UNDERGROUND INJECTION CONTROL PROGRAM

Draft Permit

Class V Injection Well

Permit No. CO52209-08412

Issued to:
Powertech (USA) Inc.
5575 DTC Parkway, Suite 140
Greenwood Village, Colorado 80111

Date Prepared: May 2011
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PART I. AUTHORIZATION TO OPERATE A CLASS V WELL

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

Powertech (USA) Incorporated ("Permittee")
5575 DTC Parkway, Suite 140
Greenwood Village, Colorado 80111

is hereby issued this Final Permit containing the requirements and conditions of constructing and operating the injection well identified as IN08-33-PW1 shown in Figure 1 of Appendix A of this permit. The purpose of this injection activity is to inject water extracted by the well identified as IN08-33-PW1 during an aquifer-pump test of the Upper Fox Hills Formation back into the same Upper Fox Hills Formation.

All conditions set forth herein are written in accordance with the regulations that are in effect on the date that this permit becomes effective, which can be found at 40 CFR Parts 124, 144, 146 and 147.

This permit is based on representations made by the applicant and on other information contained in the Administrative Record. Misrepresentation of information or failure to fully disclose all relevant information may be cause for: termination, revocation and reissuance, modification of this permit and/or formal enforcement action. It is the permittee's responsibility to read and understand all provisions of this permit.

This permit is issued for a period of ten (10) years from the date it becomes effective, unless the permit is terminated as provided in Part III, Section B. The permit also may be terminated upon delegation of primary enforcement responsibility for the Class V UIC Program to the State of Colorado.

Please be advised that this permit only authorizes underground injection in accordance with the specific terms of the permit. Compliance with the terms of this permit does not annul, alter or exempt the permittee from complying with, other applicable federal, state or local laws.

Issued this day of __________________________.

This permit shall become effective ________________________.

Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

1 The person holding this title, or as delegated, is the UIC Program Director.

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PART II. SPECIFIC PERMIT CONDITIONS

A. GENERAL

The EPA permit number the UIC Program Director has assigned to this permit is CO52209-08412. All correspondence should reference the site name and address and include the EPA permit number. Copies of all reports and notifications required by this permit shall be signed and certified in accordance with the requirements under Part III, Section E.9 of this permit, and shall be submitted to the EPA:

U.S. Environmental Protection Agency - Region 8
Valois Shea, Mailcode: 8P-W-GW
1595 Wynkoop Street
Denver, CO 80202-1129

B. INJECTION WELL CONSTRUCTION

1. Construction Requirements. The construction of any injection well shall not allow the movement of a fluid containing any contaminant into any underground source of drinking water (USDW), if the presence of that contaminant may cause a violation of the primary drinking water standards under 40 CFR Part 141, other health-based standards or may otherwise adversely affect the health of persons. The construction design for the proposed injection well is shown in Figure 2 of Appendix A of this permit. Well construction shall meet the specifications shown in Figure 2. Mechanical integrity testing shall be performed on the well and results submitted to the Director before commencing injection.

2. Proposed Changes. The permittee shall give advance notice to the Director as soon as possible and no later than thirty (30) days before any planned physical alterations or additions to the permitted injection well(s) or the injection system. Any alterations to the injection system shall meet all conditions as set forth in this permit. An alteration or addition shall be considered any work performed that affects the quantity or quality of the fluid being injected or changes in the design of the injection system from the construction design diagram in Appendix A of this permit. No changes shall be made until after approval by the Director.

After approval by the Director, the permittee shall provide plans, as-built schematics, sketches or other test data, to the EPA within sixty (60) days of completion of the alteration or addition that took place.

C. CORRECTIVE ACTION

No corrective action is required prior to issuance of this permit.
D. INJECTION WELL OPERATION AND MAINTENANCE

1. **Injection Locations.** Injection location shall be limited to the injection well shown in Figure 1 of Appendix A of this permit.

2. **Injection Fluid Limitation.** The injectate shall consist of groundwater pumped from the A2 sandstone aquifer of the Upper Fox Hills Formation through the well designated as IN08-33-PW1 and any minor volume of fluids approved by the Director that may need to be added to the stored groundwater for the purposes of corrective action so the injectate will meet permit limits. Any other fluid is an unauthorized injectate. The permittee shall not inject any hazardous substances, as defined by 40 CFR, Part 261, at any time during the operation of the injection well.

3. **Injection Fluid Analysis.** Before an aquifer-pump test begins, samples of A2 sandstone groundwater shall be collected from the injection well. Before injection begins, composite samples of the groundwater pumped from the A2 sandstone of the Upper Fox Hills Formation shall be collected from the storage tanks. All groundwater samples shall be analyzed for Total Coliforms using an EPA approved method, Total Metals using methods shown in Table 1, Volatile Organic Compounds using the EPA Method 524.2, Semi-volatile Organic Compounds using the EPA Method 525.2 and Total Petroleum Hydrocarbons using the EPA Method 1664. Alternative analytical methods may be used only if approved by the EPA before sample analyses are performed.

4. **Best Management Practices.** The permittee shall operate the injection system so that Best Management Practices (BMPs) are followed. BMPs include preventing contamination of the stored groundwater pumped from the A2 sandstone of the Upper Fox Hills Formation before it is reinjected. To verify the storage tanks are clean and will not contaminate the stored A2 sandstone groundwater, the permittee shall verify that requirements of the Colorado Division of Reclamation, Mining, and Safety (CDRMS) have been met by submitting the following information to the Director:

   i. Written documentation that the CDRMS requirement for cleaning of the storage tanks has been fulfilled.
   
   ii. Written documentation that the CDRMS requirement for providing the history of tank contents, including at least the most recent previous tank use event, has been

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Table 1: Approved Analytical Methods for Total Metals

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Analytical Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>200.7, 200.8, 200.9</td>
</tr>
<tr>
<td>Barium</td>
<td>200.7, 200.8</td>
</tr>
<tr>
<td>Cadmium</td>
<td>200.7, 200.8, 200.9</td>
</tr>
<tr>
<td>Chromium(total)</td>
<td>200.7, 200.8, 200.9</td>
</tr>
<tr>
<td>Lead</td>
<td>200.8, 200.9</td>
</tr>
<tr>
<td>Mercury (inorganic)</td>
<td>245.1, 245.2, 200.8</td>
</tr>
<tr>
<td>Selenium</td>
<td>200.8, 200.9</td>
</tr>
<tr>
<td>Silver</td>
<td>200.7, 200.8, 200.9</td>
</tr>
</tbody>
</table>
fulfilled.

iii. Written documentation that the CDRMS requirement for sampling and analysis of rinse water collected from the storage tanks after they have been cleaned has been fulfilled.

E. SAMPLING, REPORTING OF RESULTS AND NOTIFICATION REQUIREMENTS

1. Sampling Program

(a) Sampling of Groundwater from Injection Well. Before an aquifer-pump test begins, the Permittee shall collect groundwater samples from the A2 sandstone of the Upper Fox Hills Formation from the subject IN08-33-PW1 well, and analyze the samples as described in Part II, Section D.3.

(b) Sampling of Injectate. Before injection begins, the permittee shall collect composite samples from the storage tanks containing the groundwater pumped from the A2 sandstone of the Upper Fox Hills Formation and analyze the samples as described in Part II, Section D.3.

2. Sampling Information. Records of any sample collection activity required under this permit shall include:

(a) The date, exact place and the time of fluid sampling;
(b) The name of the individual(s) who performed the fluid sampling;
(c) A certification by the individual(s) who performed the sampling as to the date, exact place and the time of the sampling;
(d) The name and address of the laboratory that performed the analysis of the fluid;
(e) The exact sampling method(s) used to take the samples;
(f) The date the fluid sample was sent to the laboratory;
(g) The date(s) laboratory analyses were performed;
(h) The name of the individual(s) who performed the analyses;
(i) The analytical techniques or methods and quality control used by laboratory personnel; and
(j) The results of the analyses.

3. Reporting of Results. The permittee shall submit to the Director the following information for review:

(a) the analytical results from samples required under Part II, Section E.1, and
(b) aquifer-pump test results.

4. Aquifer-pump Test Results. Any time an aquifer pump test is conducted, the permittee shall submit aquifer-pump test results to the Director for review.

5. Permit Limits. Constituent concentration limits applicable to this permit are those promulgated under the SDWA, including the Maximum Contaminant Limits (MCLs) found in 40 CFR Part 141 National Primary Drinking Water Standards, the Health Advisory concentration limit for silver, as shown in Table 2 below, or "background" levels as determined by the samples in Part II, Section E.1(a). The concentration of a constituent in the injected fluid shall not exceed
any MCL, the Health Advisory concentration for silver, or background native A2 sandstone groundwater concentrations, whichever is greater.

### Table 2: Permit Limits for Total Metals

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Permit Limit(^2) (µg/L)</th>
<th>Standard Type*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>10</td>
<td>MCL</td>
</tr>
<tr>
<td>Barium</td>
<td>2,000</td>
<td>MCL</td>
</tr>
<tr>
<td>Cadmium</td>
<td>5</td>
<td>MCL</td>
</tr>
<tr>
<td>Chromium (total)</td>
<td>100</td>
<td>MCL</td>
</tr>
<tr>
<td>Lead</td>
<td>15</td>
<td>MCL-TT</td>
</tr>
<tr>
<td>Mercury (inorganic)</td>
<td>2</td>
<td>MCL</td>
</tr>
<tr>
<td>Selenium</td>
<td>50</td>
<td>MCL</td>
</tr>
<tr>
<td>Silver</td>
<td>100</td>
<td>HA-Lifetime</td>
</tr>
</tbody>
</table>

The Director will review the analytical results from the composite samples of stored groundwater required under Part II, Section E.1(b) to verify that they meet permit limits.

If the concentration of any constituent exceeds the permit limits specified above then corrective action shall be performed before the Director will issue an Authorization to Commence Injection. Corrective action may include additional sampling and analysis, disinfection, or treatment of the stored groundwater. After corrective action has been completed, follow-up sampling and analysis of the injectate shall be performed. The Director will review the results of any follow-up sampling to determine if they meet the conditions of this permit.

If analytical results for Total Coliforms in the sample required under Part II, Section E.1(b) show the presence of Total Coliforms, then the permittee shall either collect follow-up samples of the groundwater in each individual storage tank and analyze separately for regulated microbiological constituents or disinfect the stored groundwater in all storage tanks.

If analytical results for regulated microbial constituents in the sample required under Part II, Section E.1(b) show the presence of regulated microbiological constituents above the permit limit, then the permittee shall disinfect the stored groundwater. After disinfection, the permittee shall collect follow-up samples of the disinfected groundwater and re-analyze them for regulated microbes, and if detected, shall again disinfect the groundwater until no permit limit is exceeded for regulated microbial contaminants. Neutralization of disinfectant may be required before reinjection at the discretion of the Director.

6. **Notification Requirements.** If the permittee has any reason to believe that injection activity has caused migration of fluids out of the Upper Fox Hills Formation aquifers, this information shall be reported to the EPA. Any such incidents shall be reported to the EPA within twenty-four (24) hours in accordance with Part III, Section E.10(c).

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\(^2\) If background sample analysis performed pursuant to Part II, Section E.1(a) indicates the groundwater contains a metal concentration higher than the values in Table 2, that background value is the permit limit.
The permittee shall notify the Director in advance of any change to approved injection procedures, and obtain approval from the EPA prior to proceeding with any changes. The Director may disapprove the proposed changes or add additional monitoring requirements as deemed necessary for the protection of USDWs. Any modification of this permit resulting from any change to approved injection procedures shall follow procedures of Part III, B.1 of this permit.

F. MAXIMUM ALLOWABLE INJECTION PRESSURE

The use of a pump at the wellhead to induce injection under pressure is prohibited. Therefore, the maximum allowable injection pressure (MAIP) shall be zero pumping pressure at the injection wellhead. The injectate shall enter the wellhead by gravity flow only. Injection shall not cause injected fluids to migrate into any USDW not already in hydrologic connection with the A2 sandstone injection zone and shall not cause native fluids to be displaced into any USDW not already in hydrologic connection with the A2 sandstone injection zone.

G. MECHANICAL INTEGRITY (MI) REQUIREMENTS

Injection into a well that lacks MI is prohibited. An injection well has MI if there is no significant leak in the casing, tubing, or packer (Part I), and there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II). The Director may, at any time, require a demonstration of mechanical integrity.

1. Requirement to Demonstrate MI. The mechanical integrity of the well shall be demonstrated prior to receiving Authorization to Commence Injection. An initial demonstration of mechanical integrity shall include both internal (Part I) and external (Part II). Results of MI tests shall be submitted to the Director for review before injection begins. Subsequent demonstrations of mechanical integrity (Part I) shall take place at least once every five (5) years after a prior mechanical integrity demonstration in order to obtain an Authorization to Commence Injection.

2. Methods for Demonstrating MI. Part I MI shall be tested by a pressure test with liquid or gas using a pressure of at least 200 psi that shall be held for 15 minutes with less than 10% pressure loss. Test results shall be submitted to the Director for review and approval, and the Director shall determine whether the well passed Part I MI.

Part II MI shall be established using cementing records meeting the requirements at 40 CFR § 146.8(c)(3). The permittee shall submit information about the cementing of the annulus between the well casing and the borehole, including the well completion report and any cementing reports, to the Director, who shall determine whether the well has Part II MI.

H. AUTHORIZATION TO COMMENCE INJECTION

For each injection event, the permittee shall not commence injection until the Director issues an Authorization to Commence Injection. This will only occur after the Director reviews the analytical results required under Part II, Section E.3, aquifer-pump test results required under Part II, Section E.4, and the demonstration of mechanical integrity required under Part II, Section
G.2. The Director will issue the Authorization to Commence Injection only upon the determination that:

1. the analytical results from the injectate samples demonstrate that they do not exceed permit limits described under Part II, Section E.5;
2. the well has mechanical integrity pursuant to Part II, Section G;
3. aquifer-pump test results indicate the integrity of the confinement zones in the Upper Fox Hills Formation is adequately characterized; and
4. aquifer-pump test results demonstrate there is no potential for migration of injectate or A2 sandstone aquifer fluids into the overlying Laramie Formation during reinjection of the A2 sandstone groundwater.

Injection of the A2 sandstone groundwater before receiving the Authorization to Commence Injection letter is prohibited.

I. RECORD KEEPING

1. Record Retention Requirement. The permittee shall retain records of all monitoring activity and results (whether or not required by this permit) and other information required by this permit for the time periods specified below. These time periods may be extended at the request of the Director at any time. The following types of records shall be retained.

2. Records to Retain and Retention Time

(a) All data required to complete the Permit Application for this permit for a period of at least three (3) years after the Permit Application was submitted. This period may be extended by request of the Director at any time.

(b) Copies of all reports required by this permit for a period of at least three (3) years after the reports were submitted. This period may be extended by request of the Director at any time.

(c) The permittee shall retain calibration and maintenance records and all recorded data from continuous monitoring instrumentation, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

(d) Records regarding the nature and composition of all injected fluids. The permittee shall continue to retain these records for a period of three (3) years after the closure of the injection well system unless the records are delivered to the Director or written approval to discard the records is obtained from the Director. This period may be extended by request of the Director at any time.

(e) Records of sampling information as specified under Part II, Section E.2.
J. PLUGGING AND ABANDONMENT

The IN08-33-PW1 well shall be plugged and abandoned in a manner that ensures no movement of contaminants into a USDW and in compliance with any additional requirements, if any, of any additional permit conditions in effect at the time of abandonment. The well will be used to inject groundwater pumped from the A2 sandstone in the Upper Fox Hills Formation back into the same A2 sandstone. The well may also be used for long-term monitoring of the A2 sandstone. After its use for monitoring is completed, the well shall be plugged and abandoned in a manner that ensures no movement of contaminants into a USDW.

1. **Plugging and Abandonment Plan Approval.** The permittee shall plug and abandon the injection well as provided in the Plugging and Abandonment Plan. The Plugging and Abandonment method shall be approved by the EPA prior to the plugging and abandonment of the injection well. The EPA reserves the right to change the manner in which the injection well will be plugged and abandoned if it is deemed that the designated closure method is not protective of any USDW.

2. **Cessation of Injection Activity.** The well identified as IN08-33-PW1 will be used for injection for a limited interval of time, to inject groundwater pumped from the A2 sandstone in the Upper Fox Hills Formation back into the A2 sandstone. After this period of time, the well will be used only for long term monitoring of the A2 sandstone aquifer. For this reason, the closure requirement usually required after a cessation of injection activity for two (2) years is waived under this permit.

3. **Plugging and Abandonment Report.** If the closure of the injection well(s) shall be conducted under this requirement, the permittee shall submit a narrative plugging and abandonment report to the Director within sixty (60) calendar days after plugging the well. The person who performed the plugging operation shall certify per the requirements found in Part III, Section E.9(d) that the report is accurate. The report shall consist of either: (1) a statement that the well(s) were plugged in accordance with the approved Plugging and Abandonment Plan; or (2) a statement that the actual plugging procedures differed from the plan, including the different procedures that were followed with supporting justification for the selected closure method.
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 and/or abandon, or conduct any other injection activity in a manner that allows the movement of contaminated fluid into any USDW, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR, Part 141, 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, Reissuance, or Termination. This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Director's initiative. However, permits may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR §§144.39 or 144.40. All requests shall be in writing and shall contain facts or reasons supporting the request. Also, the permit is subject to minor modifications for cause as specified in 40 CFR §144.41. The filing of a request for a permit modification, revocation and reissuance, termination, 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. Conversions. The Director may, for cause or upon a request from the permittee, allow conversion of the well from a Class V injection well to a non-Class V well.

3. Transfers. This permit is not transferable to any person except after notice to the Director and in accordance with 40 CFR §144.38. The Director may require a modification or revocation and reissuance 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 application of such provision to other circumstances and the remainder of this permit shall not be thereby affected.
D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR § 144.5, any information submitted to the EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim shall 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, the EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim shall be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the permittee; and
- Information about 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: termination, revocation and reissuance, modification of this permit, and/or formal enforcement action. Such noncompliance may also be grounds for enforcement action under other statutes.

2. Continuation of Expiring Permit.

   (a) Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a complete application for a new permit at least one hundred and eighty (180) days before this permit expires.

   (b) Permit Extensions. The conditions of an expired permit may continue in force in accordance with 5 United States Code (U.S.C.) 558(c) until the effective date of a new permit, if:

      (i) The permittee has submitted a timely application that is a complete application for a new permit; and

      (ii) The Director, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit.

   (c) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit the Director may choose to do any or all of the following:

      (i) Initiate enforcement action based upon the permit that has been continued;

      (ii) 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;
(iii) Issue a new permit under 40CFR Part 124 with appropriate conditions; or
(iv) Take other actions authorized by these regulations.

(d) State Continuation. An EPA issued permit does not continue in force beyond its expiration date under Federal law if at that time a State has primary enforcement authority. A State authorized to administer the UIC program may continue either the EPA or State-issued permits until the effective date of the new permits, only if State law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State-issued new permit.

3. Penalties for Violations of Permit Conditions. Any person who violates any requirement of the UIC Program is subject to enforcement action under Section 1423 of the SDWA (42 U.S.C. § 300h-2). If the violation is willful, criminal penalties and/or imprisonment may result in accordance with Title 18 of the U.S.C.

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

6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training. This provision requires the implementation of Best Management Practices specified under Part II, Section D.4 to achieve compliance with the conditions of this permit.

7. Duty to Provide Information. If at any time, the Director issues a written request for information: to determine whether cause exists for modifying; to revoke and reissue or terminate this permit; or to determine compliance with this permit, the permittee shall furnish the requested information within the time specified. The permittee also shall furnish to the Director, upon request, copies of records required to be kept by this permit.

8. 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 shall be kept under the condition of this permit;
   (b) Have access to and copy, at reasonable times, records that shall be kept under 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 purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

9. Signatory Requirements. All reports or other information requested by the Director shall be signed and certified as follows:

(a) All reports required by this permit and other information requested by the Director shall be signed as follows:

   (i) for a corporation—by a responsible corporate officer, such as a president, secretary treasurer, or vice president of the corporation in charge of principal business function, or any other person who performs similar policy or decision-making functions for the corporation;

   (ii) for partnership or sole proprietorship—by general partner or the proprietor, respectively; or

   (iii) for municipality, state, federal, or other public agency—by either a principal executive or a ranking elected official.

(b) A duly authorized representative of the official designated in paragraph (a) above also may sign only if:

   (i) the authorization is made in writing by a person described in paragraph (a) above;

   (ii) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility.

   A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

   (iii) the written authorization is submitted to the Director.

(c) If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section shall be submitted to the Director prior to or together with any reports, information or applications to be signed by an authorized representative.

(d) Any person signing a document under paragraph (b) of this section shall make the following certification:

   I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for
obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

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 that 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) calendar days following each schedule date. The permittee will be notified by the EPA in writing upon being subject to such a compliance schedule.

(c) **Twenty-four (24) Hour Reporting.**

(i) The permittee shall report to the Director any noncompliance that may endanger health or the environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning 303.312.6704 and asking for the EPA Region 8 UIC Program Compliance and Enforcement Director (during normal business hours), or by contacting the EPA Region 8 Emergency Operations Center at 303.293.1788 (for reporting at all other times). The following information shall be included in the verbal report:

- Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW.
- Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

(ii) Written notice of any noncompliance that may endanger health or the environment shall be provided to the Director within five (5) calendar days of the time the permittee becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to prevent or reduce recurrence of the noncompliance.
(d) **Other Noncompliance.** The permittee shall report all other instances of noncompliance not otherwise reported at the time of analysis submission. The reports shall contain the information listed in Part III, Section E.10 of this permit.

(e) **Other Information.** When the permittee becomes aware that any relevant facts were not submitted in the permit application, or incorrect information was submitted in a permit application or in any report to the Director, the permittee shall submit such correct facts or information within fourteen (14) calendar days of the time such information becomes known.

11. **Oil Spill and Chemical Release Reporting.** The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting the National Response Center at 1.800.424.8802 or 202.267.2675, or through the NRC website at http://www.nrc.uscg.mil/nrchp.html.
APPENDIX A
Figure 2. Injection Well Construction Design