CLARIFICATION
Of
UNDERGROUND INJECTION CONTROL
(UIC) PERMIT APPLICATION
REOUIREMENTS

For Class V Wells

The intent of this guidance document is to clarify the UIC permit application requirements for Class V operators as specified in the attachments to UIC Form 7520-6. This document is intended to clarify, not replace, the UIC regulations covering application requirements. The applicant should also consult the UIC permitting regulations at 40 CFR Parts 144, 146, and 147.

The applicant should follow the instructions in this guidance document when they differ from those given in the UIC application form since this document has been developed to be consistent with UIC permitting regulations. EPA may require additional information depending on your specific project.

Application UIC Form 7520-6 - Signature Requirements

The UIC Application Form 7520-6 must be signed at the bottom as follows:

1. For a corporation: by a responsible corporate officer (a) president, secretary, treasurer, vice president, or equivalent person who performs policy or decision-making functions; or (b) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having a gross annual sales or expenditures exceeding $25 million if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

2. For a partnership: by a general partner or the proprietor; or

3. For a municipality, State, Federal or other public agency: by either a principal executive officer or ranking elected official.

ATTACHMENT A - Area of Review Methods

Does not apply to Class V wells

ATTACHMENT B - Maps of Wells/Area and Area of Review

1. Submit a topographic map (approximate scale 1:4800) extending at least one mile beyond the property boundaries of the facility, clearly showing the following:

    a. The facility and all water intake (such as water supply wells) and discharge (drainage, sewer, discharges to ponds, lakes, ditches, streams or rivers, etc.) structures, including

all surface and subsurface piping;

b. All hazardous waste treatment, storage, or disposal area(s) within one-quarter mile of the facility's property boundaries; and

c. All wells (including injection wells, water supply wells and drinking water wells), springs and other surface water bodies listed in public records or otherwise known to the applicant within one-quarter mile of the facility's property boundaries.

2. Submit the following information on all public and private water wells (active and/or plugged) listed in public records or otherwise known to the applicant that lie within one-quarter mile of the property boundaries (A copy of the form filed with the public agency is acceptable.):

   a. Type of well;

   b. Record of well completion, including construction details;

   c. Location;

   d. Date drilled;

   e. Total depth of the well;

   f. Name of the aquifer at the total depth of the well;

   g. The amount of water (in gallons per minute) yielded by the aquifer; and

   h. Records of well closure for each plugged well.

3. Submit a list of the names and addresses of all landowners within one-quarter mile of the facility boundaries (this requirement may be waived by the Director for densely populated areas).

ATTACHMENT C - Corrective Action Plan and Well Data

This attachment must include:

1. A tabulation of data, reasonably available from public records or otherwise known to the applicant, on all wells within the AOR. Include a description of each well's type, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information:

2. The record of completion and plugging for each well in the AOR which penetrates the injection zone. A copy of the data in the State Well Log and Completion Report record of Plugging for each well is acceptable;

3. For any wells in the AOR which are improperly sealed, completed, or abandoned, submit a "corrective action plan" which consists of such steps or modifications as are necessary to prevent movement of fluid into an underground source of drinking water (USDWs). The plan must consider the following criteria and factors (see 40 CFR § 146.7):

    - Nature and volume of injected fluid;
    - Nature of native fluids or by-products of injection;
    - Potentially affected population;
    - Geology;
    - Hydrology;
    - History of injection operation;
    - Completion and plugging records;
    - Plugging procedures at the time of abandonment; and
    - Hydraulic connections with USDWs.

ATTACHMENT D - Maps and Cross Sections of USDWs

Geologic Maps of the Area: Submit fully-scaled maps, with scales appropriate to the features shown, indicating:

- All Underground Sources of Drinking Water (USDWs) within a one-mile radius of the injection well(s);
- Direction of ground water flow in all USDWs that may be affected by the injection;
- Geologic structure of the local area; and
- Generalized maps illustrating the regional geologic setting.

The map keys should contain the formation names and lithologic descriptions, including porosity and permeability.

ATTACHMENT E - Name and Depth of USDWs (Class II)

Does not apply to Class V wells.

ATTACHMENT F - Maps and Cross sections of Geologic Structure of Area

Submit fully labeled cross sections depicting the following:

- Geologic structure of the local area;
- Generalized cross sections illustrating the regional geologic setting;
- Formation that receives the injection; and
- Formations above and below the injection zone

The map keys should contain the formation names and lithologic descriptions, including porosity and permeability.

ATTACHMENT G - Geologic Data on the Injection and Confining Zones (Class II)

Does not apply to Class V wells.

ATTACHMENT H - Operating Data

1. Submit the following information (in tabular form) for each Class V injection well:

    a. Average and maximum daily volumes of fluids entering the well (gallons);

    b. Average and maximum monthly volumes of fluids entering the well (gallons);

    c. The source(s) of fluid(s) entering the well and volume of fluid(s) from each source;

    d. Material Safety Data Sheets (if available) or the brand name(s) and description(s) of all fluid(s) that have the potential of entering the well; and

    e. The percentage of fluid from each source entering the well(s) (e.g., 25% sanitary waste, etc.). The total from all sources should add up to 100%.

2. Submit a fluid analysis of the waste stream for all injected fluids such that the nature of the fluid is characterized completely. Upon review of the fluid analysis, EPA may require analysis of additional constituents. The waste fluids must not result in the movement of fluid containing any contaminant into USDWs, if the presence of that contaminant may cause a violation of any primary drinking water regulation or may otherwise adversely affect human health.

    The analysis may be performed by any certified laboratory which follows EPA approved procedures.

ATTACHMENT I - Formation Testing Program

Does not apply to Class V wells.

ATTACHMENT J - Stimulation Program

Does not apply to Class V wells.

ATTACHMENT K - Injection Procedures

1. Describe how the fluids move though the system from generation of the waste stream to the release of the fluids into the subsurface from the injection well, including any treatment the fluids receive at any point before injection.

2. Include descriptions and specifications of any equipment that might be used to inject fluid (e.g., pumps) and injection pressures if applicable.

ATTACHMENT L - Construction Procedures

Does not apply to Class V wells

ATTACHMENT M - Construction Details

1. Submit a scale drawing of the facility locating all injection wells and drains receiving fluids. All wells must be labeled and numbered.

2. Submit a flow diagram depicting the source of all well-injected fluids. The diagram should include:
   a. Entry of source material into the facility;
   b. All processes within the facility which generates fluids which are disposed of in the well(s);
   c. Treatment processes (if any) and ultimate disposal to the well(s).
   d. Points at which the injection fluid may be sampled; and
   e. Provide a narrative explaining the diagram.

3. Submit schematic and/or other appropriate drawings of the surface and subsurface construction details for each Class V well and its associated surface and subsurface interconnections within the facility boundaries. The drawings should include:
   a. The location, composition and dimensions of structures such as tanks, conduits, screens, casing or other subsurface structures, etc.;
   b. Injection well depth and diameter;
   c. Name of the formation(s) into which each well injects fluids;
   d. Date the construction or installation of each well was completed; and
   e. Narrative information describing the diagram to ensure clarity.

4. Submit the following information concerning each Class V well from the date of installation or construction to the present:
   a. Date of initial operation of the well;
   b. Date(s) of modifications/additions or conversion of the well (if applicable); and
   c. Projected date(s) for completion and operation (proposed wells only).

ATTACHMENT N - Changes in Injection Fluid

Does not apply to Class V wells

ATTACHMENT O - Plans for Well Failures

Submit a contingency plan to case of well shut-in or failure, so as to prevent migration of fluids

into any USDW. Include plans for alternate disposal of fluid or process shut down

ATTACHMENT P - Monitoring Program

A monitoring program must be developed to ensure that injection operations at the facility do not result in the movement of fluid containing any contaminant into USDWs, if the presence of that contaminant may cause a violation of any primary drinking water regulation or may otherwise adversely affect human health. The monitoring program should include:

1. A monitoring plan, outlining the steps necessary to detect and prevent the movement of fluid containing any contaminant into USDWs. An analysis of the facility=s wastewater must be included. Monitoring of the nature of injected fluids shall comply with applicable analytical methods cited and described in Table I of 40 CFR 136.3;

2. The location(s) of any waste stream monitoring point(s) before the fluid is injected into the subsurface the technical basis for choosing the location(s);

3. The location(s) of any ground water monitoring well(s) (taking into account the direction of water movement in each USDW) and the technical basis for choosing the location(s);

4. A description of the proposed construction of any monitoring well(s), including appropriate construction details similar to those requested for the injection well(s) in Part M of these instructions;

5. A description of the proposed sampling of any ground water monitoring well(s), including the location, sampling frequency of each well and the technical basis for that frequency. The velocity of water movement in each affected USDW and the volume of injected fluid must be taken into account in determining the minimum sampling frequency; and

6. If injection operations are likely to impact a USDW which is currently being used as a primary drinking water source within one-quarter mile of the facility's property boundaries, the monitoring plan MUST include a sampling plan for the drinking water wells.

ATTACHMENT Q - Plugging and Abandonment Plan

Describe how the Class V well will be closed in a manner that prevents the movement of fluid containing any contaminant into a USDW. Include a schematic and/or other appropriate drawings of the construction details for each Class V well showing how the well will be closed. The plan should include (as appropriate):

- Nature and quantity of material to be used in plugging;

- Location of all plugs;
- Dimensions of the plug(s)
- Provisions for back filling the well;
- Description of casing left in the well;
- Estimated cost of plugging the well;
- Discussion of alternative waste disposal methods to be used; and
- Statement signed by facility operator verifying that they are aware of the new maintenance policy.

ATTACHMENT R - Necessary Resources

Submit evidence, such as a surety bond, trust agreement, or financial statement to verify that the financial resources necessary for closure of each well are available.

ATTACHMENT S - Aquifer Exemptions

Does not apply to Class V wells

ATTACHMENT T - Existing Permits

Provide a listing by program and permit number of all permits or construction approvals received or applied for under any of the following programs:

- Hazardous Waste Management program under the Resources Conservation and Recovery Act (RCRA)
- UIC program under the Safe Drinking Water Act (SDWA)
- NPDES program under the Clean Water Act (CWA)
- Prevention of Significant Deterioration (PSD) program under the Clean Air Act (CAA).
- Nonattainment program under the CAA.
- National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the CAA.
- Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.
- Dredge and fill permits under Section 404 and CWA.
- Other relevant environmental permits, including State permits, and State construction approvals for production and injection wells. Also provide the state permit number and location for each well covered by the application.

ATTACHMENT U - Nature of Business

Briefly state the nature of the business, such as an oil production company or a brine disposal company.