REGISTRATION FORM FOR INDUSTRIAL, COMMERCIAL, INSTITUTIONAL, OR MULTI UNIT GEOTHERMAL/GROUND SOURCE HEAT EXCHANGE SYSTEMS USING UNDERGROUND INJECTION CONTROL (UIC) WELLS

Type of Geothermal Well or Well Field

☐ Standing Column  ☐ Closed Loop  ☐ Open Loop

Facility Information

Facility Name:___________________________________________________________
Address: ____________________________________________________________________________
Property Deed Reference Book: __________ Page: ________ Tax Map: __________ Lot #: ________
City/Town: __________________________ State: __________ Zip: __________

Facility Owner Information

Owner Name: __________________________ Phone Number: (____)_______-______
Mailing Address: _______________________________________________________________________
City/Town: __________________________ State: __________ Zip: __________
Email: ___________________________________________________________________________

Property Owner Information (complete only if different from facility owner)

Owner Name: __________________________ Phone Number: (____)_______-______
Mailing Address: _______________________________________________________________________
City/Town: __________________________ State: __________ Zip: __________
Email: ___________________________________________________________________________

Facility Operator’s Information (complete only if different from facility owner)

Owner Name: __________________________ Phone Number: (____)_______-______
Mailing Address: _______________________________________________________________________
City/Town: __________________________ State: __________ Zip: __________
Email: ___________________________________________________________________________

Contact Person Information (complete only if different from facility owner)

Owner Name: __________________________ Phone Number: (____)_______-______
Mailing Address: _______________________________________________________________________
City/Town: __________________________ State: __________ Zip: __________
Email: ___________________________________________________________________________

This application is for geothermal or ground source heat exchange systems that serve industrial, commercial, or institutional facilities; or multi-unit residential structures only.

October 2008
Facility Information - Please provide the following for large underground injection control (UIC) geothermal withdrawal and injection system registration:

- A complete description of the facility and the type of heat exchange system proposed. Include locus map, tax map, and a site plan to identify the site, existing and proposed structures, topography, geothermal well or well field location, the nearest off-site /abutting lot, drinking water sources, and location and/or description of the facility’s drinking water source.
- Submit a general description of the site geologic characteristics and geothermal well(s) construction logs that identify which subsurface unit is used as the system’s thermal reservoir.
- Submit design plans identifying well and piping configuration including withdrawal and re-injection sampling taps, and flow metering locations.
- Describe the method of reject water (a.k.a. bleed-off water) disposal and identify the location of disposal area(s). Attach plans and supporting hydrogeologic information of any infiltration structures verifying the site is capable of supporting and/or infiltrating the discharge(s) without failure.
- Provide an estimated water balance for the withdrawal, re-injection, and reject water for both average operation and peak operation. (Note that you may use a readily available temperature record from a nearby source to complete the water balance estimate).
- Submit groundwater analytical results if available for the proposed geothermal wells.

For additional information or questions concerning this registration please contact Mitchell Locker at (603) 271-2858 or by e-mail at mitchell.locker@des.nh.gov.

Water Use Registration and Reporting – If the system will withdraw more than 20,000 gallons in any 24 hour period, the system must comply with Water Use Registration & Reporting Rules, Env-Wr 700. Please include the following to complete this registration:

- Types of water use at the facility in addition to geothermal heating/cooling.
- The total estimated average, maximum, and annual water use at the facility.
- Permit type and ID for all other water related permits.
- North American Industry (NAIC) or Standard Industrial Classification (SIC) Code.
- Name, location, type, and description of withdrawal or return for ALL sources and destinations.
- Measurement method and location for each source and destination.
- Maximum amount of water that can be withdrawn or returned for each source and destination.
- Topographic map with all sources, destinations, and facility locations identified.

For more information concerning this registration or the water use program please contact Derek Bennett at (603) 271-6685 or derek.bennett@des.nh.gov.

Notice for the Potential Need for a National Pollution Discharge Elimination System (NPDES) Permit – If the system design includes a bleed/reject water discharge to a surface water, a storm sewer discharge with an outflow to a surface water, or a detention/retention pond discharge with an overflow to a surface water; then the project may require a federal NPDES Non-Contact Cooling Water General Permit.

For more information concerning this permit please contact Jeff Andrews at (603) 271-2984 or by e-mail at Jeff.Andrews@des.nh.gov.
Notice Regarding Waivers from Other DES Programs—If the water balance provided with the facility information indicates that potential reject /bleed water volume may exceed 57,600 gallons in any 24-hour period, then both a large groundwater withdrawal permit and a water conservation program may be required for the project. If at peak operation the system bleed/ reject discharge does not exceed 57,600 gallons in a 24-hour period, then a written waiver to these programs will be included in the UIC discharge registration issued for the system.

For additional information or questions concerning this waiver approval or conditions please contact Christine Bowman at (603) 271-8866 or by e-mail at Christine.Bowman@des.nh.gov

To the best of my knowledge, the information I have provided on and with this form is true and correct. I will notify DES if the systems design or operation changes from that originally submitted. I will also notify DES at least 30 days prior to closing the geothermal well.

___________________________________________                  ________________________________________
Signature of Facility Owner                                                  Date Signed