

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION IX (EPA)
UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

DRAFT PERMIT

Class IIR Water/CO₂ Injection Wells

Permit No.NN208000006

Aneth Unit Area Permit, Phase III

San Juan County, Utah

Navajo Nation

Issued to:

Resolute Natural Resources Company

1675 Broadway, Suite 1950

Denver, Colorado 80202

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PART I. AUTHORIZATION TO OPERATE AND INJECT

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

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

is hereby authorized to drill, convert, and operate Class IIR water/carbon dioxide (CO₂) injection wells located in the Phase III project area of the Aneth Unit. The Phase III project area is defined as the area shown on the Aneth Unit Phase III Map in APPENDIX E of this permit and is located entirely on Navajo Nation land. The thirty-two (32) existing Class IIR injection wells located within the Phase III project area are listed in APPENDIX E. This permit authorizes injection in only those wells located in the Phase III project area, which is located entirely within Township 40S, Range 24E. The Aneth Unit is located in San Juan County, Utah, near the town of Montezuma Creek.

Injection shall be for the purpose of injection of CO₂ and produced water from the Desert Creek and Ismay members of the Paradox Formation into the Paradox formation for purposes of enhanced oil recovery, 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 Aneth Unit. The current source of the CO₂ is the Kinder Morgan McElmo Dome CO₂ Field, located approximately thirty (30) miles northeast of the Aneth Unit and recycled gas from Aneth Unit producing wells.

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

This permit consists of a total of seventeen (17) pages plus 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 twenty (20) 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 _____ day of _____

This permit shall become effective _____

Alexis Strauss
Director, Water Division

PART II. SPECIFIC PERMIT CONDITIONS

A. WELL CONSTRUCTION

1. Casing and Cementing. The construction details of existing injection wells, depicted in the well schematics submitted with the permit application, are incorporated into this permit and shall be binding on the Permittee. The wells are cased and cemented to prevent the movement of injection fluids in the casing wellbore annulus. The surface and intermediate casing strings are cemented to surface. The long string casing was set through the injection zone and cemented from the casing shoe upward to a depth that ensures isolation of the injection fluids from any Underground Sources of Drinking Water (USDWs, per 40 CFR §144.3), located approximately 3,600 feet above the injection zone. The casing shall be maintained throughout the operating life of the well. Typical well construction schematics for existing wells are included in APPENDIX C.

In wells in which surface or intermediate casing were set and cemented at a depth above the base of USDWs and cement placement in the long string casing/wellbore annulus was insufficient to cover the base of USDWs, remedial cement placement will be required at the base of USDWs during well conversion, casing repair, or plugging and abandonment operations. The wells within the Phase III Area of Review (AOR) and existing wells within the Phase III project area that require remedial cementing are identified in APPENDIX E. Advance notice of casing and cementing remedial operations will be given to the Director¹ so that an EPA representative may be present to monitor those operations.

The Permittee is required to provide notice and submit drilling and construction plans for new and converted injection wells forty-five (45) days in advance of drilling or conversion operations. Surface or intermediate casing in newly drilled wells will be set and cemented to a depth of at least 50 feet below the base of USDWs unless the cement placement in the long string casing/wellbore annulus is from the casing shoe to the surface or at least to a depth that is 100 feet above the surface or intermediate casing shoe and is verified by a cement bond log. Advance notice of casing and cementing operations will be given to the Director, so that an EPA representative may arrange to be present to witness/monitor those operations.

2. Formation Logging and Testing. Advance notice of logging and testing operations shall be given to the Director, so that an EPA representative may be present to witness/monitor those operations. Proposed well logging and testing operations are subject to EPA review and approval at least thirty (30) days in advance of those operations. Average formation pressures shall be measured and reported to EPA annually. Cement bond logs are required in newly constructed wells from plug-back total depth to the surface.
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;

¹ All required reports and notices are to be submitted to the Ground Water Office Manager, U.S. Environmental Protection Agency Region IX, with the associated address shown in part II.D.4

- (b) Two (2) one-half (½) inch FIP (female) fittings, isolated by plug or globe valves, and positioned to provide for either
 - (i) the permanent attachment of one-half (½) inch MIP (male) gauges, or
 - (ii) the attachments for equivalent "quick-disconnect" gauges at the wellhead on the injection tubing and on the tubing/casing annulus
 - (c) The gauges used shall be of a design to provide
 - (i) a full pressure range of one hundred (100) percent greater than the anticipated operating pressure, and
 - (ii) a certified deviation accuracy of five (5) percent or less throughout the operating pressure range;
 - (d) 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.
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 wells. Any changes in the well construction will require prior approval of the Director and a permit modification under the requirements of 40 CFR Part 144.39.

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 ninety-six (96) of the one hundred and twenty-eight (128) existing Navajo wells within the area of review (AOR) since those wells were constructed or plugged and abandoned in accordance with provisions of UIC regulations at 40 CFR §§146.10(a) and 146.22 and are protective of USDWs penetrated by those wellbores in accordance with provisions at 40 CFR §§144.55 and 146.7. The intermediate casing depth and cement placement in the long string casing/wellbore annulus are insufficient to assure that no fluid movement can occur into a USDW in thirty-two (32) wells located within the AOR. Those wells will require remedial cementing at the base of the USDWs during any future conversion or workover operations that include casing leak repair or when the well is plugged and abandoned. A listing of the 128 existing wells located within the AOR, including those that will require remedial cementing, is included in APPENDIX E.

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, per 40 CFR §144.3) 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 (2,980 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 one thousand (1,000) psig (minimum) but in that case, 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. In addition, the bradenhead valve will be opened and fluid pressure and content shall be monitored and recorded before and during the annular pressure test.
- (iii) The Permittee has fulfilled 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 of thirty-six (36) injection wells within the AOR, including sixteen (16) injection wells within the Phase III project area. The Permittee submitted casing and cementing records that adequately demonstrate the isolation of the injection intervals from USDWs penetrated by the wellbore of those wells. Remedial cementing operations will be required in the future in nineteen (19) injection wells within the AOR, including sixteen (16) injection wells within the project area, that lack sufficient cement to isolate USDWs from possible movement of fluids in the casing/wellbore annulus. The deficient wells are identified in the listings in APPENDIX A. The Director may require an external mechanical integrity test at any time during the life of a well to confirm the absence of fluid movement into or between USDWs.

(b) Prohibition without Demonstration. Injection into a newly constructed or converted well may begin 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 (MIT) 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, the construction of a well is modified, or within six (6) months when a loss of mechanical integrity becomes evident during operation.
- (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. 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 wells.

(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) a 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 action to restore mechanical integrity or plug and abandon the well shall be completed within six (6) months of the occurrence unless deferral for reasonable cause is requested by the Permittee and is approved by the Director. Those operations shall be completed as soon as possible

but no later than sixty (60) days after the occurrence when USDWs are endangered due to the mechanical integrity failure.

2. Injection Interval(s). Injection shall be permitted for the Paradox Formation interval, which shall be determined from wireline log depths to the top and base of the Paradox Formation in each well. The lower Honaker Trail Formation may be included in the overall injection interval in horizontal boreholes, up to the top of the uppermost open-hole window in the casing. Enlarging or changing the injection interval outside of that 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 of 2750 psig for water and 2980 psig for CO₂. The initial maximum allowable injection pressures are the maximum injection pressures proposed by the Applicant. Those pressures will not exceed the parting pressure of the injection zone, based on step-rate test results in eight McElmo Creek Unit injection wells, which are also completed in the Paradox Formation. 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.
4. Injection Volume (Rate) Limitation. The maximum and average daily injection rate of produced water and CO₂ is limited to the rate at which the maximum allowable injection pressure is not exceeded, as established in Part II.C.3 above.
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 wells shall be used only for the injection of CO₂ and water produced in association with the Paradox formation oil production in the Aneth Unit, 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 average 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 has been carried out in accordance with the Plugging and Abandonment 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 average 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 a well. The Director may require that the plugging and abandonment be witnessed by an EPA representative.
2. Plugging and Abandonment Plan. The Permittee shall plug and abandon the wells as provided in the typical Plugging and Abandonment Plans and Schematic diagrams in APPENDIX A., subject to modification and EPA approval for specific wells. The EPA reserves the right to change the manner in which a 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 and abandonment cost periodically. Such estimates shall be based upon costs that 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 Plugging and Abandonment 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 underground sources of drinking water during the period of temporary abandonment.
4. Plugging and Abandonment Report. Within sixty (60) days after plugging a 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:
 - (a) a statement that the well was plugged in accordance with the plan, or
 - (b) 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 wells as provided in the plugging and abandonment (P&A) plans and in accordance with 40 CFR §144.52(a)(7). The Permittee has provided a surety performance bond and a standby trust agreement to ensure that P&A costs for the existing injection wells are funded if the Permittee fails to properly plug and abandon the wells. P&A costs for newly constructed and converted wells must be added to the face amount of the existing financial instruments or covered by a new financial instrument before construction or conversion occurs, and are subject to Director approval. 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) Plugging and abandonment costs for the subject wells must be covered by an approved financial instrument, to be provided prior to issuance of the final permit. The beneficiary of said financial instrument shall be the U.S. Environmental Protection Agency.
- (b) The financial responsibility mechanism and amount 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 as the beneficiary, and may be required to update the amount of coverage to account for changes in P&A costs, the number of injection wells authorized under this permit, and other considerations as circumstances may require. 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 denial or 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 underground sources of drinking water, 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 Sections 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 underground source of drinking water.

(B) Any noncompliance with a permit condition or malfunction of the injection system, which may cause fluid migration into or between underground sources of drinking water.

(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 noncompliance, 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(s)

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(s)

APPENDIX D – Reference Materials

1. EPA REGION IX MECHANICAL INTEGRITY TEST (MIT) PART I: REQUIREMENTS FOR INTERNAL TEST
2. REGION IX STEP RATE TEST POLICY reference Society of Petroleum Engineers (SPE) Paper #16798, Systematic Design and Analysis of Step-Rate Tests to Determine Formation Parting Pressure

APPENDIX E – Listing of Existing Wells, with Project Expansion & AOR Maps

1. Listing of Existing Injection Wells within Phase III Project Area
2. Listing of Existing Wells within Phase III AOR and & Phase I Project Area
3. Listing of Existing Wells within Phase III AOR & Phase IV Project Area
4. Listing of Other Wells within Phase III Project Area
5. Map of CO₂ Expansion Areas
6. Phase III Area of Review Map