

**United States Environmental Protection Agency**  
**Underground Injection Control (UIC) Program**  
**Class I Permit Application Completeness Review Checklist**

<b>Permit Number:</b>
<b>Well Name:</b>
<b>Well Type:</b> <input type="checkbox"/> Class Ii NonHaz <input type="checkbox"/> Class Iw Haz <input type="checkbox"/> Class I Commercial
<b>Permit Applicant:</b>
<b>Date Application Received:</b>
<b>Application Reviewed By:</b>
<b>CHECK BOX IF ITEM IS PROVIDED; IF NOT APPLICABLE, WRITE "NA"</b>
<input type="checkbox"/> Completed Permit Application Form 7520-6, including signature of an authorized representative
<b>Attachment A. Maps and Area of Review</b>
<input type="checkbox"/> <b>I. Well Location(s) and Permitted Area Description (if area permit) (40 CFR 144.26; 144.33)</b>
<input type="checkbox"/> <b>II. Area of Review Size Determination – fixed radius or equation (40 CFR 144.6)</b>
<b>III. Maps (40 CFR 144.31; 146.24)</b> Topographic Map extending one-mile beyond facility property boundary showing: <input type="checkbox"/> injection well, well pad, and project area <input type="checkbox"/> area of review boundary <input type="checkbox"/> outcrops of injection and confining formation, <i>if present</i> <input type="checkbox"/> surface water intake and discharge structures, <i>if present</i> <input type="checkbox"/> hazardous waste treatment, storage or disposal facility, <i>if present</i> Map showing within ¼ - mile beyond facility property boundary or AOR (whichever is larger): <input type="checkbox"/> name and location of production wells, injection wells, abandoned wells, dry holes, and all water wells, noting its type (public water system, domestic drinking water, stock, etc.), <i>if present</i> <input type="checkbox"/> springs and surface bodies of waters, <i>if present</i> <input type="checkbox"/> mines (surface and subsurface) and quarries, <i>if present</i> <input type="checkbox"/> residences, schools, hospitals, and roads, <i>if present</i>
<b>IV. Area of Review (AOR) Wells and Corrective Action Plan (CAP) (40 CFR 144.55; 146.24)</b> <input type="checkbox"/> tabulation of AOR wells, <i>if present</i> <input type="checkbox"/> well bore diagrams, CBL, completion records of AOR wells, <i>if available</i> <input type="checkbox"/> AOR CAP, <i>if applicable</i>
<b>V. Landowner Information (40 CFR 144.31 and part 147)</b> <input type="checkbox"/> list of landowners and address within ¼-mile <input type="checkbox"/> evidence of notification to landowner of intent to apply for permit, <i>if applicable</i>
<b>Attachment B. Geological and Geophysical Information</b>
<b>I. Geological Data (40 CFR 146.24)</b> <input type="checkbox"/> list of formations from surface to the base of the injection well, identifying all the USDWs and confining and injection zone(s). List includes the lithologic description, geological name, thickness, depth, and total dissolved solids (TDS) concentrations from these formations, <i>if known</i> <input type="checkbox"/> source of information for the geologic data and formation TDS

- ☐ porosity and permeability of injection formation, *if available*
- ☐ geological cross-sections, *if available*
- ☐ known or suspected faults and fracture systems within AOR. If identified, provide proximity to the injection zone and affect fault/fracture system may have on the injection activities
- ☐ history of seismic activity in the area and proximity to crystalline (i.e., granitic) basement, *if applicable*

## **II. Formation Testing Plan (40 CFR 146.22)**

- ☐ fluid pressure
- ☐ estimated fracture pressure
- ☐ physical and chemical characteristics of the injection zone

## **Attachment C. Well Construction/Conversion Information**

### **I. Well Schematic Diagram (40 CFR 146.24)**

Detailed proposed well schematic diagram that includes:

- ☐ identification of USDWs and confining and injection zones
- ☐ casing and cementing details, including demonstrated or calculated top of cement
- ☐ tubing and packer, *if applicable*
- ☐ open hole or perforated intervals
- ☐ surface trace, *if horizontal or deviated well*

*If conversion to injection well:*

- ☐ current well schematic diagram

### **II. Well Construction or Conversion Procedures (40 CFR 144.52; 146.22; 146.24)**

Description of well construction or conversion procedures that includes:

- ☐ proposed logs and other tests conducted during the drilling and construction of new well(s)
- ☐ proposed stimulation plan(s), *if applicable*
- ☐ description of alarms and shut-down systems at the well, *if applicable*

*If conversion to injection well:*

- ☐ well completion and cementing records
- ☐ previously run logs/tests

## **Attachment D. Injection Operation and Monitoring Program (40 CFR 146.23; 146.24)**

- ☐ flow diagram of fluid flow through facility
- ☐ contingency plan(s) to respond to with well failures
- ☐ drawing of the surface construction
- ☐ location of monitoring ports (show on the map(s) referenced in section A.III. above)
- ☐ description of sampling and monitoring devices to monitor the nature of the injected fluids, injection pressure, annulus pressure (if applicable), flowrate, and cumulative volume
- ☐ description of manifold monitoring program and how the program is comparable to individual well monitoring

Operating Data Information:

- ☐ average and maximum daily rate and volume of fluids to be injected
- ☐ average and maximum injection pressure
- ☐ source(s) of injection fluids (including field and formation names)
- ☐ proposed annular fluid, *if applicable*
- ☐ analysis of the chemical and physical characteristics of the injection fluid. At a minimum, this should include pH, specific gravity, TDS, and conductivity

## **Attachment E. Plugging and Abandonment (P&A) Plan (40 CFR 144.31; 144.51; 146.24)**

- ☐ P&A plan of the well on EPA Form 7520-19

P&A diagram that includes:

- ☐ type, and number of plugs to be used
- ☐ placement of each plug including the elevation of top and bottom
- ☐ type, grade, and quantity of cement to be used
- ☐ method of placement of the plugs
- ☐ at least one cost estimates from an independent firm in the business of plugging and abandoning wells for third party (EPA) to complete proposed P&A plan

**Attachment F. Financial Assurance (40 CFR 144.52)**

- ☐ evidence of financial resources, such as a surety bond or financial statement, necessary to close, plug, or abandon the well

**Attachment G. Site Security and Manifest Requirements (Commercial Wells Only; Form 7520)**

- ☐ site security plan
- ☐ description of manifest system

**Attachment H. Aquifer Exemption (AE) (40 CFR 144.7; 146.4)**

- ☐ supporting documentation for proposed AE, *if applicable*

**Attachment I. Existing EPA Permits (40 CFR 144.31)**

- ☐ list of existing EPA permits, *if applicable*

**Attachment J. Description of Business (40 CFR 144.31)**

- ☐ description of the nature of the business

**Attachment K. Optional Additional Project Information (40 CFR 144.4)**

- ☐ The Wild and Scenic Rivers Act, 16 U.S.C. 1273 et seq.  
list of national wild and scenic rivers that may be impacted by the activities associated with proposed project, *if applicable*
- ☐ The National Historic Preservation Act of 1966, 16 U.S.C. 470 et seq.  
list of properties listed or eligible for listing in the National Register of Historic Places. If available, historic and cultural resource survey(s) that have been conducted, *if applicable*
- ☐ The Endangered Species Act, 16 U.S.C. 1531 et seq.  
list of endangered or threatened species that may be affected by the activities associated with proposed project. If available, previous endangered or threatened species surveys that have been conducted, *if applicable*
- ☐ The Coastal Zone Management Act, 16 U.S.C. 1451 et seq.  
list of coastal zones that may be affected by the activities associated with the proposed project, *if applicable*