

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION IX  
UNDERGROUND INJECTION CONTROL PROGRAM

**FINAL PERMIT**

Class IID Water Injection Well

Permit No. NN208000005

Well Name: Aneth Unit E-221 SE SWD

San Juan County, Utah

Navajo Nation

API No. 4303731882

Issued to:

Resolute Natural Resources Company

1675 Broadway, Suite 1950

Denver, Colorado 80202

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APPENDIX A - Plugging and Abandonment Plan (s)

APPENDIX B - Reporting Forms and Instructions

APPENDIX C - Wellbore Schematic(s)

APPENDIX D - Reference Materials

## PART I. AUTHORIZATION TO OPERATE AND INJECT

Pursuant to the Underground Injection Control (UIC) Regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (CFR), §§124, 144, 145, 146, 147, and 148,

Resolute Natural Resources Company  
1675 Broadway, Suite 1950  
Denver, Colorado 80202

is hereby authorized to drill, construct, and operate a new Class IID horizontal water injection well, to be known as the Aneth Unit E-221 SE SWD (Salt Water Disposal) well. The vertical portion of the well will be located on BLM land at 2520 feet from the south line and 1,640 feet from the west line of Section 21, Township 40 South, Range 24 East, at thirty-seven (37) degrees, seventeen (17) minutes, forty and two-tenths (40.2) seconds latitude and one-hundred-nine (109) degrees, seventeen (17) minutes, nineteen and two-tenths (19.2) seconds longitude, in San Juan County, Utah. Three of the four lateral wellbores will be located entirely under Navajo Nation trust land in Section 21, 40 South, Range 24 East and the fourth lateral will be located entirely under Navajo Nation trust land in the west half of Section 21, 40 South, Range 24 East and the east half of Section 20, Township 40 South, Range 24 East.

Injection shall be for the purpose of disposing of produced water from the Desert Creek and Ismay members of the Paradox Formation into the Mississippian Leadville formation, in accordance with conditions set forth herein; the source of the produced water is from current and future wells operated by the Permittee in the Greater Aneth Field.

All conditions set forth herein refer to Title 40 CFR §§124, 144, 145, 146, 147, and 148 of the CFR and are regulations that are in effect on the date that this permit becomes effective.

This permit consists of a total of sixteen (16) pages plus the appendices as listed in the Table of Contents. Further, it is based upon representations made by the Permittee and on other information contained in the administrative record. It is the responsibility of the Permittee to read and understand all provisions of this permit.

This permit and the authorization to inject are issued for a period of ten (10) years unless terminated under the conditions set forth in Part III, Section B of this permit. The permit will expire upon delegation of primary enforcement responsibility for the UIC Class II Program to an appropriate agency of the Navajo Nation, unless that agency has the appropriate authority and chooses to adopt and enforce this permit as a Tribal permit. The permit shall be reviewed by EPA every five (5) years.

Issued this 3rd day of December, 2008

This permit shall become effective today, December 3, 2008.

/signed by/  
Alexis Strauss  
Director, Water Division

## PART II. SPECIFIC PERMIT CONDITIONS

### A. WELL CONSTRUCTION

1. Casing and Cementing. The construction details submitted with the permit application, as amended by EPA, are incorporated into this permit as APPENDIX C (Wellbore Schematic), and shall be binding on the Permittee. The intermediate casing will be set to a depth at least fifty (50) feet below the top of the Chinle Formation at approximately 1,500 feet, which is subject to review during drilling and logging operations. The well will be cased and cemented to prevent the movement of fluids in the casing wellbore annulus, from the casing shoe of each casing string to the surface. The casing shall be maintained throughout the operating life of the well. Advance notice of drilling, casing, cementing and remedial operations will be given to EPA<sup>1</sup> so that an EPA representative may be present to monitor those operations.
2. Formation Logging and Testing. A Dual Laterolog, Gamma Ray/Compensated Neutron Log/Compensated Density Logs, Caliper and Sonic Log will be run from total depth (TD) to the bottom of the surface casing at approximately eighty-two (82) feet and a Cement Bond Log/Gamma Ray log will be run from TD to the bottom of intermediate casing. A pressure fall-off test will be conducted annually for the determination of the static reservoir pressure and permeability of the injection zone and will be reported to the Director<sup>2</sup> within thirty (30) days of the test date. The Region 9 EPA guidance document for conducting a fall-off test- can be found in Appendix D. The test results and evaluation will be subject to the Director's review and approval. Advance notice of logging and fall off test operations shall be given to the Director, so that an EPA representative may be present to witness/monitor those operations.
3. Monitoring Devices. The operator shall install and maintain in good operating condition:
  - (a) A tap on the discharge line between the injection pump and the wellhead for the purpose of obtaining representative samples of the injection fluids;
  - (b) Two one-half (1/2) inch FIP (female) fittings, isolated by plug or globe valves, and positioned to provide for the permanent attachment of one-half (1/2) inch MIP (male) gauges at the wellhead on the injection tubing and on the tubing/casing annulus. The gauges used shall be of a design to provide (1), a full pressure range of 100 percent greater than the anticipated operating pressure, and (2), a certified deviation accuracy of five (5) percent or less throughout the operating pressure range;
  - (c) A flow meter with measured cumulative volumes that are certified for a deviation accuracy of five (5) percent or less throughout the range of injection rates allowed by the permit.

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<sup>1</sup> "EPA" refers to the Ground Water Office Manager, U.S. Environmental Protection Agency Region IX, with the associated address shown in part II.D.4

<sup>2</sup> "Director" refers to the Water Division Director, EPA Region IX

4. Proposed Changes and Workovers. The Permittee shall give advance notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted injection well. Any changes in the well construction will require prior approval of the Director and a permit modification under the requirements of 40 CFR §144.39 may be also required.

In addition, the Permittee shall provide all records of well completions, workovers, logging, or other subsequent test data, including required mechanical integrity testing, to the Director within thirty (30) days of completion of the activity. Appendix B contains samples of the appropriate reporting forms. Demonstration of mechanical integrity shall be performed within thirty (30) days of completion of workovers or alterations and prior to resuming injection activities in accordance with Part II, Section C.1.(a) of this permit.

## **B. CORRECTIVE ACTION**

No corrective action will be required on the other wells within the eight (8) mile radius area of review (AOR) since those wells do not penetrate the injection zone or are constructed and/or plugged and abandoned in a manner that is protective of Underground Sources of Drinking Water (USDWs, per 40 CFR §144.3) in wells that penetrate the injection zone. The AOR will be reevaluated annually and may be enlarged if the zone of endangering influence, to be calculated from log and formation fluid pressure data, exceeds the AOR. Additional wellbores that may penetrate the expanded AOR will then be considered for corrective action in accordance with the provisions of 40 CFR §§144.55 and 146.7.

## **C. WELL OPERATION**

### **1. Mechanical Integrity.**

#### **(a) Method for Demonstrating Mechanical Integrity.**

- (i) All injection wells must have and maintain mechanical integrity consistent with 40 CFR §146.8. The Permittee must show that there are no significant leaks in the casing and tubing and that there is no significant fluid movement into any Underground Sources of Drinking Water (USDWs) through vertical channels adjacent to the injection wellbore or into the casing/wellbore annulus.
- (ii) The Permittee will demonstrate that no significant leaks exist by means of a shut-in annular pressure test. The casing/tubing annulus must hold a pressure equal to the maximum allowable injection pressure (3,500 psig) for a period of thirty (30) minutes with no more than a five (5) percent change in pressure and a differential of at least three hundred (300) psig pressure must be maintained between the tubing and casing/tubing annulus for the duration of the test. The test pressure may be reduced to 1,000 psig (minimum) but the frequency of testing will be reduced from five (5) to three (3) years and the tubing/casing annulus pressure must be monitored and recorded on a weekly basis.

- (iii) The Permittee will fulfill the requirements listed in 40 CFR §146.8 for demonstrating the absence of fluid movement into an underground source of drinking water (USDW) through vertical channels adjacent to the injection wellbore. The Permittee will run a cement bond log to demonstrate the isolation of the injection interval and other porous and permeable formations from USDWs. USDWs will be protected by means of cementing the wellbore annulus of all casing strings from the casing shoe to the surface in addition to the installation of tubing and packer assemblies through which injection will occur.
- (b) Prohibition without Demonstration. Injection into this well may continue after the effective date of this permit only if:
  - (i) the well has passed a mechanical integrity test (MIT) in accordance with Part II Section C.1.(a) of this permit and
  - (ii) the Permittee has received written notice from the Director that the MIT demonstration is satisfactory.

The Permittee shall notify the Director of intent to demonstrate mechanical integrity at least thirty (30) days prior to an official test, unless shorter notice is approved by the Director.

- (c) Subsequent Mechanical Integrity Demonstrations
  - (i) A demonstration of mechanical integrity in accordance with provisions of EPA REGION IX MECHANICAL INTEGRITY TEST PART I: REQUIREMENTS FOR INTERNAL TEST, a copy of which is contained in Appendix D attached hereto, shall be conducted at least once every five (5) years during the life of the well, or every three (3) years if the well is tested at less than the maximum allowable injection pressure. Mechanical integrity shall also be demonstrated within thirty (30) days of the time that a workover is conducted, or the seal is broken at the wellhead assembly, or the construction of the well is modified.
  - (ii) It shall be the Permittee's responsibility to arrange and conduct the mechanical integrity demonstrations. The Permittee shall notify the Director of intent to demonstrate mechanical integrity at least thirty (30) days in advance of the demonstration, or a shorter time if approved by the Director. A subsequent notification must be given to the Navajo Nation UIC office at least seventy-two (72) hours in advance of the MIT in order to arrange for a representative to witness the MIT. Results of the test shall be submitted to the Director as soon as possible, but not later than sixty (60) days after the demonstration.
  - (iii) In addition to any demonstration made under paragraph (I) above, the Director may require a demonstration of mechanical integrity at any time during the permitted life of the well.

- (d) Loss of Mechanical Integrity. The Permittee shall notify the Director, in accordance with Part III, Section E, paragraph 10 of this permit, under any of the following circumstances:

- (i) the well fails to demonstrate mechanical integrity during a test, or
- (ii) a loss of mechanical integrity becomes evident during operation, or
- (iii) a significant change in the annulus or injection pressure occurs during normal operating conditions.

Furthermore, in the event of (i), (ii), or (iii), injection activities shall be terminated immediately and operation shall not be resumed until the Permittee has taken necessary actions to restore mechanical integrity to the well and the Director gives approval to recommence injection; remedial operations shall be completed no later than six (6) months after the loss of mechanical integrity is discovered. If USDWs are endangered by possible fluid movement while the well is inactive, remedial operations will be initiated and completed as soon as possible, but not later than 60 days after discovery of the loss of mechanical integrity.

2. Injection Interval(s). Injection shall be permitted for the Leadville Formation in the gross subsurface interval of approximately 6,555 to 7,100 feet, subject to a review of the wireline log formation tops and depth to the top of the Upper Leadville Formation and the base of the deepest perforation or lateral borehole in the Lower Leadville Formation. Enlarging or changing the injection interval outside of the Leadville Formation interval is considered a major permit modification and will require public notice and the Director's approval. Any alteration of the injection interval and other rework operations must be properly reported (EPA Form 7520-12, see Appendix B) and the well must demonstrate mechanical integrity before injection is resumed.
3. Injection Pressure Limitation(s). The injection pressure shall not exceed a surface (wellhead) injection pressure determined from a calculation of maximum allowable injection pressure equal to 1.0 psi/foot multiplied by the actual depth to the top of the injection interval less the hydrostatic pressure of the injection fluid at that depth. The maximum allowable injection pressure may be increased only if a valid step-rate test has been conducted and approved by the EPA. Appendix D contains acceptable step-rate reference materials. The step-rate test will be evaluated and a maximum allowable injection pressure will be determined by EPA, the results of which will be incorporated into this permit as the maximum allowable injection pressure. This will be considered a minor permit modification and will not be open for further public comment. The initial maximum allowable injection pressure is set at 3,500 psig, based on a depth of 6,555 feet to the top of the permitted injection interval and a hydrostatic pressure of 3,022 psig (0.461 psi/ft. gradient) at that depth.
4. Injection Volume (Rate) Limitation.
  - (a) The maximum injection rate shall be limited to 35,000 barrels per day, subject to the maximum allowable injection pressure. The average injection rate will be limited to 40,000 barrels per day or 1,240,000 barrels per month for the E-221 SE and C-113 LDVL wells combined. The maximum cumulative injection volume is



limited to a grand total of 70,201,000 barrels for both wells combined, for an average injection rate of 19,236 barrels per day over the ten-year term of the permits.

- (b) The Permittee may request an increase in the average and maximum rates allowed in paragraph (a). Any such request shall be made in writing and shall be appropriately justified to the Director.
- (c) Should any increase in injection rate or cumulative volume be requested, the Permittee shall demonstrate to the satisfaction of the Director that the increase in volume will not cause migration of formation or injected fluids into any USDW above or below the injection zone, nor cause any injected fluids to move beyond the AOR. If the increased cumulative volume requires an increase in the AOR, a major permit modification with opportunity for public review, comment, and appeal will be required to authorize the increased injection rate.

5. Injection Fluid Limitation.

- (a) The Permittee shall not inject any hazardous wastes as defined by the Resource Conservation and Recovery Act (RCRA) (see 40 CFR §261) at any time during the operation of the facility.
- (b) The well shall be used only for the injection of water produced in association with the Paradox formation oil production in the Greater Aneth Field, and produced only from wells owned and operated by the Permittee.
- (c) Fluids to be injected other than those described in paragraph (b) above shall be limited to occasional minor amounts of well treatment fluids such as dilute acids and corrosion inhibiting fluids. Injection of any fluids other than those described in paragraph (b) above shall be reported to the Director within thirty (30) days.

**D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS**

1. Injection Well Monitoring Program. Samples and measurements shall be representative of the monitored activity. The Permittee shall utilize the applicable analytical methods described in Table I of 40 CFR §136.3 or, in certain circumstances, other methods that have been approved by the EPA Administrator. Monitoring shall consist of:

- (a) Annually, or whenever there is a change in injection fluids, the following analyses of injection fluids shall be performed:
  - (i) Total Dissolved Solids;
  - (ii) Major ions;
  - (iii) pH;
  - (iv) Specific Conductance;
  - (v) Specific Gravity; and
  - (vi) Viscosity.
- (b) Annually, measurement of static reservoir pressure; and

- (c) Weekly, observations of injection pressure, annulus pressure, flow rate and cumulative volume. Written records of these weekly observations shall be made at least monthly.
2. Monitoring Information. Records of any monitoring activity required under this permit shall include:
- (a) Date, exact place, and the time of sampling or field measurements;
  - (b) Name of individual(s) who performed sampling or measurements;
  - (c) Exact sampling method(s) used;
  - (d) Date(s) the laboratory analyses were performed;
  - (e) Name of individual(s) who performed the analyses;
  - (f) Types of analyses; and
  - (g) Results of analyses.

3. Recordkeeping.

The Permittee shall retain the following records and shall have them available at all times for examination at the lease facility:

- (a) Information on the nature and composition of all injected fluids until three (3) years after the Plugging and Abandonment (P&A) has been carried out in accordance with the P&A Plan shown in Appendix A,
- (b) All monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit, for a period of at least five (5) years from the date of the sample, measurement or report throughout the operating life of the well,
- (c) Monthly records of weekly observation records as required in Part II, Section D.1(c),
- (d) Records and results of MITs or any other tests required by the Director, and
- (e) Any well workover records.

The Permittee shall continue to retain such records, including those corresponding to the retention periods specified in paragraphs (a) and (b), unless it delivers the records to the Director or obtains written approval from the Director to discard the records.

4. Reporting.

Annually, the Permittee shall submit a report to the Director summarizing the results of the monitoring required by Part II, Sections A.2, D.1 and 2 of this permit. The results of annual measurement of static reservoir pressure and monthly records of flow rates, volumes, pressures, and injected fluid, and any major changes in the characteristics or sources of injected fluid shall be included in the Annual Report. The first Annual Report shall cover the period from the effective date of the permit through December 31, 2008 and shall be submitted by January 31, 2009. Subsequently, the Annual Report shall cover the period of January 1 through December 31, and shall be submitted by January 31 of the following year. Appendix B contains Form 7520-11, which may be copied and used to submit the annual summary of monitoring.

Monitoring reports and all other reports required by this permit shall be submitted to the following address:

U.S. Environmental Protection Agency, Region IX  
Ground Water Office Manager (Mail Code WTR-9)  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Copies of all reports shall also be provided to the following:

Underground Injection Control Program  
Navajo Nation EPA  
P.O. Box 1999  
Shiprock, NM 87420

**E. PLUGGING AND ABANDONMENT**

1. Notice of Plugging and Abandonment. The Permittee shall notify the Director forty-five (45) days before further conversion, workover, or abandonment of the well. The Director may require that the plugging and abandonment be witnessed by an EPA representative.
2. P&A Plan. The Permittee shall plug and abandon the well as provided in the P&A Plan and Schematic diagram in Appendix A. The EPA reserves the right to change the manner in which the well will be plugged if the well is modified during its permitted life or if the well is not made consistent with EPA requirements for construction and mechanical integrity. The Director may ask the Permittee to estimate and to update the estimated plugging cost periodically. Such estimates shall be based upon costs which a third party would incur to plug the well according to the plan.
3. Cessation of Injection Activities. After a cessation of operations of two (2) years, the Permittee shall plug and abandon the well in accordance with the P&A Plan, unless it:
  - (a) has provided notice to the Director;
  - (b) has demonstrated that the well will be used in the future, and

- (c) has described actions or procedures, satisfactory to the Director that will be taken to ensure that the well will not endanger USDWs during the period of temporary abandonment.
- 4. **P&A Report.** Within sixty (60) days after plugging the well, the Permittee shall submit a report on Form 7520-14 (Appendix B), or an equivalent form, to the Director. The report shall be certified as accurate by the person who performed the plugging operation and the report shall consist of either: (1) a statement that the well was plugged in accordance with the plan, or (2) where actual plugging differed from the plan, a statement specifying the different procedures followed.

## **F. FINANCIAL RESPONSIBILITY**

### **1. Demonstration of Financial Responsibility.**

The Permittee is required to maintain financial responsibility and resources to close, plug, and abandon the injection well as provided in the P&A plan and in accordance with 40 CFR §144.52(a)(7). The Permittee shall not substitute an alternative demonstration of financial responsibility from that which the Director has approved, unless the Permittee has previously submitted evidence of that alternative demonstration to the Director and the Director has notified the Permittee in writing that the alternative demonstration is acceptable.

- (a) Prior to any construction or operation of this injection well, P&A costs for the subject well must be covered by an approved financial instrument. The stated beneficiary of said instrument shall be the U.S. EPA or, if delegation of primary enforcement authority for the UIC Class II Program to the Navajo Nation has been completed and this permit has been adopted as a Tribal permit, the Navajo Nation EPA UIC Program.
- (b) The financial responsibility mechanism shall be reviewed and updated periodically, upon request of the Director. The Permittee may be required to change to an alternate method of demonstrating financial responsibility, such as an irrevocable standby letter of credit or trust fund which names EPA, or Navajo Nation EPA UIC Program if so delegated, as the beneficiary. Any such change must be approved in writing by the Director prior to the change.

### **2. Insolvency of Financial Institution.**

The Permittee must submit an alternate instrument of financial responsibility acceptable to the Director within sixty (60) days after either of the following events occurs:

- (a) The trustee financial institution issuing the financial instrument files for bankruptcy; or
- (b) The authority of the trustee institution to act as trustee, or the authority of the institution issuing the financial instrument, is suspended or revoked.

Failure to submit an acceptable financial demonstration will result in the termination of this permit pursuant to 40 CFR §144.40(a)(1).

3. Insolvency of Owner or Operator.

An owner or operator must notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under U.S. Code Title 11 (Bankruptcy), naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he/she is named as debtor, as required under the terms of the guarantee.

### **PART III. GENERAL PERMIT CONDITIONS**

#### **A. EFFECT OF PERMIT**

The Permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The Permittee, as authorized by this permit, shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into USDWs, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR §142 or otherwise adversely affect the health of persons.

Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations.

#### **B. PERMIT ACTIONS**

1. Modification, Revocation and Re-issuance, or Termination.

The Director may, for cause or upon request from the Permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR §§124.5, 144.12, 144.39, and 144.40. The permit is also subject to minor modifications for cause as specified in 40 CFR §144.41. The filing of a request for a permit modification, revocation and re-issuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

2. Transfers.

This permit may only be transferred after notice is provided to the Director and the Permittee complies with the requirements of 40 CFR §144.38. The Director may require modification or revocation and re-issuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the SDWA.

### **C. 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 remainder of this permit shall not be affected.

### **D. CONFIDENTIALITY**

In accordance with 40 CFR Part 2 and 40 CFR §144.5, any information submitted to EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

1. The name and address of the Permittee, or
2. Information which deals with the existence, absence, or level of contaminants in drinking water.

### **E. GENERAL DUTIES AND REQUIREMENTS**

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and re-issuance, or modification. Such noncompliance may also be grounds for enforcement action under the Resource Conservation and Recovery Act (RCRA).
2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to civil penalties, fines, and other enforcement action under the SDWA and may be subject to such actions pursuant to RCRA. Any person who willfully violates permit conditions may be subject to criminal prosecution.
3. Need to Halt or Reduce Activity not a Defense. 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.
4. 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.
5. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control 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 funding, adequate 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 this permit.

6. Duty to Provide Information. The Permittee shall furnish the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
7. Inspection and Entry. The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
  - (a) enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;
  - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment) practices, or operations regulated or required under this permit; and
  - (d) 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.
8. Records of the Permit Application. The Permittee shall maintain records of all data required to complete the permit application and any supplemental information submitted for a period of five (5) years from the effective date of this permit. This period may be extended by request of the Director at any time.
9. Signatory Requirements. All reports or other information requested by the Director shall be signed and certified by a responsible corporate officer or duly authorized representative according to 40 CFR §144.32.
10. Reporting of Noncompliance.
  - (a) Anticipated Noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
  - (b) Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than thirty (30) days following each schedule date.

c) Twenty-Four Hour Reporting.

(i) The Permittee shall report to the Director any noncompliance which may endanger health or the environment. Information shall be provided within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances by telephoning the EPA project officer. The following information shall be included in the verbal report:

(A) Any monitoring or other information which indicates that any contaminant may cause endangerment to an USDW.

(B) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

(ii) 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 non compliance, including exact dates and times, and 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 recurrence of the noncompliance.

(d) Other Noncompliance. The Permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part II, Section D.1 and 2 of this permit.

(e) Other Information. Where the Permittee becomes aware that it failed to submit all relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall submit such facts or information within two (2) weeks of the time such information becomes known.



## APPENDIX A - Plugging and Abandonment Plan

## APPENDIX B - Reporting Forms and Instructions

1. EPA Form 7520-7:APPLICATION TO TRANSFER PERMIT
2. EPA Form 7520-10:WELL COMPLETION REPORT
3. EPA Form 7520-11:ANNUAL WELL MONITORING REPORT
4. EPA Form 7520-12:WELL REWORK RECORD
5. EPA Form 7520-14:PLUGGING AND ABANDONMENT PLAN

## APPENDIX C – Wellbore Schematic

#### APPENDIX D – Reference Materials

1. MECHANICAL INTEGRITY TEST PART I: REQUIREMENTS FOR INTERNAL TEST
2. REGION 9 UIC PRESSURE FALLOFF REQUIREMENTS
3. REGION 9 STEP RATE TESTING – reference Society of Petroleum Engineers (SPE) Paper #16798, Systematic Design and Analysis of Step-Rate Tests to Determine Formation Parting Pressure