

## **Program Guidance - Alternative Eligibility Requirements for Heat Exchange Driller Licensing**

Summary of Changes based on Public Comments – March 18, 2015

Thank you to the individuals that provided feedback on the Department of Natural Resources (Department) proposed program guidance regarding “Alternative Eligibility Requirements for Heat Exchange Driller Licensing”. Three e-mail messages were submitted to the Department during the public comment period. A summary of the public comments and DNR response is provided below. The original email comments are attached to this summary.

All comments were either alternative phrasing or requests to modify requirements that are in state statute or administrative code. The Department did not make any changes to the guidance. The final guidance will be issued on April 1, 2015.

If you have any questions, please contact Liesa Lehmann at (608) 267-7649 or [Liesa.LehmannKerler@wisconsin.gov](mailto:Liesa.LehmannKerler@wisconsin.gov)

**Comment #1** (Henrich): The guidance should include some information about contractors that already hold licenses to drill heat exchangers in other states. Contractors that hold heat exchange license from Minnesota should be allowed to immediately sit for the exam, or be automatically granted a Wisconsin license.

**DNR Response:** The program guidance provides alternative eligibility requirements for applicants with in-state experience. Section 280.15(2m)(g), Wisconsin Statutes provides specific eligibility requirements for applicants who hold out-of-state licenses. This law does not provide automatic eligibility or reciprocity for contractors who hold heat license from another state. DNR cannot revise state statute through program guidance. No change was made to the program guidance in response to this comment.

**Comment #2** (Henrich): Individuals holding water well contractor licenses should be considered to sit for the Wisconsin Heat Exchange Driller exams.

**DNR Response:**

NR 146.04(9), Wisconsin Administrative Code, contains the eligibility requirements to qualify to take a heat exchange driller exam. This law does not provide automatic eligibility for individuals who hold a water well driller license. DNR cannot revise administrative code through program guidance. No change was made to the program guidance in response to this comment.

**Comment #3** (Henrich): For item 1, suggests one of the following statements be used instead of current proposed language, to meet the guidance intent:

- *Exception: Applicants are exempt from meeting this criteria since it was not possible for applicants to register as a heat exchange driller before April 1, 2015. OR*
- *Exception: This provision shall be waived since it was not possible for applicants to register as a heat exchange driller before April 1, 2015*

**DNR Response:** The alternative phrasing does not meet the intent. The intent is that item 1 does not apply. Item 1 relates to progressing from a registered heat exchange drill rig operator to a heat exchange driller, where no such path currently exists because there are currently no registered heat exchange drill rig operators. No change was made to the program guidance in response to this comment.

**Comment #4** (Henrich): For item 8, suggests one of the following statements be used instead of current proposed language, to meet the guidance intent:

- *Exception: Applicants are exempt from meeting this criteria since it was not possible for applicants were not required to obtain continuing education for heat exchange drillers prior to April 1, 2015 OR*
- *Exception: This provision shall be waived since it is was not possible for applicants were not required to obtain continuing education for heat exchange drillers prior to April 1, 2015*

**DNR Response:** The alternative phrasing appears to meet the intent, but is grammatically incorrect. The proposed phrasing meets the intent. No change was made to the program guidance in response to this comment.

**Comment #5** (Archibald): Under item 2, “Within...subdivision. *Experience obtained* in a formal degree or apprenticeship program approved in advance by the department may qualify toward the requirements of this subdivision.” I would propose changing the words *Experience obtained* in to ***Completion of***

**DNR Response:** The non-italicized language in item 2 of the program guidance is directly from NR 146.04(9)(a)2., Wisconsin Administrative Code. DNR cannot revise administrative rule language through program guidance. No change was made to the program guidance in response to this comment.

**From:** [David Henrich](#)  
**To:** [Lehmann Kerler, Liesa K - DNR](#)  
**Cc:** [Jack Henrich](#)  
**Subject:** Comments for Heat Exchange Driller Guidance document  
**Date:** Wednesday, February 25, 2015 8:57:39 AM

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Good morning Liesa,

I have a couple of additional comments that I think would help clarify some of the suggested guidance in the document:

**For item 1** – I believe the intent of the exception is to state that since potential licensees could not possibly meet the criteria the applicant would be exempt from meeting the criteria. I would suggest the following statement be used instead of current proposed language:

- *Exception: Applicants are exempt from meeting this criteria since it was not possible for applicants to register as a heat exchange driller before April 1, 2015.*

Or

- *Exception: This provision shall be waived since it was not possible for applicants to register as a heat exchange driller before April 1, 2015*

**For item 8** – I believe the same intent was desired here as well. I would suggest the following language:

- *Exception: Applicants are exempt from meeting this criteria since it was not possible for applicants were not required to obtain continuing education for heat exchange drillers prior to April 1, 2015*

Or

- *Exception: This provision shall be waived since it is was not possible for applicants were not required to obtain continuing education for heat exchange drillers prior to April 1, 2015*

Please let me know if there is any additional information I should provide, thank you!

Thank You,

*David P. Henrich*

Vice - President

Bergerson - Caswell, Inc.

5115 Industrial St.

Maple Plain, MN 55359

Ph: 952-255-7000

Fx: 763-479-2183

An Equal Opportunity Employer/Contractor

**From:** [David Henrich](#)  
**To:** [Lehmann Kerler, Liesa K - DNR](#)  
**Cc:** [Rick Nash](#); [Jack Henrich](#)  
**Subject:** Comments on Eligibility requirements for heat exchange driller license requirements  
**Date:** Tuesday, February 17, 2015 9:36:18 AM

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Good morning Ms. Lehmann,

After reviewing the document I don't see any guidance dealing with contractors that already hold licenses to drill heat exchangers in other states. I have been told that, In particular, that there would be some form of reciprocity with Minnesota as there has been over the past years with our water well contractors licenses. Could you please add some information regarding this? At minimum, contractors holding a HE license from Minnesota should be allowed to immediately sit for the exam. Preferably there should be a direct grandfathering that should allow persons holding a Minnesota Heat Exchanger license to simply apply and receive a Wisconsin heat exchanger license. In both cases the license holder has already demonstrated proficiency in proper construction of heat exchange wells as well as passing an examination to verify competency. Both Wisconsin and Minnesota have been at the forefront of having good codes and regulations protecting our groundwater resources and both states licenses should remain on equal footing and enjoy reciprocity across state lines.

Water well contractors have also demonstrated the necessary proficiencies regarding pipe installation and proper grouting techniques. Those holding water well contractor licenses should also be considered to sit for the Wisconsin Heat Exchange Driller exams.

Thank You,

*David P. Henrich*

Vice - President

Bergerson - Caswell, Inc.

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**From:** [monarchibald@tds.net](mailto:monarchibald@tds.net)  
**To:** [Lehmann Kerler, Liesa K - DNR](#)  
**Cc:** [Clark, Randell V - DNR](#)  
**Subject:** Comments - Alternative Eligibility Requirements for Heat Exchange Driller License Exan  
**Date:** Sunday, March 01, 2015 9:27:39 PM

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Under

## **Alternative Eligibility Requirements**

2. Within...subdivision. *Experience obtained in* a formal degree or apprenticeship program approved in advance by the department may qualify toward the requirements of this subdivision. I would propose changing the words *Experience obtained in* to ***Completion of***

The logic is simple. Since the department must approve a formal degree or apprenticeship program, you will be able to determine during the approval process how much experience is required. We had already discussed using structures owned by nonprofits to gain additional drilling time as part of an internship for students and had been invited by the National Science Foundation to apply for more funding.

Unfortunately, once the bill was introduced, Gateway suspended entry into the program. Now, in the face of uncertainty as to how these regulations might affect graduates, they are exploring termination of the program. Changing the terminology as proposed above will allow the department and Gateway to reach a mutually satisfactory solution that can put Wisconsin on the forefront of preparing heat exchange drillers, while protecting the groundwater. Mark Putra, one of your predecessors, devoted a considerable amount of resources to help set this program up. To toss it all aside would truly be a shame.

I know most of the names on the email list you sent out and can easily conclude that they are overwhelmingly Caucasian males. Providing a pathway for women and minorities to enter the field should also be a priority. With respect to this, you will find some emails previously sent by me when Jeff Beringer, lobbyist for the water well drillers got Representative Ott to introduce his original and amended bill(s).

If you have any questions, please do not hesitate to contact me. I can be reached either by email, or on my cell phone at (920) 565-4149.

M. Archibald, PhD

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**From:** "monarchibald tds.net" <monarchibald@tds.net>  
**To:** "Erin Ruby" <Erin.Ruby@legis.wisconsin.gov>  
**Sent:** Monday, January 9, 2012 1:58:30 PM  
**Subject:** Fwd: concerns about Assembly Bill 201 - geothermal drilling

Thought I would forward this response from Sen. Wanggaard to you to verify my

previous efforts to get my concerns to the appropriate legislators. As You probably gathered, neither Tom Neisen or myself are politically astute individuals. While he contacted each of the bill's sponsors, I contacted my local legislators.

In previous sessions, when the water well drillers tried to get Senator Jauch to sponsor a similar bill, I had numerous conversations with his staff and Jeff Beiringer. Unfortunately key retirements in the DNR kept us from being as informed about critical potential legislative activity, such as Assemblyman Ott's bill as occurred in the past.

If you have any questions, please do not hesitate to contact me. I can be reached at either (262) 822-7551 or (920) 565-4149.

M. Archibald  
Earthlinked Technologies

----- Forwarded message -----

From: **Sen.Wanggaard** <[Sen.Wanggaard@legis.wisconsin.gov](mailto:Sen.Wanggaard@legis.wisconsin.gov)>  
Date: Thu, Aug 11, 2011 at 10:58 AM  
Subject: RE: concerns about Assembly Bill 201 - geothermal drilling  
To: "monarchibald [tds.net](http://tds.net)" <[monarchibald@tds.net](mailto:monarchibald@tds.net)>

Dear Ms. Archibald,

Thank you for contacting me with your concerns regarding Assembly Bill 201, which relates to geothermal drilling. Although I am not a cosponsor of this bill, I wanted to make sure your concerns were understood by the authors. I contacted the authors of the bill, Senator Kedzie and Representative Ott, on your behalf. I forwarded your correspondence to them as well, to ensure they have all the details of how this legislation may affect you. They will keep your thoughts in mind while considering amendments or revisions to the legislation. I will be keeping an eye on the bill as it goes forward, and watching for any amendments that address the issues you have brought up. I may contact you again in the future with questions or updates, if you don't mind. If the authors contact you directly, please let me know.

Again, thank you for sharing your sentiments with me. If you have future concerns on this, or any other legislation, please don't hesitate to contact me.

Regards,



Van H. Wanggaard

Wisconsin State Senator

Senate District 21—Serving Racine County

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**From:** monarchibald [tds.net](http://tds.net) [mailto:[monarchibald@tds.net](mailto:monarchibald@tds.net)]  
**Sent:** Wednesday, July 27, 2011 4:42 PM  
**To:** Sen.Wanggaard  
**Subject:** concerns about Assembly Bill 201 - geothermal drilling

I just moved into your district purchasing both a commercial building and a home (14706 & 14708 Washington Ave., Union Grove, 53182) and would like to express my concern over Assembly Bill 201 as currently written. It needs to be revised to either grant blanket approval to the DNR to regulate all licenses for drilling in Wisconsin or amended to include alternatives to obtaining geothermal licensing, such as graduating from the geothermal drilling program currently offered by Gateway Technical College.

I am very much a proponent of protecting the groundwater, but I am very much against a law that would put in place a parochial system that benefits existing water well drillers (who had no interest in doing geothermal drilling when the economy was humming along). The bill as currently written will create and perpetuate an inequity – limiting the ability of women, minorities, and anyone who doesn't have connections to enter the field. My experience from attending various association meetings around the country is that an inordinate number of well drillers entered the field because a relative or neighbor operated a water well rig. It's not unusual to find fifth generation well drillers.

One of the reasons I moved to Racine county was to be able to work more closely with Gateway Technical College in order to set up their geothermal drilling program. This was part of an agreement that I made with the DNR in order to eventually receive a blanket approval to install DX geothermal systems in Wisconsin.

Our systems differ from most other types of geothermal systems in that we drill small diameter boreholes no more than 100 ft in depth and insert copper tubes “directly” into the ground through which the refrigerant flows. Not only are our systems more efficient, we use smaller rigs and create a loopfield with a small footprint that can fit on the small lots

typically found in urban areas – places existing water well drillers cannot even fit their rigs.

This is a site which gives more information on our type of system: [www.earthlinked.com](http://www.earthlinked.com)

Once we had satisfied the DNR as to the safety of our systems, Mark Putra, former head of the Water Supply Section, had estimated that they might need to oversee as many as 8 million holes in Wisconsin and they didn't want to approve them one installation at a time. But before we were granted a blanket approval, the DNR wanted assurances as to how we were going to assure that only highly qualified individuals were used to do the geothermal drilling. We promised to help set up a program with one of the technical colleges in Wisconsin, and have been working with Gateway over the last several years to get this accomplished. Our efforts have included assistance with obtaining a military drilling curriculum, a National Science Foundation grant, and provision of equipment, materials and supplies. We also offered tuition payments for students taking initial courses so that we could get the program going.

The DNR also offered support in the form of release time for a staff member, Bill Furbish, to take the instructors to various geothermal drilling sites to show them what kinds of techniques various drilling companies were using and advising what should be included in the training, which the DNR wanted expanded to include other types of geothermal boreholes – and what should be avoided. Bill Furbish was also on our first few drilling sites (in the Madison area) to oversee the initial DX installations, which were categorized as experimental. None of our sites involved a licensed well driller, but they have always involved one or more Gateway instructor(s). The first few installations also involved a representative from the DNR and the last one involved some student interns. All except one of our installations was a retrofit and none (including the new construction) could have been serviced by one of the larger water well rigs.

We expect the first graduates to be coming out of the Gateway program in December and it would be a travesty if an ill-advised piece of legislation decimates all the effort that has gone into turning Gateway into a geothermal leader and model for the rest of the US. It would also jeopardize their opportunity to become a regional center for geothermal training and the several million dollars in funding from the National Science Foundation that would entail.

From a personal standpoint, passage of Assembly Bill 201, as it now reads, would also stifle our personal plans to start gearing up our sales efforts as the trained individuals necessary to support and install DX geothermal systems become available. With 8 million holes projected, that should mean jobs – lots of jobs. Therefore, I urge you not to support Assembly Bill 201 in its current form.

If you have any questions, feel free to contact me at (262) 822-7551.

Respectfully,

Mona Archibald