

MDH use only	
Date Rcd	
Amount Recd	
Deposit#	
App#	
Date Approved	
\$3,250 (387)	

Submerged Closed Loop Heat Exchanger (SCLHE) Permit Application

WELL MANAGEMENT SECTION

Read and follow the enclosed Instruction Sheet.

ALL FIELDS ARE REQUIRED. IF INCOMPLETE, APPLICATION WILL BE RETURNED.

1. Incomplete applications cannot be processed and will be returned to the applicant.
2. Make check or money order payable to the Minnesota Department of Health (MDH) or pay by credit card by completing your license application and submitting your fees at the [MDH Licensing System \(https://mn-mdh.portal.opengov.com/\)](https://mn-mdh.portal.opengov.com/). **Credit card payments must be made through the online system; paper applications cannot pay by card.**
3. Returned checks are subject to a \$30 fee per Minnesota Statutes, section 604.113, subdivision 2(a). Licenses that have been issued will be canceled.
4. Fees submitted with this application are nonrefundable per Minnesota Rules, part 4725.0350, subpart 3.
5. Mail completed application, payment, and supporting documentation to MDH's address listed at the bottom of this application or submit your application online at [MDH Licensing System \(https://mn-mdh.portal.opengov.com/\)](https://mn-mdh.portal.opengov.com/).

Permit application fee

SCLHE \$3,250

Applicant information

(ALL FIELDS REQUIRED)

Email Address _____

First Name _____

Last Name _____

Phone Number _____

Address _____

City _____

State _____

Zip Code _____

Including yourself, who is involved with this SCLHE permit?

(ALL FIELDS REQUIRED)

- Full well contractor Yes No
- Property owner Yes No
- SCLHE owner Yes No
- Some other party Yes No

Property owner is the SCLHE owner Yes No

Specify your role, the person filling out this permit, regarding this SCLHE (ONE CHOICE REQUIRED)

- Full well contractor
- Well owner, who is also the property owner
- Well (not property) owner
- Property (not well) owner
- Property owner's agent

Define your role _____

Licensed well/boring company

(ALL FIELDS REQUIRED)

Company license number _____
Company name _____
Company expiration date _____

Responsible certified representative

(ALL FIELDS REQUIRED)

Certified Rep license number _____
Certified Rep first name _____
Certified Rep last name _____
Certified Rep license expiration _____

Certified Rep Type

- Elevator Boring Contractor
- Environmental Well Contractor
- Explorer Responsible Individual
- Limited Bored Geothermal Heat Exchanger Contractor
- Limited Dewatering Well Contractor
- Limited Pump, Pitless, and Screen Contractor
- Limited Well Sealing Contractor
- Well Contractor (Full)

Property owner of this SCLHE system

Is the property owner a company or a person? **(ALL FIELDS REQUIRED UNDER PERSON OR COMPANY)**

Company

Company owner name _____
Company street address _____
Company city _____
Company state _____
Company zip _____
Company email _____
Company phone number _____

SUBMERGED CLOSED LOOP HEAT EXCHANGER (SCLHE) PERMIT APPLICATION

Person

Owner first name _____
Owner last name _____
Owner street address _____
Owner city _____
Owner state _____
Owner zip _____
Owner email _____
Owner phone number _____

Other involved parties of this SCLHE system

(ALL FIELDS REQUIRED EXCEPT ORGANIZATION)

First Name	Last Name	Organization	Email Address	Phone Number

Permit processing details

(ALL FIELDS REQUIRED)

What is the status of each well for this SCLHE?

- There are both existing and proposed wells
- Each well is an existing well

Each well is a proposed well (not yet constructed)

What is the anticipated depth to bedrock - feet below surface? _____

What is the anticipated static water level - feet below surface? _____

What is the maximum SCLHE system design operating pressure? _____

What is the maximum design flow rate of submersible pump maximum design flow rate (gpm)? _____

What types of seals or packers will be installed? _____

SCLHE system location

(ALL FIELDS REQUIRED)

Property ID of the SCLHE system _____

Street address of the SCLHE system _____

City of the SCLHE system _____

Zip of the SCLHE system _____

County of the SCLHE system _____

Largest quartile of the SCLHE system _____

Township number of the SCLHE system _____

Range number of the SCLHE system _____

Section number of the SCLHE system _____

Heat transfer fluid additives

(ALL FIELDS REQUIRED)

The heat transfer fluid in the system must be potable water and may be amended with additives that meet the requirements of ANSI/NSF-60 certification.

Product name _____

Product manufacturer _____

Maximum concentration proposed for use - mg/L _____

SCLHE existing water-supply well

(ALL FIELDS REQUIRED IF WELLS STATUS IS EXISTING, MAKE COPIES AS NEEDED)

MN Unique Well Number _____
County _____
Township number _____
Range number _____
Section number _____

Does this well have a street address? Yes No

If no, enter Location details _____

If yes, enter street address fields below

Street address _____
City _____
State _____
Zip _____

Construction information

(ALL FIELDS REQUIRED)

Third quarter – largest _____
Well construction date _____
Well depth _____
Hole diameter - inches _____
Casing diameter - inches _____
Casing depth – feet _____
Aquifer of well completion _____
Observed static water level-feet _____

Have flowing artesian conditions been observed? Yes No

Pitless unit

(ALL FIELDS REQUIRED)

Pitless unit make _____
Pitless unit model _____

Grout material

(ALL FIELDS REQUIRED IF USED)

Grout type Bentonite Cement sand Neat cement Other grout type approved
Second grout material Bentonite Cement sand Neat cement Other grout type approved
Third grout material Bentonite Cement sand Neat cement Other grout type approved

SCLHE proposed water-supply well

(ALL FIELDS REQUIRED IF WELLS STATUS IS EXISTING, MAKE COPIES AS NEEDED)

Unique well number of proposed well (if known) _____
Proposed well estimated construction date _____
Proposed well estimated depth - feet _____
Proposed well estimated hole diameter - inches _____
Proposed well estimated casing diameter - inches _____
Proposed well casing depth – feet _____

Proposed well grout material

Bentonite Cement sand Neat cement Other type approved by a variance

Proposed well aquifer _____

Anticipated static water level-feet _____

Are flowing artesian conditions expected? Yes No

Pitless unit

(ALL FIELDS REQUIRED)

Pitless unit make _____

Pitless unit model _____

Estimated date of final pressure test

What is the estimated date of the final pressure test? _____

Attach SCLHE unit specifications (REQUIRED)

Provide specifications for the heat exchanger unit to be installed in the water-suppl wells. Include proposed diameter; material type and corresponding standard; and wall thickness (SDR or Schedule).

Attach piping specifications (REQUIRED)

Specifications must indicate:

- In-well piping and lateral piping and connections: proposed diameter, material type and corresponding standard, and wall thickness (SDR or Schedule).
- Heat exchanger unit: proposed diameter, types of materials composing the heat exchanger and their corresponding standards, and pressure rating.

Attach SCLHE operation plans (OPTIONAL)

System maintenance plan. Include:

- Type and frequency of anticipated system maintenance.
- Description of any monitoring for needed maintenance.
- Plans for containing/managing heat transfer fluids during equipment removal.
- Plans for system re-installation.

Attach groundwater contamination inventory (REQUIRED)

Attach an inventory of known groundwater contamination sites and plumes within one-half mile of the proposed SCLHE system wells. The inventory must include:

1. **List of groundwater contamination sites and plumes.** A list of mapped groundwater contamination sites and plumes generated from publicly available information on local, state, and federal websites. The list must include:
 - a. The special well and bring construction area name, if applicable.
 - b. The site name.
 - c. A description of contamination.
 - d. The status of contamination.
 - e. The source of information.
2. **Scaled map.** A scaled map, including:
 - a. Proposed SCLHE wells.
 - b. A line showing the one-half mile boundary from the proposed SCLHE wells.
 - c. Identified sites and plumes within the one-half mile boundary.
 - d. Existing or anticipated geology at each well location.

Attach SCLHE system leak detection and mitigation plan (REQUIRED)

Attach a plan to the application describing how the proposed SCLHE system will be monitored for potential leaks and mitigation strategies for any leaks that may occur. The plan must include:

- Design documents with locations of monitoring and mitigation devices.

- Proposed monitoring parameters and frequency.
- A description of conditions that trigger a system alert or shut-off.
- A description of alter or shut-off response activities, including a list of entities and roles of persons involved.
- A description of mitigation activities to implement in the event of a leak, including a list of entities and the roles of the persons involved.

Attach SCLHE system diagrams (REQUIRED)

Plan View Diagram. Attach a plan diagram to the application showing the following:

- All existing and proposed well locations where an SCLHE will be installed
- Distances of existing and proposed wells to:
 - Property lines
 - Structures
 - Utilities listed in Minnesota Rules, part 4725.2150
 - Water bodies listed in Minnesota Rules, part 4725.4350, subpart 1
 - All other wells on the property, if applicable
 - Contamination sources listed in Minnesota Rules, part 4725.4450

Cross Section Diagram. A diagram of each well proposed to be used in a SCLHE system must be submitted as part of this application. One diagram may be submitted if well construction, piping, and unit installation is the same. Attach cross-section diagrams to the application showing the following:

- Existing or anticipated geology at each well location.
- Existing or proposed well construction information, including:
 - Total well depth.
 - Casing depth.
 - Bore hole diameter.
 - Casing diameter.
 - Grouting materials and intervals.
 - Gravel packed interval and screened interval, if applicable.
 - Pitless unit depth and diameter.
- Existing or anticipated static water level.
- Proposed SCLHE installation information, including:
 - The depth and length of the SCLHE unit.
 - The locations of seals or packers installed in the well.
 - The depth of the submersible pump.

Attach records illustrating geology at the SCLHE system site (REQUIRED)

Attach copies of the construction records for any environmental wells or sealing records for any temporary borings constructed at the SCLHE system location.

Well contractor certified representative signature (REQUIRED)

As a condition of this permit, I agree to construct this SCLHE under the provisions of Minnesota Statutes, chapter 103I, Minnesota Rules, chapter 4725, and the conditions provided in an approved permit.

Certified Representative Name (print) Certified Representative Signature Date

System Owner signature (REQUIRED)

As a condition of this permit, I agree to operate and maintain this SCLHE under the provisions of Minnesota Statutes, chapter 103I, Minnesota Rules, chapter 4725, and the conditions provided in an approved permit, and to allow inspection by the commissioner of health and/or a Minnesota Department of Health agent during regular work hours.

System Owner Name (print) System Owner Signature Date

Property Owner signature

Required if the property owner IS NOT the system owner

As a condition of this permit, I agree to operate and maintain this SCLHE under the provisions of Minnesota Statutes, chapter 103I, Minnesota Rules, chapter 4725, and the conditions provided in an approved permit, and to allow inspection by the commissioner of health and/or a Minnesota Department of Health agent during regular work hours.

Property Owner Name (print) Property Owner Signature Date

Tennessee Warning and Signature

(REQUIRED)

For individuals applying for MDH credentials

Minnesota Statute, section 270C.72, subdivision 4, requires you to submit your social security number before MDH can issue a credential to you.

For companies applying for an MDH credential

Minnesota Statute, section 270C.72, subdivision 4, requires you to supply your Minnesota business identification number and your social security number before MDH issues a credential to you. Minnesota Statutes, section 176 also requires you to provide the information concerning Workers Compensation Insurance or your permit to self-insure.

For all applicants

MDH uses the information you provide on an application to determine if you meet the requirements for an MDH credential. You are not required to provide any of the requested information. However, if you do not provide the requested information, MDH will be unable to process your application. If you submit false information, MDH will deny your application or suspend, revoke, or take other disciplinary action against your credential after issuing it.

MDH will not disclose the information on your application to others during the application process. MDH may disclose it to others, including the Attorney General's Office and persons contacted for purposes of verification or investigation, if required by law. MDH will provide information on the application, including your social security number, to the Minnesota Department of Revenue at its request. If anyone contests your credential, the information on your application may become public. Once MDH issues your credential, all information in the application becomes public, except your social security number, which remains private.

I understand MDH's Tennessee Warning and will provide true and complete information in this application. I also understand that submitting false information allows MDH to deny, suspend, revoke or take other action against this license.

Name (print) _____ Date _____

Signature _____ Date _____

Minnesota Department of Health
Well Management Section
PO Box 64502
St. Paul, MN 55164-0502
651-201-4600
health.wells@state.mn.us
www.health.state.mn.us

04/27/2026

To obtain this information in a different format, call: 651-201-4600.