

**BEFORE THE  
DEPARTMENT OF NATURAL RESOURCES**

**NOTICE OF PUBLIC HEARINGS**

Natural Resources Board Orders DG-02-13

**NOTICE IS HEREBY GIVEN THAT** pursuant to ss. 227.16 and 227.17, Stats, the Department of Natural Resources, hereinafter the Department, will hold a public hearing on proposed revisions to chapters NR146 and NR812, relating to licensing criteria for heat exchange drillers, to standards for heat exchange drillholes that will be approved with notification rather than individual review, on the date(s) and at the time(s) and location(s) listed below. Hearings will be held jointly with hearings on DG-03-13 relating to licensing for well filling and sealing contractors, well inspectors and water well drilling rig operators; to inspection of water systems at time of real estate transfer; and to citations for violations related to well drilling and pump installation.

**Hearing Information**

***Date and Time 1***

Monday, December 16, 2013  
4:00 PM

***Locations (attendees may select any location listed below on December 16)***

Madison: UW-Pyle Center Room 227, 702 Langdon Street, Madison, WI 53706

LaCrosse: UW-La Crosse Room 102 Wing Technology, 1725 State St. La Crosse, WI 54601

Wausau: UWC-Wausau Room 144, near the MAIN ENTRANCE, 518 S. 7th Avenue Wausau, WI 54401

Milwaukee: UW-Milwaukee Room 264 Enderis Hall, 2400 East Hartford Ave, Milwaukee, WI 53201

***Date and Time 2***

Tuesday, December 17, 2013  
4:00 PM

***Locations (attendees may select any location listed below on December 17)***

Madison: UW-Pyle Center Room 227, 702 Langdon Street, Madison, WI 53706

Eau Claire: UW-Eau Claire Old Library Room 1128, 105 Garfield Ave., Eau Claire WI 54702

Green Bay: UW-Green Bay Instructional Services Room 1034, 2420 Nicolet Drive, Green Bay, WI 54311

Ashland: Wisconsin Indianhead Technical College Room 7, 2100 Beaser Avenue, Ashland, WI 54806

Reasonable accommodations, including the provision of informational material in an alternative format, will be provided for qualified individuals with disabilities upon request. Contact Ms. June Everson, Bureau of Drinking Water and Groundwater, P.O. Box 7921, 101 South Webster Street, Madison, WI 53707-7921; by E-mail to [june.everson@wisconsin.gov](mailto:june.everson@wisconsin.gov) or by calling (608) 266-6669. A request must include specific information and be received at least 10 days before the date of the scheduled hearing.

**Availability of the Proposed Rules and Fiscal Estimate**

The proposed rule and supporting documents, including the fiscal estimate, may be viewed and downloaded from the Administrative Rules System Web site which can be accessed through the link <https://health.wisconsin.gov/admrules/public/Home>. If you do not have Internet access, a printed copy of the proposed rule and supporting documents, including the fiscal estimate, may be obtained free of charge by contacting Ms. June Everson, Bureau of Drinking Water and Groundwater, P.O. Box 7921, 101 South Webster Street, Madison, WI 53707-7921; by E-mail to [june.everson@wisconsin.gov](mailto:june.everson@wisconsin.gov) or by calling (608) 266-6669.

**Submitting Comments**

Comments on the proposed rule must be received on or before 4:30 PM on December 20, 2013. Written comments may be submitted by U.S. mail, fax, E-mail, or through the Internet and will have the same

weight and effect as oral statements presented at the public hearing. Written comments and any questions on the proposed rules should be submitted to:

Mr. Randell Clark

Department of Natural Resources

Bureau of Drinking Water and Groundwater

101 S Webster St, Madison, WI 53703

Fax: (608) 267-7650

E-mail: Randell.clark@wisconsin.gov

Internet: Use the Administrative Rules System Web site at the link provided above.

## **Analysis Prepared by the Department of Natural Resources**

**1. Statutes interpreted:** Sections 227.11 and s. 280.11(1), Wis. Stats.

**2. Statutory authority:** Sections 280.15 (2m)(b)2., and s. 280.15(2m)(f)2m.b, Wis. Stats.

### **3. Explanation of agency authority:**

Chapter 280.11(1), Wis. Stats., grants authority to the department to, among other things, establishing of all safeguards necessary in protecting public health against the hazards of polluted or impure water supplies. Specifically, s. 280.15(2m)(b)2., Wis. Stats., requires compliance with licensing, training and education requirements promulgated by the department by rule for heat exchange drilling. Wisconsin Act 150 will become effective 36 months after publication, or April 1, 2015, at which time heat exchange drilling cannot be done without a license.

### **4. Related statutes or rules:**

Chapter 280 – Pure Drinking Water, provides definitions for terms, defines the powers of the department, and lays out well drilling registration, licensing and qualification requirements and fees for such. It also defines certain prohibitions and exceptions, local authority and defines penalties and citations.

Chapter NR 146 – Well Driller and Pump Installer Registration, provides definitions, registration requirements, defines the requirements for the initial application and registration conditions. It also defines requirements for out-of-state drillers, renewals and the registrant responsibilities, as well as license suspension and revocation criteria.

Chapter NR 812 – Well Construction and Pump Installation, provides a general section covering purpose, applicability, cooperation with the department, contracts for noncomplying installations, disposal of pollutants and injection prohibition, drinking water standards, definitions and location criteria, and additional sections on new well construction and reconstruction requirements, requirements of new pump installations and water treatment, standards for existing installations, and variance conditions.

### **5. Plain language analysis:**

The proposed rule would create the specific requirement for heat exchange drilling to help protect sources of drinking water as well as consumers while enhancing the availability of alternate sources of energy for heating and cooling. The Department proposes to issue a single drilling license with authorizations available for either water well or heat exchange drilling or both. Construction requirements for heat exchange drilling will be proposed in the rule.

The proposed order includes provisions in NR146 for obtaining and maintaining authorization to construct heat exchange drillholes, including:

1. sets a minimum length and type of drillhole that a person must have constructed in order to demonstrate eligibility to test for the drilling license and heat exchange authorization;
2. requires continuing education in order to maintain a drilling license and heat exchange authorization;
3. identifies knowledge that will be the basis for written testing.

The proposed order includes provisions in NR812; setting specifications for heat exchange drillholes that are approvable with notification and will not automatically require individual application and review.

Specifications include:

1. number and depth of drillholes;

2. setbacks from contamination sources or water supply wells;
3. equipment;
4. drilling and sealing aids;
5. reporting and consultation procedures;
6. abandonment procedures.

## **6. Summary and comparison with existing and proposed federal regulations.**

No federal regulations currently apply to private firms engaged in drilling and installation of heat exchange drillholes.

### **7. Comparison of similar rules in adjacent states:**

**ILLINOIS:** In Illinois, the Department of Public Health is responsible for oversight of the well construction code, and has authority over the location, construction and modification of closed loop wells. A small set of standards specifically covers construction of closed-loop wells. The Department of Public Health's Closed Loop Well Contractors Certification Board oversees the rules, licensing and administration. A closed loop certification is required for drillers and is issued to those who are qualified and have passed the exam. The initial examination fee is \$50 and annual renewal fee is \$25. Licensees must attend one continuing education session in the preceding 2 years for license renewal.

**INDIANA:** Indiana has a well construction code and requires a water well driller license. Geothermal heat pump wells are addressed very briefly in the well drilling code. No license is required for heat pump well drilling.

**IOWA:** Iowa is in the process of developing rules, but has no rules codified for heat exchange drilling at this time. Iowa has a well drilling code and a well driller certification. Fee is \$400 initially and \$300 for renewal. License is for a two-year period and requires 16 contact hours of continuing education.

**MICHIGAN:** Michigan has no codified rules at this time, but has guidelines for heat exchange systems. Michigan has a Water Well Drilling Contractor license, but no requirements for heat exchange drillers. Water well driller license fee is \$40.

**MINNESOTA:** In Minnesota, the Commissioner of Health is responsible for oversight of the well construction code. The code includes regulations for groundwater thermal exchange devices. Minnesota has a license for a certified well contractor and a separate license for constructing vertical heat exchangers. Fees for well contractor licenses range from \$75 to \$250. Fees are required for construction of vertical heat exchangers, ranging from \$235 to \$700.

**OHIO:** Ohio has requirements for well construction, but no requirements for heat exchange drillholes at this time. Ohio has a well driller registration process and a \$250 annual fee.

### **8. Summary of factual data and analytical methodologies:**

Instances of drinking water and groundwater contamination have occurred in Wisconsin as a result of improper heat exchange drilling. 2011 Wisconsin Act 150 was prompted by concerns in the drilling industry that current regulation and licensing did not adequately cover the installation of heat-exchange drillholes and that inexperienced or even unqualified drillers were doing installations in Wisconsin. The Wisconsin Water Well Association took the lead in working with the legislature, other industry representatives, and the department, to promote passage of Wisconsin Act 150.

### **9. Analysis and supporting documents used to determine effect on small business or in preparation of an economic impact analysis:**

The current water well drilling license is \$50.00 per year for an individual drilling license and/or \$50.00 for the drilling firm business license. The cost is anticipated to be the same to add certification for heat exchange drilling, so a licensed driller with both certifications would pay a total of \$100. Administration of the driller license exam is currently done at no cost to the driller. No complaints of economic hardship or business impacts have been received during the collection of existing license fees. Neither the Wisconsin Water Well Association, representing many affected drillers, or individual drillers participating in the advisory committee to rule development, have expressed any concern about the impact of proposed fees.

**10. Effect on small business:**

Economic impacts of this rule will be minimal. Actual costs to drillers are small and unlikely to affect decisions to offer a service or enter a business sector.

As a result, actual costs to consumers to use geothermal energy are unlikely to be affected by the licensing and construction requirements.

Overall economic impacts are uncertain. Additional protection of groundwater through better drilling practices may reduce future costs of drinking water treatment or groundwater clean-up.

**Environmental Analysis**

The Department has made a preliminary determination that adoption of the proposed rules would not involve significant adverse environmental effects and would not need an environmental analysis under ch. NR 150, Wis. Adm. Code. However, based on comments received, an environmental analysis may be prepared before proceeding. This analysis would summarize the Department's consideration of the impacts of the proposal and any reasonable alternatives.

**Fiscal Estimate Summary**

Economic and fiscal impacts of this rule are anticipated to be minimal (final determination of impact will follow public comment period). Actual costs to well drillers are small and not expected to affect decisions to offer a service or enter a business sector. The current water well drilling license fee is \$50 and the heat exchange drilling license fee is expected to be set at the same level (total compliance cost to industry is estimated at \$500). Drillers may take the licensing exam and apply to construct heat exchange drillholes at no cost. The rule does not propose fees for either of these state services as the total cost to the state is small (total implementation cost is estimated at \$7300).

Dated at Madison, Wisconsin \_\_\_\_\_

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
Cathy Stepp, Secretary