

**Wisconsin Department of Natural Resources  
Natural Resources Board Agenda Item**

**SUBJECT:**

Request that the Board approve the statement of scope for DG-02-13, proposed rules affecting Chapter 280 related to 2011 Wisconsin Act 150 creation of new definitions in Chapter 280, Stats., for heat exchange drillhole and heat exchange drilling, and the modification of the individual and business license for drillers to create a more generic drilling license, with specific authorization to do well drilling or heat exchange drilling.

**FOR: June, 2013 Board meeting**

**PRESENTER'S NAME AND TITLE:** Mary Ellen Vollbrecht, Groundwater Section Chief

**SUMMARY:**

2011 Wisconsin Act 150 created new definitions in Chapter 280, Stats., for heat exchange drillhole and heat exchange drilling, and modified the individual and business license for drillers to create a more generic drilling license, with specific authorization to do well drilling or heat exchange drilling. Wisconsin Act 150 requires that the department establish new criteria and requirements for evaluating existing heat exchange drilling experience, and establish training and continuing education requirements for attaining and maintaining a heat exchange drilling license under the new definitions. As a part of implementing the requirements for the new category of heat exchange driller, NR 146 - license registration, and NR 812 - construction requirements, will need to be amended to address heat exchange drilling.

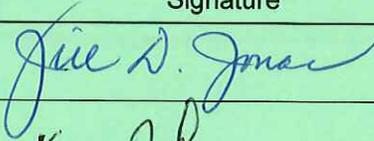
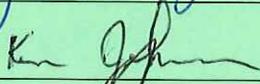
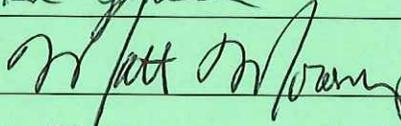
Revision to the rules should generate little controversy since the Wisconsin Water Well Association has already taken the lead in working with the legislature, technical college leaders, other industry representatives, and the department, to promote passage of Wisconsin Act 150 and is in favor of the rule amendments.

Economic impacts of the passage 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. 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 similar to add certification for heat exchange drilling. Administration of the driller license exam is currently done at no cost to the driller. As a result, actual costs to consumers to use geothermal energy are unlikely to be affected by the licensing and construction requirements.

**RECOMMENDATION:** That the Board approve the statement of scope for Board Order DG-02-13.

**LIST OF ATTACHED MATERIALS (check all that are applicable):**

- |  |   |
|--|---|
| <input type="checkbox"/> (choose one)  | <input type="checkbox"/> Attachments to background memo                     |
| <input checked="" type="checkbox"/> Statement of scope                           | <input checked="" type="checkbox"/> Governor approval of statement of scope |
| <input type="checkbox"/> Fiscal estimate and economic impact analysis (EIA) form | <input type="checkbox"/> Environmental assessment or impact statement       |
| <input type="checkbox"/> Response summary  | <input type="checkbox"/> Board order/rule                                   |

Approved by	Signature	Date
Jill Jonas, Bureau Director		4/12/13
Ken Johnson, Administrator		5/7/13
Cathy Stepp, Secretary		5/30/13

cc: Board Liaison - AD/8

Program attorney - LS/8

Department rule coordinator - LS/8

Staff review – Natural Resources Board agenda item

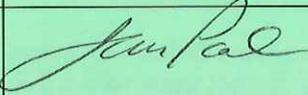
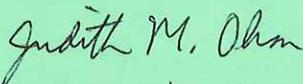
**Reminder:**

Have the following questions been answered under the summary section of this form?

- Why is the rule needed?
- What are the significant changes?
- What are the key issues/controversies?
- What was the last action of the Board?
- Will the proposed rule have an economic impact on small business, and if so, will it be minimal (level 3), moderate (level 2), or significant (level 1)?

List of attached materials required for rule proposals:

Statement of scope	Hearing authorization	Final adoption
<ul style="list-style-type: none"> <li>• Memo to the Board</li> <li>• Statement of scope</li> <li>• Governor approval letter</li> </ul>	<ul style="list-style-type: none"> <li>• Background memo</li> <li>• Fiscal estimate and EIA form</li> <li>• Environmental assessment (if needed)</li> <li>• Board order/rule</li> </ul>	<ul style="list-style-type: none"> <li>• Background memo</li> <li>• Response summary</li> <li>• Fiscal estimate and EIA form</li> <li>• Environmental assessment (if needed)</li> <li>• Board order/rule</li> </ul>

Program and reviewer	Signature	Date	Comments
<b>Enforcement and Science</b> Jim Pardee Environmental Analyst  Bill Walker Economist	  	5/1/13  5/1/13	
<b>Management and Budget</b> Paul Neumann		4/30/13	
<b>Legal Services</b> Judith Ohm Attorney  Linda Haddix Rule Coordinator	  	4/29/13  4-29-13	
<b>Other reviewers</b> Not applicable			

# STATEMENT OF SCOPE

## Department of Natural Resources

Rule No.:           DG-02-13          

Relating to: Geothermal licensing

Rule Type: Permanent

### 1. Finding/nature of emergency (Emergency Rule only):

These will be permanent rules.

### 2. Description of the objective of the rule:

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. Rules are necessary to interpret the provisions regarding heat exchange drilling, which is now regulated as a result of passage of 2011 Wisconsin Act 150. 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.

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.

Construction of drillholes creates a connection from the land surface through layers of soil and rock to groundwater. Improper heat exchange drillhole construction can potentially result not only in contamination of groundwater used for drinking water supply but also in reduced energy efficiency and unnecessary business and consumer costs.

### 3. Description of existing policies relevant to the rule and of new policies proposed to be included in the rule and an analysis of policy alternatives; the history, background and justification for the proposed rule:

Existing rules set license and construction requirements for water well drilling. New rules will set license and construction requirements for heat exchange drillhole drilling.

Current rules include:

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.

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.

2011 Wisconsin Act 150 created new definitions in Chapter 280, Stats., for heat exchange drillhole and heat exchange drilling, and modified the individual and business license for drillers to create a more generic drilling license, with specific authorization to do well drilling or heat exchange drilling. Wisconsin Act 150 requires that the department establish new criteria and requirements for evaluating existing heat exchange drilling experience, and establish training and continuing education requirements for attaining and maintaining a heat exchange drilling license under the new definitions. As a part of implementing the requirements for the new category of heat exchange driller, NR 146 - license registration, and NR 812 - construction requirements - will need to be amended to address heat exchange drilling.

Currently drilling-related aspects of all vertical heat exchange systems must receive department approval. Development of construction standards for vertical heat exchange systems will allow the department to streamline the approval process. Establishing construction standards for heat exchange drillholes by rule will allow the typical low-risk systems to proceed with installation more quickly by no longer requiring the owners to wait for DNR approval.

The new licensing requirement continues the state policy to protect groundwater and ensure safe drinking water as well as protect consumers and enhance the availability of alternate

sources of energy for heating and cooling by proper construction of heat exchange drillholes by licensed and trained professionals.

**4. Statutory authority for the rule (including the statutory citation and language):**

Section 280.11(1), Stats.,: "The department shall, after a public hearing, prescribe, publish and enforce minimum reasonable standards and rules and regulations for methods to be pursued in the obtaining of pure drinking water for human consumption and the establishing of all safeguards deemed necessary in protecting the public health against the hazards of polluted sources of impure water supplies intended or used for human consumption, including minimum reasonable standards for the construction of well pits. It shall have general supervision and control of all methods of obtaining groundwater for human consumption including sanitary conditions surrounding the same, the construction or reconstruction of wells and generally to prescribe, amend, modify or repeal any rule or regulation theretofore prescribed and shall do and perform any act deemed necessary for the safeguarding of public health."

Section 280.13(1) (intro.) states: "The department may exercise such powers as are reasonably necessary to carry out and enforce the provisions of this chapter. It may, among other things:"

Section 227.11(2) (a) states: "Each agency may promulgate rules interpreting the provisions of any statute enforced or administered by the agency, if the agency considers it necessary to effectuate the purpose of the statute, but a rule is not valid if the rule exceeds the bounds of correct interpretation. All of the following apply to the promulgation of a rule interpreting the provisions of a statute enforced or administered by an agency:"

Section 280.15(2m) (b)2. States: "In order to retain his or her license as a well driller or pump installer an individual shall comply with requirements for continuing education promulgated by the department by rule and shall apply for license renewal and pay the required license fees under par. (c) annually on or before January 1."

Section 280.15(2m) (f)2m.b. states: "Except as provided in par. (g), the applicant has been a registered drilling rig operator for at least 2 years within the 5 years before applying, has complied with training and continuing education requirements

under sub. (3g), and has the heat exchange drilling experience required by the department by rule."

**5. Estimate of the amount of time that state employees will spend to develop the rule and other resources necessary to develop the rule:**

It is estimated state employees may spend up to 500 hours in stakeholder meetings, drafting, hearings and other steps in promulgations of the proposed rules.

**6. Description of all entities that may be impacted by the rule:**

The rule revisions will affect people and businesses involved with drillhole construction, as follows:

1. All drillers who construct heat exchange drillholes will benefit from procedures promulgated by rule rather than individual review of standard-construction heat exchange drillholes.
2. Wisconsin-licensed water well drillers who currently install or want to begin installing heat exchange drillholes will need to follow licensing and training requirements for heat exchange drilling.
3. Wisconsin based drillers installing heat exchange drillholes, who do not hold a water well drilling license, will need to obtain a Wisconsin driller license with heat exchange drilling authorization;
4. Non-Wisconsin drillers licensed in another state who currently install or want to install heat exchange drillholes in Wisconsin will need to obtain a Wisconsin driller license with heat exchange drilling authorization;
5. People with no drilling experience who want a heat exchange driller license will need to be trained and obtain the required level of experience in order to obtain a heat exchange drilling license.
6. Consumers will benefit by reduced risk of drinking water contamination and reduced risk of costly repair of improper drilling.

**7. Summary and preliminary comparison of any existing or proposed federal regulation that is intended to address the activities to be regulated by the rule:**

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

**8. Anticipated economic impact of implementing the rule (note if the rule is likely to have a significant economic impact 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. 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.

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.

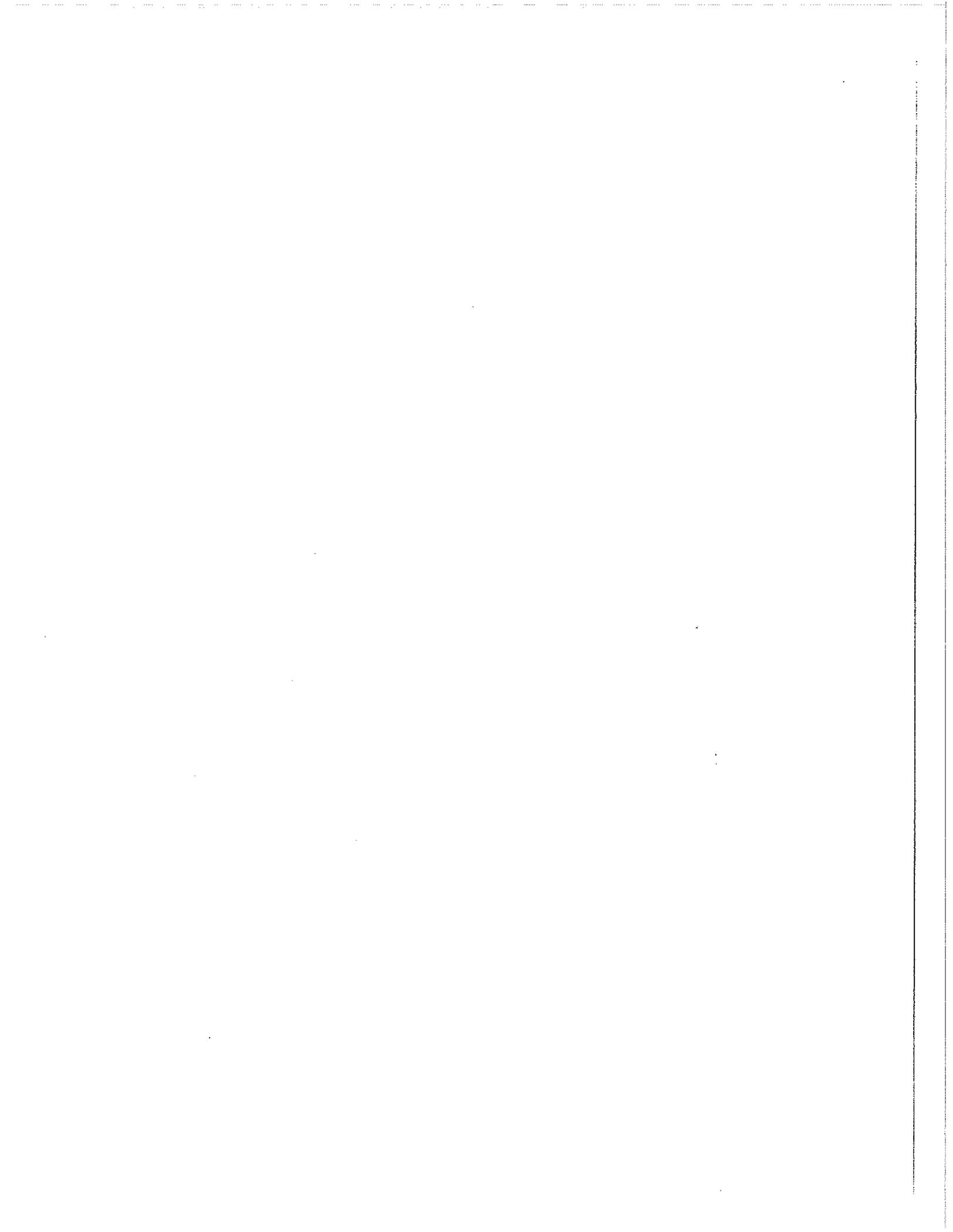
**Contact Person:** Randell Clark, Hydrogeologist, 608-276-7895  
Randell.Clark@wisconsin.gov

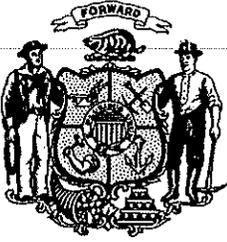


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Department head or authorizing signature



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Date Submitted





**SCOTT WALKER**  
**OFFICE OF THE GOVERNOR**  
**STATE OF WISCONSIN**

P.O. Box 7863  
MADISON, WI 53707

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February 4, 2013

Cathy Stepp  
Secretary  
Wisconsin Department of Natural Resources  
101 South Webster St.  
P.O. Box 7921  
Madison, WI 53707-7921

**RE: Scope Statement for DG-02-13 relating to geothermal licensing**

Dear Secretary Stepp,

I hereby approve the statement of scope submitted on January 17, 2013, pursuant to Wisconsin Statutes § 227.135, in regards to a proposed rule DG-02-13. You may send the scope statement to the Legislative Reference Bureau for publication pursuant to Wisconsin Statutes § 227.135(3).

Sincerely,

Scott Walker  
Governor

