

REMEDIATION PROJECTS USING INJECTION WELLS IN IOWA

The emplacement of materials whether solid, liquid or gas into the subsurface via a well (including direct push technology) for purposes of remediation is regulated by the Underground Injection Control (UIC) Program as a Class V injection well. Decisions to authorize these operations are based on the following criteria: whether the injectate could cause a violation of the Primary Drinking Water Regulations under 40 CFR §141 or otherwise adversely affect the health of humans; the duration of the project; the frequency of injection; and the volume of fluids to be injected.

The State of Iowa has elected not to obtain primacy of the UIC program. Therefore, when injection is selected as the remediation method at a LUST or other corrective action site in Iowa, EPA Region 7 approval is required prior to initiating the injection. A plan describing the activities that will occur at the site – including plume location, ground water flow, injection point locations, volumes of fluids to be injected and information on the injection product to be used for the remediation – must be submitted to EPA Region 7 at least 30 days before any operations can begin. In most cases, submission to EPA Region 7 of the Corrective Action Design Report (CADR) that was provided to IDNR will meet EPA's needs. This 30-day advance notification provides EPA the necessary time to determine whether an injection can be authorized by the UIC program, and if so, how that authorization can be achieved (e.g. Permit or Authorization by Rule).

The only exception to this advance notification requirement relates to the limited injection/emplacement of air, oxygen or hydrogen into contaminated zones located in the unconfined surficial aquifer of sites in order to stimulate remediation. These wells are allowed to operate under 40 CFR §144.24 without the need for permitting or a 30-day advance notification, providing that inventory information is submitted to EPA Region 7 using the [EPA Region 7 Shallow Injection Well Registration Form](#). However, the use of this process in a confined aquifer setting or in combination with other gases (such as methane or propane) or other remediation materials remains subject to the minimum 30-day advance notification requirement. The inventory information to be provided includes: the facility's name and location; IDNR registration number and project officer's name; the name, address and telephone number of the facility owner and/or its legal contact; the ownership of the facility; the nature and type of injection well(s); and the number of injection wells to be installed. This information should be submitted in advance of well installation.

Send information for projects needing advance approval, or projects providing inventory information, to:

Attention: Iowa UIC Program Coordinator
Drinking Water Management Branch
Water, Wetlands & Pesticides Division
U.S. EPA – Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

This information may also be provided electronically, to:

r7_uic_program@epa.gov

Any injection of materials into the subsurface in Iowa that is done without prior approval from EPA Region 7 or the submission of inventory information is considered to be an unauthorized and may be subject to penalties up to \$10,000 per day per violation.

In addition to contacting EPA Region 7, the IDNR Water Quality Bureau must be contacted for state approval of injection activities, which may also require an operating permit.