are met, the transfer is effective on the date specified in paragraph (a)(2)(i).
- 4. Monitoring reports Monitoring results shall be reported annually on the EPA Annual Disposal/Injection Well Monitoring Report form or an identical format. The report shall specify the types of methods used to generate the monitoring data.

- 5. Compliance schedules Reports of compliance or noncompliance with, or any progress report on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each interim date and final date of compliance.
- 6. Twenty-four hour reporting - The permittee shall report to EPA Region 6 UIC office any noncompliance which may endanger an underground source of drinking water. report shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 7. The following shall be reported within 30 days of occurrence:
  - a) Any monitoring reports or other information required under paragraph 6 that is not available within five (5) days.
  - b) Any malfunction of the injection system including any mechanical failure or downhole problem involving well integrity, well workovers, or any noncompliance (40 CFR 144.27).
- 8. Other noncompliance The permittee shall report all instances of noncompliance not reported under paragraphs 6 and 7 of this section at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph L.6 of this section.

9. The permittee shall notify the EPA Region 6 UIC office within 30 days of the date injection has terminated.

10. Other information. When the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the RA, the permittee shall promptly submit such facts or information.

# M. Additional Conditions

- 1. The operator of a well shall not allow the movement of fluid containing any contaminant into underground sources of drinking water if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect human health.
- 2. The owner/operator shall notify the EPA
  Region 6 UIC office within 30 days of the
  date injection has terminated. The well must
  be plugged within two years after termination
  of injection. The RA may extend the time to
  plug, but only if no fluid movement into a
  USDW will occur, and the operator has
  presented a viable plan for utilizing the
  well within a reasonable time.
- 3. The permittee shall notify the EPA Region 6
  UIC office by certified mail at least fortyfive (45) days prior to the commencement of
  plugging operations. The notice must include
  that information prescribed at 40 CFR 146.10.
- 4. Plugging and Abandonment The well shall be plugged in a manner which will not allow movement of fluids either into or between underground sources of drinking water. Placement of cement plugs shall be accomplished by one of the methods described in 40 CFR 146.10 or some other method approved by the RA.

The well to be abandoned shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the RA, prior to the placement of the cement plug(s).

# N. Financial Responsibility

The permittee must demonstrate and maintain financial responsibility and resources to close, plug, and abandon the underground injection well.

# O. <u>Civil and Criminal Liability</u>

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

# P. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provisions to other circumstances, and the remainder of this permit, shall not be affected thereby.

## Q. Appeals

Appeals to this permit must be made in writing to the Administrator the EPA within 30 days of its' effective date. An appeal must contain the information setout in 40 C.F.R. 124.19.

## R. Explanation of Terms

Terms used in this permit are defined as follows:

"RA" - Regional Administrator, Region 6 EPA

"UIC" - Underground Injection Control

"SDWA"/"the Act" - The Safe Drinking Water Act

"EPA Region 6" - U.S. Environmental Protection Agency (6W-SE) 1445 Ross Avenue Dallas, Texas 75202-2733 Telephone - (214) 655-7165

"Well Stimulation" - means several processes used to clean the wellbore, enlarge channels, and increase pore space in the interval to be injected thus making it possible for wastewater to move more readily into the formation, and includes (1) surging, (2) jetting, (3) blasting, (4) acidizing, (5) hydraulic fracturing.

Other references to program - specific terms, acronyms and abbreviations shall mean those terms as defined by the UIC program regulations, 40 CFR 124, 144, 145, 146, 147 and the Safe Drinking Water Act.