

1.1 **Senator Utke from the Committee on Health and Human Services Finance and**
1.2 **Policy, to which was referred**

1.3 **S.F. No. 1919:** A bill for an act relating to wells and borings; adding a definition for
1.4 closed loop heat exchangers; specifying that a closed loop heat exchanger is an environmental
1.5 well for purposes of chapter 103I, amending Minnesota Statutes 2020, section 103I.005,
1.6 subdivisions 8a, 11, by adding a subdivision.

1.7 Reports the same back with the recommendation that the bill be amended as follows:

1.8 Delete everything after the enacting clause and insert:

1.9 "Section 1. Minnesota Statutes 2020, section 103I.005, subdivision 17a, is amended to
1.10 read:

1.11 Subd. 17a. ~~Temporary boring~~ **Submerged closed loop heat exchanger.** "Temporary
1.12 boring" "Submerged closed loop heat exchanger" means an excavation that is 15 feet or
1.13 more in depth, is sealed within 72 hours of the time of construction, and is drilled, cored,
1.14 washed, driven, dug, jetted, or otherwise constructed to a heating and cooling system that:
1.15 (1) conduct physical, chemical, or biological testing of groundwater; including
1.16 groundwater quality monitoring is installed in a water supply well;

1.17 (2) monitor or measure physical, chemical, radiological, or biological parameters of
1.18 earth materials or earth fluids, including hydraulic conductivity, bearing capacity, or
1.19 resistance utilizes the convective flow of groundwater as the primary medium of heat
1.20 exchange;

1.21 (3) measure groundwater levels, including use of a piezometer contained potable water
1.22 as the heat transfer fluid; and

1.23 (4) determine groundwater flow direction or velocity operates using nonconsumptive
1.24 recirculation.

1.25 A submerged closed loop heat exchanger also includes submersible pumps, a heat exchanger
1.26 device, piping, and other necessary appurtenances.

1.27 Sec. 2. Minnesota Statutes 2020, section 103I.005, is amended by adding a subdivision
1.28 to read:

1.29 Subd. 17b. **Temporary boring.** "Temporary boring" means an excavation that is 15
1.30 feet or more in depth, is sealed within 72 hours of the time of construction, and is drilled,
1.31 cored, washed, driven, dug, jetted, or otherwise constructed to:

- 2.1 (1) conduct physical, chemical, or biological testing of groundwater, including groundwater quality monitoring;
- 2.2
- 2.3 (2) monitor or measure physical, chemical, radiological, or biological parameters of earth materials or earth fluids, including hydraulic conductivity, bearing capacity, or resistance;
- 2.4
- 2.5 resistance;
- 2.6 (3) measure groundwater levels, including use of a piezometer; and
- 2.7 (4) determine groundwater flow direction or velocity.
- 2.8 Sec. 3. Minnesota Statutes 2020, section 103I.005, subdivision 20a, is amended to read:
- 2.9 **Subd. 20a. Water supply well.** "Water supply well" means a well that is not a dewatering well or environmental well and includes wells used:
- 2.10
- 2.11 (1) for potable water supply;
- 2.12 (2) for irrigation;
- 2.13 (3) for agricultural, commercial, or industrial water supply;
- 2.14 (4) for heating or cooling; ~~and~~
- 2.15 (5) for containing a submerged closed loop heat exchanger; and
- 2.16 (6) for testing water yield for irrigation, commercial or industrial uses, residential supply, or public water supply.

2.18 **Sec. 4. [103I.631] INSTALLATION OF A SUBMERGED CLOSED LOOP HEAT EXCHANGER.**

2.19

- 2.20 Subdivision 1. Installation. Notwithstanding any other provision of law, the
- 2.21 commissioner must allow the installation of a submerged closed loop heat exchanger in a
- 2.22 water supply well. A project may consist of more than one water supply well on a particular site.
- 2.23
- 2.24 Subd. 2. Setbacks. Water supply wells used only for the nonpotable purpose of providing
- 2.25 heating and cooling using a submerged closed-loop heat exchanger are exempt from isolation distance requirements greater than 10 feet.
- 2.26
- 2.27 Subd. 3. Construction. The screened interval of a water supply well constructed to
- 2.28 contain a submerged closed-loop heat exchanger completed within a single aquifer may be designed and constructed using any combination of screen, casing, leader, riser, sump, or other piping combinations, so long as the screen configuration does not interconnect aquifers.
- 2.30

3.1 Subd. 4. Permits. A submerged closed loop heat exchanger is not subject to the permit requirements in this chapter.

3.3 Subd. 5. Variances. A variance is not required to install or operate a submerged closed loop heat exchanger."

3.5 Delete the title and insert:

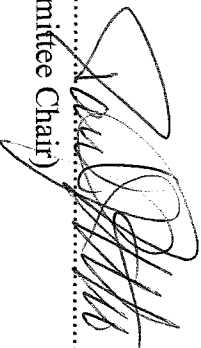
"A bill for an act

3.6
3.7 relating to wells and borings; adding a definition for a submerged closed loop
3.8 exchanger; specifying a water supply well includes a well containing a submerged
3.9 closed loop heat exchanger; specifying requirements for a submerged closed loop
3.10 heat exchanger amending Minnesota Statutes 2020, section 1031.005, subdivisions
3.11 17a, 20a, by adding a subdivision; proposing coding for new law in Minnesota
3.12 Statutes, chapter 1031."

3.13 And when so amended the bill do pass and be re-referred to the Committee on Finance.

3.14 Amendments adopted. Report adopted.

3.15
3.16
(Committee Chair)



3.17 March 28, 2022.....
3.18 (Date of Committee recommendation)