UTAH WATER QUALITY BOARD

CLASS V AREA PERMIT

UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

UIC PERMIT UTU-35-AP-38871EB
(Formerly UTU500005)

Permit Renewal

Issued To:

Jordan Valley Water Conservancy District
8215 South 1300 West
P.O. Box 70
West Jordan, Utah 84088-0070
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Sheet</td>
<td>i</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>i</td>
</tr>
<tr>
<td>List of Acronyms</td>
<td>iv</td>
</tr>
<tr>
<td><strong>Part I. AUTHORIZATION TO CONSTRUCT AND INJECT</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Part II. GENERAL PERMIT COMPLIANCE</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>A. EFFECT OF PERMIT</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>B. PERMIT ACTIONS</strong></td>
<td>2</td>
</tr>
<tr>
<td>1. Modification, Revocation, Reissuance and Termination</td>
<td>2</td>
</tr>
<tr>
<td>2. Transfer of Permits</td>
<td>2</td>
</tr>
<tr>
<td>3. Operator Change of Address</td>
<td>2</td>
</tr>
<tr>
<td><strong>C. SEVERABILITY</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>D. CONFIDENTIALITY</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>E. DUTIES AND REQUIREMENTS</strong></td>
<td>3</td>
</tr>
<tr>
<td>1. Duty to Comply</td>
<td>3</td>
</tr>
<tr>
<td>2. Penalties for Violations of Permit Conditions</td>
<td>3</td>
</tr>
<tr>
<td>3. Duty to Reapply</td>
<td>3</td>
</tr>
<tr>
<td>4. Need to Halt or Reduce Activity Not a Defense</td>
<td>3</td>
</tr>
<tr>
<td>5. Duty to Mitigate</td>
<td>4</td>
</tr>
<tr>
<td>6. Proper Operation and Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>7. Duty to Provide Information</td>
<td>4</td>
</tr>
<tr>
<td>8. Inspection and Entry</td>
<td>4</td>
</tr>
<tr>
<td>9. Recordkeeping</td>
<td>5</td>
</tr>
<tr>
<td>10. Signatory Requirements</td>
<td>6</td>
</tr>
<tr>
<td>11. Reporting Requirements</td>
<td>6</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>F. REOPENER PROVISIONS</td>
<td>9</td>
</tr>
<tr>
<td>Part III. SPECIFIC PERMIT CONDITIONS</td>
<td>10</td>
</tr>
<tr>
<td>A. COMPLIANCE SCHEDULE</td>
<td>10</td>
</tr>
<tr>
<td>B. CONSTRUCTION REQUIREMENTS FOR NEW WELLS</td>
<td>10</td>
</tr>
<tr>
<td>C. OPERATION REQUIREMENTS</td>
<td>10</td>
</tr>
<tr>
<td>1. Injection Zone</td>
<td>10</td>
</tr>
<tr>
<td>2. Injection Pressure Limitations</td>
<td>10</td>
</tr>
<tr>
<td>3. Injection Rate Limitations</td>
<td>10</td>
</tr>
<tr>
<td>4. Injection Fluid Limitations</td>
<td>11</td>
</tr>
<tr>
<td>5. Well Site Security</td>
<td>11</td>
</tr>
<tr>
<td>D. MONITORING, TESTING, AND REPORTING OF RESULTS</td>
<td>12</td>
</tr>
<tr>
<td>1. Injectate Characterization</td>
<td>12</td>
</tr>
<tr>
<td>2. Monitoring of Operating Parameters</td>
<td>12</td>
</tr>
<tr>
<td>3. Reporting of Results</td>
<td>13</td>
</tr>
<tr>
<td>E. PLUGGING AND ABANDONMENT OF RECHARGE WELLS</td>
<td>13</td>
</tr>
<tr>
<td>1. Plugging and Abandonment Plan</td>
<td>13</td>
</tr>
<tr>
<td>2. Notice of Plugging and Abandonment</td>
<td>13</td>
</tr>
<tr>
<td>3. Plugging and Abandonment Report</td>
<td>13</td>
</tr>
<tr>
<td>4. Inactive Well</td>
<td>14</td>
</tr>
<tr>
<td>F. FINANCIAL RESPONSIBILITY</td>
<td>14</td>
</tr>
<tr>
<td>G. CONTINUATION OF EXPIRING PERMIT</td>
<td>14</td>
</tr>
<tr>
<td>1. Permit Extension</td>
<td>14</td>
</tr>
<tr>
<td>2. Effect</td>
<td>14</td>
</tr>
<tr>
<td>3. Enforcement</td>
<td>14</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

Part IV. PERMIT ATTACHMENTS

Attachment I Table 1 – Monitoring Parameters and Schedule
Attachment II Utah UIC Quality Assurance (QA) Plan
LIST OF TERMS AND ACRONYMS

Act........................Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated 1953
Board......................Utah Water Quality Board
CFR ......................Code of Federal Regulations
DDW ......................Utah Division of Drinking Water
DWQ ......................Utah Division of Water Quality
DWRights ............Utah Division of Water Rights
JVWCD .................Jordan Valley Water Conservancy District
LCWTP .................Little Cottonwood Water Treatment Plant
MCL ......................Maximum Contaminant Level
MI ......................Mechanical Integrity
MIT ......................Mechanical Integrity Test
MSIP ......................Maximum Surface Injection Pressure
POMWTP ........Point of the Mountain Water Treatment Plant
ppm ......................parts per million
psi ......................pounds per square inch
psig ......................pounds per square inch gauge
UAC ......................Utah Administrative Code
UIC ......................Underground Injection Control
USDW .................Underground Source of Drinking Water
USEPA ..............United States Environmental Protection Agency
PART I. AUTHORIZATION TO CONSTRUCT AND INJECT

Pursuant to the Underground Injection Control Rules of the Utah Water Quality Board (the Board) codified in the Utah Administrative Code (UAC) R317-7,

Jordan Valley Water Conservancy District (JVWCD)

is hereby authorized to construct and operate Class V aquifer recharge injection wells completed in Quaternary age sediments located in Salt Lake County at approximately 6800 to 9800 South and 700 to 2700 East. The permit area lies within the following bounds: lat. 40° 33' 30" N to 40° 37' 10" N and longitude 111° 48' 30" E to 111° 53' 00" E. Injection is subject to the condition that the permittee meets the requirements set forth herein.

All references to UAC R315-2, UAC R317-7 and to Title 40 of the Code of Federal Regulations (40 CFR) pertain to all regulations that are in effect on the date that this permit becomes effective.

This permit is based upon representations made by the permittee and 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 shall become effective June 15, 2010.

This permit and the authorization to inject shall expire at Midnight on June 15, 2015.

Signed this 15th day of June, 2010.

________________________________________
Walter L. Baker, P.E.
Executive Secretary
Utah Water Quality Board
PART II. GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

Jordan Valley Water Conservancy District (JVWCD), the permittee, is allowed to engage in underground injection in accordance with the conditions of this permit. The permittee shall not construct, operate, maintain, convert, plug or abandon any facilities nor conduct any injection activity or surface operations in a manner that allows the movement of fluid containing any contaminant into an underground source of drinking water (USDW) if the contaminant concentration exceeds any primary drinking water regulations under State and Federal Public Drinking Water Regulations (UAC R309-200 and 40 CFR Part 141), exceeds State Ground Water Quality Standards (UAC R317-6-2), exceeds a TDS of 500 mg/l, contains hazardous waste (UAC R315-2-3 or 40 CFR 261), or may otherwise adversely affect the health of persons. A USDW is defined in UAC R317-7-2.56.

Any underground injection activity not specifically authorized in this permit is prohibited. Compliance with this permit does not constitute a defense to any action brought under the Utah Water Quality Act, Title 19, Chapter 5 Utah Code Annotated 1953, (the Act) or any other common or statutory law or regulation. 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. Nothing in this permit shall be construed to relieve the permittee of any duties under applicable regulations.

B. PERMIT ACTIONS

1. Modification, Revocation, Re-issuance and Termination

The Executive Secretary of the Division of Water Quality (Executive Secretary) may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with UAC R317-7-9.6 (40 CFR 144.39 and 40 CFR 144.40) and R317-7-5.8. Also, the permit is subject to minor modifications as specified in UAC R317-7-9.6 (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.

Any finding by the Executive Secretary that the injection fluid may cause a violation according to Part II (A) of this permit, shall be cause for the Executive Secretary to modify, revoke and reissue, or terminate this permit in accordance with the requirements of this section.

2. Transfer of Permits

This permit is not transferable to any person except in accordance with UAC R317-7-9.6, which references 40 CFR 144.38.

3. Operator Change of Address

Upon the operator’s change of address, notice must be given to the Executive Secretary at least fifteen (15) days prior to the effective date.
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 application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with Section 19-5-113 of the Act any information deemed by the permittee to be entitled to trade secret protection submitted to the Board 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 information" on each page containing such information. If no claim is made at the time of submission, the Board may make the information available to the public without further notice. Claims of confidentiality for the following information will be denied as per UAC R317-7-9.7.

1. The name and address of the permittee.

2. Information that deals with the existence, absence or level of contaminants in drinking water.

E. DUTIES AND REQUIREMENTS

1. Duty to Comply

The permittee shall comply with all applicable UIC Program regulations and conditions of this permit, except to the extent and for the duration an emergency permit issued in accordance with UAC R317-7-8 authorizes such noncompliance. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and re-issuance, modifications, or for denial of a permit renewal application.

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 Act. Any person who willfully violates permit conditions may be subject to criminal prosecution.

3. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a complete application for a new permit at least 180 days before this permit expires.

4. 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.
5. **Duty to Mitigate**

Upon any finding by the permittee or the Executive Secretary that the injection activity is in violation of Part II (A) of this permit, the permittee shall:

a. Take immediate action to prevent or mitigate the violation, including the cessation of injection, as may be found necessary by the permittee or the Executive Secretary.

b. Conduct remedial investigations, if deemed necessary by the Executive Secretary, to determine:
   
   i. The extent and characteristics of the USDW impacted.
   
   ii. The extent and impact of the contamination caused by the injection activity. This includes an evaluation of the fate of the contaminants in the hydrogeologic system.
   
   iii. Options for corrective action to mitigate the effects of the contamination on the USDW and to prevent the migration of contaminants to any public or private wells.

c. Submit a plan for corrective action to the Executive Secretary, if requested, and implement it after Executive Secretary approval.

6. **Proper Operation and Maintenance**

The permittee shall at all times properly operate and maintain all facilities and systems of treatment, monitoring 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 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.

7. **Duty to Provide Information**

The permittee shall furnish to the Executive Secretary within a time specified, any information which the Executive Secretary may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Executive Secretary upon request, copies of records that are kept under conditions of this permit.

8. **Inspection and Entry**

The permittee shall allow the Executive Secretary, or any authorized representative, upon the presentation of credentials and other documents as may be required by the law, to:
a. Enter upon the permittee's premises, at reasonable times, 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 are 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 Act any substances or parameters at any location.

9. Recordkeeping

a. The permittee shall record and retain records of well operations concerning:

i. Daily recharge volumes for each well during the period of injection, and

ii. Daily hydrostatic head or ground water levels for each well during the period of injection.

b. The permittee shall retain records and all monitoring information, including all calibration and maintenance records and original chart recordings, as well as copies of all analyses and reports required by this permit, for a period of at least three years from the date of the sample, measurement, calibration, maintenance, or report.

c. The permittee shall maintain records of all data required to complete the permit application form for this permit and any supplemental information submitted under UAC R317-7-9.2 for a period of at least three years from the date the application was signed.

d. The permittee shall retain records concerning the nature and composition of all injected fluids until three years after the completion of plugging and abandonment of the recharge wells.

e. The permittee shall continue to retain such records after the retention period specified by paragraphs (b) to (d) above, unless the permittee delivers the records to the Executive Secretary or obtains written approval from the Executive Secretary to discard the records.

f. Records of monitoring information shall include:

i. The date, exact place, and time of sampling or measurements;

ii. The individual(s) who performed the sampling or measurements;

iii. A precise description of measurement or sampling methodology, sample handling or custody, and all quality assurance methods used;

iv. The date(s) analyses were performed;
v. The name, address and phone number, and Utah certification number of the lab performing the analyses;

vi. The analytical techniques or methods used; and

vii. The results of such measurements or analyses, with the Utah certification number of the lab performing the analyses, if applicable.

g. The permittee shall maintain copies (or originals) of all pertinent records at the Jordan Valley Water Treatment Plant located at 15305 South 3200 West, Herriman, Utah.

10. Signatory Requirements

All reports or other information, submitted as required by this permit or requested by the Executive Secretary, shall be signed and certified in accordance with UAC R317-7-9.3, which references 40 CFR 144.32.

11. Reporting Requirements

a. Planned Changes

The permittee shall give written notice to the Executive Secretary at least 30 days before any planned physical alterations or additions to the UIC permitted facility.

The UIC permitted facility includes:

i. The 19 wells currently authorized under this area permit located at approximately:

(1) 7700 South 700 East
(2) 8200 South 700 East
(3) 7800 South 1000 East
(4) 8200 South 1000 East
(5) 8518 South 960 East
(6) 7800 South 1300 East
(7) 1800 East Creek Road
(8) 1200 East 9400 South - Well A
(9) 1200 East 9400 South - Well B
(10) 8600 South 1300 East
(11) 8200 South 1300 East
(12) 9390 South Solena Way
(13) 2090 East 8600 South
(14) 2400 East Creek Road
(15) 2400 East 9800 South
(16) 1600 East Siesta Drive
(17) 1453 East 9400 South
(18) 1526 East 8600 South
(19) 2700 East 9000 South (9003 South Quail Hollow Drive)
ii. New wells constructed in accordance with Part III (B) of this permit;

iii. Pipelines between the final injection pumps and the injection wellheads;

iv. Injection wells, wellheads, and all down-hole well equipment and instrumentation within the permit area; and

v. Instrumentation used to measure volume, pressure, and physical properties of fluids injected into the wells.

b. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of Part III (A) of this permit shall be submitted no later than 30 days following each schedule date.

c. Twenty-four Hour Reporting

i. The permittee shall report to the Executive Secretary any spill, leak or noncompliance of a permit condition that may endanger human health or the environment. Any such information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning the Executive Secretary or his representative at

The report shall be made to the Utah Department of Environmental Quality 24 hour number, (801) 536-4123, or to the Division of Water Quality Ground Water Protection Section at (801) 536-4300, during normal business hours (Monday through Thursday 7:00 am - 6:00 pm Mountain Time). Such reports shall include, but not be limited to:

(1) Any monitoring or other information that indicates that any contaminant may cause endangerment to a USDW.

ii. A written submission shall also be provided to the Executive Secretary within five (5) days of the time the permittee becomes aware of the potential for endangerment to human health or the environment. The written submission shall contain a description of the spill, leak or noncompliance and its cause, exact dates and times, steps taken to mitigate the effects, and steps taken or planned to prevent a re-occurrence. If a leak or noncompliance is ongoing, the submission shall indicate the anticipated time it is expected to continue.

d. Annual Monitoring Report

An annual monitoring report shall be submitted to the Executive Secretary on or before September 15 and shall include:

i. Weekly total volumes of fluids injected into each well.

ii. Hydrostatic head determinations for each injection well made immediately before the commencement of each injection event, immediately after each injection event, and monthly throughout the year even during periods of no injection.
iii. Analyses for the injectate including field parameters.

e. Other Noncompliance

The permittee shall report all other instances of noncompliance not otherwise reported at the time the annual report is submitted.

f. Other Information

When the permittee becomes aware that he failed to submit any relevant facts in the permit application or submitted incorrect information in a permit application or in any report to the Executive Secretary, the permittee shall submit such facts or information within 10 days of the time they become known.

g. Report on Permit Review

Within 30 days of receipt of this permit, the permittee shall report to the Executive Secretary that the person(s) designated to implement the requirements of this permit has read and is personally familiar with all terms and conditions of this permit.

h. Electronic Reporting

In addition to submittal of the hard copy data, the permittee shall electronically submit required monitoring data in the electronic format specified by the Executive Secretary. The data may be sent by e-mail, CD, or other approved transmittal mechanism.

F. REOPENER PROVISIONS

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate regulations and standards if one or more of the following events occurs:

1. New Standards

If new Federal or State MCLs for drinking water or State Ground Water Quality Standards are finalized during the life of the permit, the permit may be reopened and modified to extend the terms of the permit or to include pollutants covered by the new standards in Table 1.

2. New Rules

If the Board adopts new rules concerning the class of well authorized under this permit, the permit may be reopened and the new rules incorporated.

3. Monitoring Analytes/Frequency

If the Executive Secretary determines that the permit should be modified regarding monitoring analytes or monitoring frequency, the permit may be reopened and Table 1 modified accordingly.
4. **Adverse Public Health Impact**

   If information or data becomes available which demonstrates that an adverse public health impact is occurring, linked to the facilities covered under this permit, this permit may be opened to incorporate additional requirements including additional or new Best Available Technology requirements if necessary.

5. **Other Reasons for Reopening the Permit**

   If the Executive Secretary determines that events or conditions, other than those specified above, warrant it, the permit may be reopened and modified. Upon the approval of the Executive Secretary, the permittee may request, given just cause, that the permit be reopened and modified.
PART III. SPECIFIC PERMIT CONDITIONS

A. COMPLIANCE SCHEDULE

There are no compliance schedule items associated with this permit renewal.

B. CONSTRUCTION REQUIREMENTS FOR NEW WELLS

1. Before any new recharge/recovery wells are constructed under this UIC permit, the permittee must:
   a. Submit to the Executive Secretary a copy of the Memorandum Decision issued by the Utah Division of Water Rights stating that the State Engineer has approved the Ground Water Recharge Permit Application and issued a Ground Water Recharge Permit.
   b. Submit to the Executive Secretary a copy of a letter from the Utah Division of Drinking Water stating that all requirements regarding engineering design and construction of the wells, groundwater source water protection issues, and water quality issues have been properly addressed.

2. After any new recharge/recovery wells are constructed under this UIC permit, the permittee must:
   a. Submit to the Executive Secretary a copy of the “As Built” drawings for each new well.

C. OPERATION REQUIREMENTS

1. Injection Zone

   Injection is explicitly limited to the Quaternary age sediments located in Salt Lake County at approximately 6800 to 9800 South and 700 to 2700 East which is bounded by the following latitudes and longitudes: latitude 40° 33' 30" N to 40° 37' 10" N and longitude 111° 48' 30" E to 111° 53' 00" E.

2. Injection Pressure Limitation

   Injection pressure shall be limited to prevent flowing artesian conditions in the extraction or monitoring wells.

3. Injection Volume Limitation

   The injection volume is limited by the Ground Water Recharge Permit issued by the Utah Division of Water Rights. No additional restrictions on the injection volume are imposed by the Utah UIC Program.
4. Injection Fluid Limitations

a. Fluid injected through all wells is expressly limited to water from:
   Deer Creek Reservoir,
   Provo River,
   Bell Canyon Creek,
   Middle Fork Dry Creek,
   South Fork Dry Creek,
   Big Willow Creek, and
   Rocky Mouth Creek
   Little Cottonwood Creek

b. Prior to injection the water shall be fully treated by the Jordan Valley Water Treatment Plant, the
   Southeast Regional Water Treatment Plant, the Little Cottonwood Water Treatment Plant or the
   Point of the Mountain Water Treatment Plant.

c. Injected water shall meet all Federal and State Maximum Contaminant Levels for Drinking
   Water (MCLs), and State Ground Water Quality Standards. The maximum total dissolved solids
   (TDS) of injected water shall not exceed 500 milligrams per liter (mg/l).

d. The permittee shall not inject any hazardous waste as defined by UAC R315-2-3 or 40 CFR 261
   at any time during operation of the facility.

e. All additives introduced into the injection stream must meet all Utah Rules for Public Drinking
   Water Systems found in UAC R309-525-11.5.

f. The permittee shall notify the Executive Secretary in writing within 10 days of any changes in
   the injection fluid or process additives that may alter the quality or chemical composition of the
   injection fluid.

g. Upon notification of a spill or dumping incident which may adversely affect the quality of the
   injectate or any finding by the permittee or the Executive Secretary that the injection fluid has
   exceeded Federal or State MCLs, State Ground Water Quality Standards, TDS of 500 mg/l, or
   may otherwise adversely affect the health of persons, the permittee shall stop injection
   immediately at all affected or potentially affected wells. Injection shall not recommence until
   approval has been received by the Executive Secretary.

5. Well Site Security

a. At the 9800 South 2400 East injection well site: The fiberglass enclosure over the wellhead shall
   be maintained in good condition, kept in place and padlocked shut except during times of
   maintenance work by JVWCD personnel. The gate in the six-foot high fence shall be kept
   locked except during site visits by JVWCD personnel.
b. At all other well sites: For shaft-driven well pumps, wellheads shall be inside a locked, brick pump building. For submersible motor-driven pumps where the wellhead is outside a pump building, the wellhead shall be kept closed with bolted flange connections. Each of these wellheads shall be kept behind six-foot high fences with locked gates except during site visits by JVWCD personnel.

D. MONITORING, TESTING, AND REPORTING OF RESULTS

All monitoring and testing shall be conducted in accordance with the Quality Assurance (QA) Plan for the Underground Injection Control (UIC) Program included as Attachment II of the permit.

1. Injectate Characterization

a. Analytes for Monitoring

Injectate water shall be analyzed for the parameters listed in Attachment I of the permit. Utilizing proper chain-of-custody procedures, monitoring samples must be sent to a State-certified environmental lab for analyses. Sample analysis shall comply with applicable analytical methods cited and described in Table IB of 40 CFR 136.3 or in Appendix III of 40 CFR 261 or in certain circumstances by other methods that have been approved by the Executive Secretary.

Field parameters shall be determined immediately prior to collection of all water quality samples and shall include: pH, temperature, and specific conductivity.

b. Sampling Schedule

Recharge water samples shall be collected and analyzed according to the sampling schedule in Attachment I of the permit.

2. Monitoring of Operating Parameters

a. Calibration

The permittee shall ensure calibration of all meters, gauges, and totalizers associated with the injection wells according to manufacturer’s recommendations regarding method and frequency, with the minimum frequency being once a year. The permittee shall be responsible for maintaining records of calibration and quality assurance procedures.

b. Injection Pressure

Wellhead injection pressure shall be recorded on a continuous recording device. Periodic observations of the wellhead pressure gauges shall be made and compared to continuous recording device readings as a means of assuring the accuracy of the continuous recording device. The permittee shall report the injection pressure and annulus pressure information according to Part II (E)(11) of this permit.
c. Injection Volume

Injection volumes shall be recorded on continuous recording devices. Cumulative volumes shall be measured by non-resettable volume totalizers. The permittee shall report the injection volume information according to Part II (E)(11) of this permit.

d. Injection Flow Rate

Continuous monitoring of the injection flow rate is to be recorded on a continuous recording device. Periodic observation of the wellhead flow meter during injection shall be made and compared to continuous recording device readings as a means of assuring the accuracy of the continuous recording device. The permittee shall report the injection flow rate information according to Part II (E)(11) of this permit.

e. Hydrostatic Head in Injection Wells

Hydrostatic head will be determined in each injection well immediately before the commencement of each injection event, immediately after each injection event, and monthly throughout the year even during periods of no injection.

3. Reporting of Results

The permittee shall submit the results of the required monitoring and testing in Part III (D) of this permit according to the reporting requirements of Part II (E)(11) of this permit.

E. PLUGGING AND ABANDONMENT OF RECHARGE WELLS

1. Plugging and Abandonment Plan

After the recharge wells cease to be employed as a Class V injection wells, the permittee shall plug and abandon the wells according to an approved Plugging and Abandonment Plan that meets the requirements of the Utah Division of Water Rights and Utah Division of Drinking Water.

2. Notice of Plugging and Abandonment

The permittee shall notify the Executive Secretary in writing at least 45 days before planned abandonment of the injection well.

3. Plugging and Abandonment Report

Within 60 days after the plugging has been completed, the permittee shall submit to the Executive Secretary a copy of the plugging and abandonment report prepared in accordance with the requirements of the Utah Division of Water Rights and Utah Division of Drinking Water.
4. **Inactive Well**

After cessation of operation of the injection well for two years, the permittee shall plug and abandon the well in accordance with the requirements of the Utah Division of Water Rights and the Utah Division of Drinking Water, unless the permittee requests and receives a variance from this requirement from the Executive Secretary prior to the end of the two year cessation period, based on:

a. A demonstration that the well will be used in the future; and

b. A satisfactory description of actions or procedures that the permittee will take to ensure that the well will not endanger a USDW during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived by the Executive Secretary.

F. **FINANCIAL RESPONSIBILITY**

The permittee is not required to maintain financial responsibility and resources to plug and abandon the permitted injection well facilities beyond that which is required by the Utah Division of Water Rights and the Utah Division of Drinking Water.

G. **CONTINUATION OF EXPIRING PERMIT**

1. **Permit Extensions**

   The conditions of an expired permit may continue in force if a complete permit renewal application has been submitted at least 180 days before expiration of this permit.

2. **Effect**

   Permits continued under this special condition remain fully effective and enforceable.

3. **Enforcement**

   When the permittee is not in compliance with the conditions of the expiring or expired permit, the Executive Secretary may choose to do any or all of the following:

   a. Initiate enforcement action based upon the permit that has been continued;

   b. Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

   c. Issue a new permit with appropriate conditions; or

   d. Take other actions authorized by Underground Injection Control Program Rules (UAC R317-7).
ATTACHMENT I

TABLE 1 – MONITORING PARAMETERS AND SCHEDULE
ATTACHMENT II

QUALITY ASSURANCE (QA) PLAN FOR THE
UTAH UNDERGROUND INJECTION CONTROL (UIC) PROGRAM
JULY 5, 1990