



**Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Drinking Water Program**

**UIC Registration Application for Closed-Loop Ground Source Heat Pump Well
Instructions and Supporting Materials**

Introduction

MassDEP *Permit Applications*, as well as *Instructions & Support Materials*, are also available for download from the MassDEP Web site at <http://www.mass.gov/eea/agencies/massdep/> in two file formats: Microsoft Word and Adobe Acrobat PDF. Either format allows documents to be printed.

Instructions & Support Materials files in Microsoft Word™ format contain a series of documents that provide guidance on how to prepare a permit application. Although we recommend that you print out the entire package, you may choose to print specific documents by selecting the appropriate page numbers for printing.

Permit Applications in Microsoft Word format must be downloaded separately. Users with Microsoft Word 97 or later may complete these forms electronically.

Permitting packages in Adobe Acrobat PDF format combine *Permit Applications* and *Instructions & Support Materials* in a single document. Adobe Acrobat PDF files may only be viewed and printed without alteration. *Permit Applications* in this format may not be completed electronically.

Permit Name UIC Registration Application for Closed-Loop Ground Source Heat Pump Well

Permit Code UIC Registration Application for Closed-Loop Ground Source Heat Pump Well

Purpose of Registration Regulating the injection of fluids to the ground is necessary to prevent contamination of groundwater used as drinking water sources.

For Assistance with this application Contact MassDEP Bureau of Resource Protection, Underground Injection Control Program: (617) 292-5859

Who must apply Any party who has discharged or is discharging to a Class V closed-loop or direct exchange well as defined in 310 CMR 27.00 must apply unless exempted by 310 CMR 27.07. Also, any party that has a registered Class V closed-loop or direct exchange well with the UIC Program for which ownership, number of wells, or construction details have or will change. The only types of Class V closed-loop ground source heat pump UIC wells not requiring UIC Registration are those associated with parcels of land that are only used for a **single, one-unit** residential dwelling with no additional non-residential land uses.

What land use types must use this application This application form applies to all properties regardless of land-use.

Fees

- No registration fee is required regardless of land use or the number of wells installed.
- If the Application is submitted for a Modification to an existing Registration there is no fee.
- There is currently no annual compliance fee associated with UIC Class V Well Registrations.



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What regulations apply?

Regulations that apply primarily include, but are not limited to:

- Underground Injection Control Program, 310 CMR 27.00.

These regulations may be purchased at

State Bookstore
Massachusetts State House
Room 116
Boston, MA 02133
617-727-2834

State Bookstore West
436 Dwight Street, Room 102
Springfield, MA 01103
413-784-1376

Or found on the internet at:

<http://www.mass.gov/eea/agencies/massdep/water/regulations/>

What other requirements must be considered?

All closed-loop and direct exchange (DX) ground source heat pump (GSHP) (geothermal) wells must conform to the MassDEP *Guidelines for Ground Source Heat Pump Wells*. These guideline may be obtained at:
<http://www.mass.gov/eea/agencies/massdep/water/drinking/underground-injection-control.html>

Applicants should consider the need to obtain the following permits or sanctions:

- Wetlands requirements should be checked through the local Conservation Commission.
- Local Board of Health requirements should be investigated.

Note: The additional requirements listed above are examples intended to serve as a guide to the applicant. They do not necessarily include **all** possible additional requirements.

How long is the Registration valid?

The UIC registration will remain valid for the life of the program pending any future changes to the regulations and provided that the Owner /Operator submits a UIC Modification application when pertinent inventory information changes.

How to Apply

To submit an application to MassDEP, follow the steps described below:

Step	Action
1.	Complete the appropriate form - UIC Registration Application for Closed-Loop Ground Source Heat Pump Well. Include all specified information.
2.	Submit a UIC Registration Application for Closed-Loop Ground Source Heat Pump Well Application Form to the: MassDEP, BRP UIC Program One Winter Street, 5th Floor Boston, MA 02108 or email the completed form to: joseph.cerutti@state.ma.us
3.	Retain a copy of the complete application package for your files.



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Instructions to assist with completing the form:

Registration Category:

Select one of the following:

- Registration of Underground Discharges to Injection Well(s) – select this category for the first time registration of a proposed injection well(s) or an existing injection well unless the well is being registered for the purpose of closing it.
- Modification to an Existing UIC Registration – select this category for modification of an existing UIC registration. You only must complete those portions of the form for which the information has changed. Use this form to notify the UIC Program of any changes of ownership, owner's contact information, or the number of existing or proposed injection wells.

For Modifications to an Existing UIC Registration:

Select applicable item(s) and enter the UIC registration ID # which was assigned to the well(s) by MassDEP when the well(s) was initially registered. If you believe the well was registered but can't locate the UIC registration number contact MassDEP UIC Program prior to submitting your modifications.

A. Site Information.

Property Name: Enter "private residence" or the name of the facility, whichever is applicable.

Enter the street address of the subject property, not the owner's address (unless the same). If a street address has not yet been assigned by the local post office, enter the Town tax assessor's map and plot number.

B. Owner Information

Name and address of property owner: Enter the **legal** / corporate name (i.e., Acme Products, Inc. or John Doe or John Doe Trust) and address of the owner of the property. The company name must be a legal, active name registered with the Commonwealth of Massachusetts, unless otherwise exempted by the Department of Commerce regulations.

C. Registered Well Driller

If the UIC installation involves the installation of a drilled well, enter the driller's name, the name of the company that he/she works for, the driller's MassDEP certification number, and a phone number where the driller can be reached. If the proposed well is a horizontal well, rather than a drilled well, enter "N/A horizontal well" in the "well driller's name" field.

D. Injection Well Information

Total Number of Wells (existing plus proposed): Enter the total number of closed-loop or direct exchange wells that will exist at the facility/residence when the proposed well installations have been completed. This should include all wells of the same well type (either closed-loop or direct exchange) that were previously installed at the facility/residence.

Type of discharge: Select the type of well.

direct exchange heat pump: refrigerant enters ground loop which consists of copper tubing

closed-loop heat pump: ground-loop material = high density polyethylene tubing

E. Preparer Information

Enter the name, position/title, phone number, and email address where the person who completed the application may be reached.



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Additional information required:

No other attachments are required unless you are proposing well construction materials, chemical additives or refrigerants, installation techniques or anything else that is not to the specifications provided in MassDEP's *Guidelines for Ground Source Heat Pump Wells*. If you are using the Rygan HPGX or Kelix concentric closed-loop well construction material you simply must indicate so somewhere on the application form or in the cover letter or email message that you send in with the form. For all other proposed exceptions to MassDEP's *Guidelines for Ground Source Heat Pump Wells* you must contact the UIC Program to discuss what additional information may be required and whether this application form is applicable for your proposed project.



UIC Registration Application for Closed-Loop Ground Source Heat Pump Well

Registration Category

Registration of Underground Discharges to Injection Well(s)
Modification to an Existing UIC Registration

UIC Registration Fee - Exempt

For Modifications to an Existing UIC Registration

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Check all that apply: Change of owner Change in # of discharge wells (+/-)

Enter UIC Registration Number issued by MassDEP for the initial UIC Registration (required for modifications): _____ UIC Registration # _____

A. Site Information

Property name (enter "Private Residence" if unnamed) _____
Property Street Address _____ City/Town _____
State _____ Zip Code _____

B. Owner Information

Name of Owner _____ Street Address _____
City/Town _____ State _____ Zip Code _____
Telephone Number _____ Email (optional) _____

C. Registered Well Driller

Well Driller's Name _____ MassDEP Well Driller Certification Number _____
Name of Company _____ Telephone Number _____

D. Injection Well Information

Total Number of Wells (existing plus proposed) _____
Type of Discharge: Direct Exchange Heat Pump Closed Loop Heat Pump

E. Preparer

Printed Name _____ Date _____
Telephone Number _____ Position/Title _____
Email (optional) _____

Send a duplicate copy of this form to the local board of health.