



STATE OF WASHINGTON  
DEPARTMENT OF LABOR AND INDUSTRIES

Prevailing Wage  
PO Box 44540 • Olympia, Washington 98504-4540  
360/902-5335 Fax 360/902-5300

May 28, 2013

Steven Snorsky, Vice President  
Geo Loop Tec Company  
85 South Orcas Street  
Seattle, WA 98108

Re: Piping Work for Geothermal Heat Pump Systems

Dear Mr. Snorsky:

Thank you for your March 26, 2013 letter to Industrial Relations Agent Beatriz Hart regarding the appropriate scope of work (scope) for certain work related to a closed loop geothermal heating and cooling system, and more specifically the installation of piping systems for a geothermal heat pump system. Your letter responds to Ms. Hart's findings in regard to work performed for City of Seattle Fire Station #6. Following an audit, Ms. Hart found that the work to install and connect high density polyethylene (HDPE) piping was incorrectly classified under the scope for Laborers, [WAC 296-127-01344](#), and should have been classified instead under the scope for Plumbers, Pipefitters, and Steamfitters, [WAC 296-127-01364](#), or the scope for Refrigeration Mechanic, [WAC 296-127-01367](#). You contend that the scope for Laborers is correct, and have asked me to make a formal determination on the issue.

This is a determination of the Industrial Statistician regarding coverage of the referenced work under Washington's prevailing wage laws and is made pursuant to RCW [39.12.015](#). See the enclosed document, "*Prevailing Wage Determination Request and Review Process*."

I previously rendered three determinations (May 26, 2011, August 11, 2011, and August 28, 2012) relating to drilling for geothermal systems. The May 26, 2011 determination was superseded by the later determinations which are enclosed and are also posted on the "[Determinations and Policies](#)" section of our Prevailing Wage web site. In drafting this letter of determination, some of the documents I have reviewed include those determinations and the following:

- Beatriz Hart's letter dated March 26, 2013. The letter describes the information that Ms. Hart collected, including her visit to your facilities on February 8, 2013.
- A number of pictures of your facility and descriptions of the systems observed, provided by Ms. Hart.

- The scope of work descriptions for Laborers, [WAC 296-127-01344](#); Plumbers, Pipefitters, and Steamfitters, [WAC 296-127-01364](#); Refrigeration Mechanic, [WAC 296-127-01367](#); Laborers In Utilities Construction, [WAC 296-127-01340](#); Operating Engineers (power equipment operators), [WAC 296-127-01354](#); and Utilities Construction (underground sewers and water lines), [WAC 296-127-01389](#). (These scope of work descriptions are enclosed and are also available on the Prevailing Wage web site. See <http://www.lni.wa.gov/TradesLicensing/PrevWage/default.asp>,
- Your March 26, 2013 letter and accompanying documents, including the 2007-2012 Washington and Northern Idaho District Council of Laborers Western Central Washington Master Labor Agreement.
- The enclosed December 17, 2008 determination of former Industrial Statistician David J. Soma relating to geothermal systems.
- Assistant Director José Rodriguez's enclosed letter of redetermination dated February 22, 2013 on the topic of Closed Loop Geothermal Drilling.
- Various web sites demonstrating or otherwise explaining the details of the installation of geothermal heating and cooling systems, including:  
<http://www.youtube.com/watch?v=g2cvsXsOJ64>  
<http://www.youtube.com/watch?v=kKC2YG2PUnE>  
<http://www.youtube.com/watch?list=PL90AA3E5F6521EA08&v=FKV17UewzPY&NR=1&feature=endscreen>  
<http://www.youtube.com/watch?v=LKqZV60vQ8A>  
<http://www.youtube.com/watch?v=pbFmI9MsuGw>  
<http://www.welldrillingschool.com/courses/pdf/geothermal.pdf>  
<http://www.youtube.com/watch?v=FJXVrUvbCuc&feature=endscreen&NR=1>  
<http://opus.mcerf.org/joiningmethod.aspx?id=-2133580976575427791>

In my August 28, 2012 determination, I previously addressed this issue, noting that “the work of placing the pipe into the bores or shafts requires payment of the Plumber, Pipefitter, and Steamfitters, [WAC 296-127-01364](#) prevailing rate of wage, and filling the bores or shafts with concrete slurry or grout requires payment at the Laborers, [WAC 296-127-01344](#) prevailing rate of wage.”

Based on the facts presented here it is my determination that installing pipe for a geothermal closed loop heating and cooling system may be compensated under either of two scopes of work: Plumbers, Pipefitters, and Steamfitters, [WAC 296-127-01364](#), and Refrigeration Mechanic, [WAC 296-127-01367](#).

**Specific Tasks Addressed – HDPE Pipe Assembly (Heat Welding)**

In your letter you describe the relevant work as involving the heat fusion of HDPE pipe sections. You state that “[t]his is the only accepted method of joining pipe in the Ground Source Heat Pump Boring Industry.” Ms. Hart notes that in a visit to your facility you explained that heat fusion was part of the “looping” process. She also provided numerous pictures from her visit to your facility which illustrated a variety of ways in which the fusion is performed. Thank you for facilitating Ms. Hart’s visit and for your help in specifically identifying the processes the pictures represent. I appreciate your efforts in that regard.

Generally, I understand that this pipe assembly process involves the use of a specialized iron to heat the ends of the HDPE pipe to approximately 400-500 degrees Fahrenheit. The workers then either adjoin two ends to each other (“butt fusion”) or insert one end into a socket (“socket fusion”). A “sidewall fusion” may also be performed. For the butt fusion a facing machine may also be used. The process creates a permanent joint. In a vertical piping system, the pipe is lowered into a hole that has been drilled. The hole is then grouted for several reasons, including successful heat transfer between the ground and the pipe. Heat fusion may be used to create the “u-bend” to be lowered into the borehole, as well as on the surface to connect the pipes. The systems are pressurized, and the fusion method is intended to maintain high pressure. The system is pressure tested before backfilling.

**Plumbers, Pipefitters, and Steamfitters (WAC 296-127-01364)**

In your communications with Ms. Hart, and in your determination request letter to me, you indicate that you do not believe the Plumbers, Pipefitters, and Steamfitters classification was acceptable for the work at issue because “plumbers only work indoors.”

The work described in the Plumbers, Pipefitters, and Steamfitters scope is not limited to work inside a structure. In its introductory paragraph, the scope states:

For the purpose of the Washington state public works law, chapter [39.12](#) RCW, plumbers, pipefitters and steamfitters assemble, install, and maintain piping systems, fixtures and equipment for the transportation of water, steam, gas, air, sewage, oil, fuels, liquids, gases, or similar substances.

You will note that nothing in the above language specifies that the work must be performed indoors, and indeed we have applied the scope to a variety of outside work. The detail that follows in the Plumbers, Pipefitters, and Steamfitters scope is preceded by this phrase: “The work includes, *but is not limited to...*” (Emphasis added.) The detailed examples that follow in that scope are there to provide examples of the covered work, and cannot be used to exclude work on piping systems that is consistent with the scope’s introductory paragraph.

In further support of your position that the Plumbers, Pipefitters, and Steamfitters scope of work applies only to indoor tasks, you reference a December 17, 2008 determination issued by former Industrial Statistician, David J. Soma that addressed a potential distinction between work that was indoors or outdoors:

The facts provided do not mention where the system is or which classification has to be used for hooking up the pipe system to the heating and cooling control unit. Connecting the piping to the unit is the work of plumbers, pipefitters, and steamfitters ([WAC 296-127-01364](#)) if the unit is indoors. If the unit is outdoors, additional information is necessary to determine whose work it is.

As Mr. Soma indicated, although all the indoor work with piping systems must be classified under the Plumbers, Pipefitters, and Steamfitters scope of work, outdoor work with piping

systems has a wider variety of options for classifications than indoor work. The determination does not, however, state or imply that the Plumbers, Pipefitters, and Steamfitters wage rate cannot apply to work performed outside of a structure.

You assert that joining pipe by fusing is different from: joining by means of solder, welding, brazing and other specific joining methods. By limiting your reference to the various methods of joining of pipes specifically listed in the scope of work for Plumbers, Pipefitters, and Steamfitters your conclusion seems to be that those work descriptions do not include the process under consideration here, sealing of pipe sections by fusion. That clearly is not the case. A more complete review of that part of the work description you cite includes the following: “[j]oining pipes by use of screws, bolts, fittings, solder, welding and caulking, *or any other method of making joints in the pipefitting industry.*” [Emphasis added.] Heat fusion is a form of making joints that is common practice within the pipefitting industry, and is included within the Plumbers, Pipefitters, and Steamfitters scope of work and must be compensated at that prevailing wage rate or at the prevailing wage rate for Refrigeration Mechanics (see below).

**Refrigeration Mechanic (WAC 296-127-01367)**

Additionally, as stated above, fusing and installing such piping may also be compensated at the Refrigeration Mechanic prevailing wage rate. Refrigeration mechanics install systems for cooling, heating, air conditioning, etc. This includes work to lay-out, cut, thread, bend, and connect pipe in such systems, and the method used to fuse the pipe involves a process with specialized tools which constitutes a form of welding, as described under the scope of work for Refrigeration Mechanic. Installation of a heat transfer system such as a closed loop geothermal heating and cooling system is covered by the scope’s language.

**Utilities Construction Scopes of Work (WAC 296-127-01340 and WAC 296-127-01389)**

In forms filed with the Department, you report paying your crew under the Laborers in Utilities Construction classification, [WAC 296-127-01340](#), for such work. Case law tells us that the nature of the work is the controlling factor in determining application of prevailing wage law. See *Lockheed Shipbuilding Company v. Dept. of Labor and Indus.*, 565 Wn. App. 421, 783 P.2d 1119 (1989). The nature of the work here is the installation of a geothermal heating and cooling system and it is not a utilities system such as the water or sewer mains that a public or private utility might run down a street or road, which is the coverage contemplated by the Laborers In Utilities Construction scope of work. For the same reason, the Utilities Construction (underground sewers and water lines) work description, [WAC 296-127-01389](#), would not be appropriately assigned to the work. Also, pipe fusing and other work to install a geothermal heat/cooling system is not covered under [WAC 296-127-01340](#) or [WAC 296-127-01389](#).

**Laborers (WAC 296-127-01344) and Operating Engineers (Equipment Operators) (WAC 296-127-01354)**

For the piping system under consideration here, the excavation or backfilling by shovel may be performed at the Laborers rate of wage. The hole boring, and excavation or backfilling by power equipment (such as backhoe, drilling, etc.) must be paid at the Operating Engineers, [WAC 296-127-01354](#) prevailing wage rate.

### **Plumber Certification Requirements**

In your letter you cite [RCW 18.106.010](#), a section of plumber certification law, to support your position that the described work should not be covered under the scope of work for Plumbers, Pipefitters, and Steamfitters. Specifically, you quote the following portion of [RCW 18.106.010](#):

"Plumbing" means that craft involved in installing, altering, repairing and renovating potable water systems, liquid waste systems, and medical gas piping systems within a building.

#### **RCW 18.106.010(9)**

This provision in plumber certification law when read with WAC 296-127-01364 in prevailing wage law may give rise to some confusion and incorrect assumptions about piping outside buildings. However, nothing in the prevailing wage scope of work for Plumbers, Pipefitters, and Steamfitters indicates that it is limited to work requiring a plumber certification. Nor is there any reference to [RCW 18.106.010](#) or the requirement for plumber certification in the Refrigeration Mechanic scope of work. For prevailing wage payment purposes, the work description in [WAC 296-127-01364](#) is controlling regarding work payable at the wage rate for Plumbers, Pipefitters, and Steamfitters. And, of course, for plumber certification purposes, [RCW 18.106](#) and its corresponding body of law are controlling.

### **Collective Bargaining Agreements (CBAs)**

Your letter also highlights the provisions of the Washington and Northern Idaho District Council of Laborers Western/Central Washington Master Labor Agreement. The document, which you attached to your determination request letter, makes reference to a Pipe Layer/Tailor, which it notes may work with pressurized and non-pressurized ductile pipe, gravity pipe and "HDPE (fused and non fused)" (page 22). However, while there are situations for which we will consider the contents of a CBA, we do not rely on such private agreements to establish the limits of a prevailing wage scope of work. Additionally, although it is clear under the agreement that Laborers may work with HDPE piping as they may work with other materials, this does not establish that the Laborers prevailing wage scope of work includes fusion and installation of a geothermal heating and cooling system. For our determinations, the primary and controlling authority in determining the applicable rate of wage is our scope of work descriptions.

Finally, your letter suggests that the program previously considered this work to be appropriately classified as the work of Laborers, as indicated by its approval of certain forms. I am not aware of any such decision, and my prior determinations have stated the contrary. Generally, the program is not able to review whether the classifications listed on each form are correct for the work performed since such a review may require a detailed investigation. A disclaimer to this effect is included on approved forms.

Steven Snorsky  
May 28, 2013  
Page 6 of 6

This determination is based upon the specific facts provided. If the facts vary or are different from as stated, the answer may also differ.

I hope this information is helpful. If you have additional questions, please let me know.

Sincerely,



L. Ann Selover  
Industrial Statistician/Program Manager  
(360) 902-5330  
[Ann.Selover@Lni.wa.gov](mailto:Ann.Selover@Lni.wa.gov)

Enclosures (6)

cc: Elizabeth Smith, L&I Assistant Director for Fraud Prevention and Labor Standards  
Jim Ashcraft, L&I Supervisor, Fraud Prevention and Labor Standards  
Beatriz Hart, L&I Prevailing Wage Industrial Relations Agent

# Prevailing Wage Determination Request and Review Process

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RCW 39.12.015 is the basis for requesting a determination, since it provides:

All determinations of the prevailing rate of wage shall be made by the industrial statistician of the department of labor and industries.

If you disagree with a determination the industrial statistician provides, WAC 296-127-060(3) provides for a review process:

(3) Any party in interest who is seeking a modification or other change in a wage determination under RCW [39.12.015](#), and who has requested the industrial statistician to make such modification or other change and the request has been denied, after appropriate reconsideration by the assistant director shall have a right to petition for arbitration of the determination.

(a) For purpose of this section, the term "party in interest" is considered to include, without limitation:

(i) Any contractor, or an association representing a contractor, who is likely to seek or to work under a contract containing a particular wage determination, or any worker, laborer or mechanic, or any council of unions or any labor organization which represents a laborer or mechanic who is likely to be employed or to seek employment under a contract containing a particular wage determination, and

(ii) Any public agency concerned with the administration of a proposed contract or a contract containing a particular wage determination issued pursuant to chapter [39.12](#) RCW.

(b) For good cause shown, the director may permit any party in interest to intervene or otherwise participate in any proceeding held by the director. A petition to intervene or otherwise participate shall be in writing, and shall state with precision and particularity:

(i) The petitioner's relationship to the matters involved in the proceedings, and

(ii) The nature of the presentation which he would make. Copies of the petition shall be served on all parties or interested persons known to be participating in the proceeding, who may respond to the petition. Appropriate service shall be made of any response.

If you choose to utilize this review process, you must submit your request within 30 days of the date of the applicable industrial statistician's determination or response to your request for modification or other change. Include with your request any additional information you consider relevant to the review.

Direct requests for determinations, and for modification of determinations via email or letter to the prevailing wage industrial statistician:

L. Ann Selover  
Industrial Statistician/Program Manger  
Department of Labor & Industries  
Prevailing Wage  
P O Box 44540  
Olympia, WA 98504-4540  
[Ann.Selover@Lni.wa.gov](mailto:Ann.Selover@Lni.wa.gov)

## Prevailing Wage Determination Request and Review Process

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Direct requests via email or letter seeking reconsideration (redetermination) by the assistant director to:

Elizabeth Smith, Assistant Director  
Department of Labor & Industries  
Fraud Prevention and Labor Standards  
P O Box 44278  
Olympia, WA 98504-4278  
[Elizabeth.Smith@Lni.wa.gov](mailto:Elizabeth.Smith@Lni.wa.gov)

Direct petitions for arbitration to:

Joel Sacks, Director  
Department of Labor & Industries  
P O Box 44001  
Olympia, WA 98504-4001

If you choose to utilize this arbitration process, you must submit your request within 30 days of the date of the applicable assistant director's decision on reconsideration (redetermination). Submit an original and two copies of your request for arbitration to the Director personally, or by mail. The physical address for the Director is 7273 Linderson Way, SW, Tumwater, WA 98501.

WAC 296-127-061 also contains the following provisions regarding petitions for arbitration:

In addition, copies of the petition shall be served personally or by mail upon each of the following:

- (a) The public agency or agencies involved,
  - (b) The industrial statistician, and
  - (c) Any other person (or the authorized representatives of such person) known to be interested in the subject matter of the petition.
- (2) The director shall under no circumstances request any administering agency to postpone any contract performance because of the filing of a petition. This is a matter which must be resolved directly with the administering agency by the petitioner or other party in interest.
- (3) A petition for arbitration of a wage determination shall:
- (a) Be in writing and signed by the petitioner or his counsel (or other authorized representative), and
  - (b) Identify clearly the wage determination, location of project or projects in question, and the agency concerned, and
  - (c) State that the petitioner has requested reconsideration of the wage determination in question and describe briefly the action taken in response to the request, and
  - (d) Contain a short and plain statement of the grounds for review, and
  - (e) Be accompanied by supporting data, views, or arguments, and
  - (f) Be accompanied by a filing fee of \$75.00. Fees shall be made payable to the department of labor and industries.





STATE OF WASHINGTON  
DEPARTMENT OF LABOR AND INDUSTRIES

Prevailing Wage  
PO Box 44540 • Olympia, Washington 98504-4540  
360/902-5335 Fax 360/902-5300

December 17, 2008

Mr. Dale Bright  
Business Agent  
Local 440  
565 13<sup>th</sup> Avenue  
Seattle, WA 98122

Re: Request for Determination for Work Done On Geo Thermal Heating and Cooling Systems

Dear Mr. Bright:

You have asked for a determination on which scope(s) of work apply to the installation of geo thermal heating and cooling systems.

The answer below is based on specific information provided. References to the Revised Code of Washington (RCW) and the Washington Administrative Code (WAC) are included. If the facts differ from those provided, the answers may be different.

Geo thermal systems are composed of loops of HDPE pipe, installed either horizontally in ditches or vertically in holes bored in the ground. The horizontal application is backfilled using soil, the vertical application is backfilled using grout to maximize heat exchange. Water used for the geo thermal systems comes from an established water supply and circulates in a closed loop.

The issue is whether the contractor can use Water Well Drillers, Exploration Drillers, Water Well Pump Installers, and Equipment Oilers (WAC 296-127-01391) to install these systems. WAC 296-127-01391 states it covers: 1. The drilling of wells, 2. Exploration drilling for geologic or hydrologic information, 3. Installation of water well pumps, and 4. Equipment oilers who assist the drillers and pump installers.

The information provided on geo thermal heating and cooling systems does not include any of the above four procedures. Therefore the work in question cannot be classified under WAC 296-127-01391.

The work of digging ditches and backfilling with soil or grout is work done by laborers (WAC 296-127-01344). Drilling bore holes not intended to produce water can either be power equipment operator (WAC 296-127-01354) or laborer depending on the method of drilling used.

Dale Bright  
December 17, 2008  
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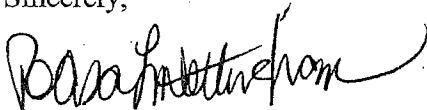
The facts provided do not mention where the system is or which classification has to be used for hooking up the pipe system to the heating and cooling control unit. Connecting the piping to the unit is the work of plumbers, pipefitters, and steamfitters (WAC 296-127-01364) if the unit is indoors. If the unit is outdoors, additional information is necessary to determine whose work it is.


Again, this answer is based on the fact set provided. If the facts differ from those used, the answers may be different.

Washington State prevailing wage information, including the WACs, are available on the Department's web site: <http://www.lni.wa.gov/TradesLicensing/PrevWage/default.asp>

I hope this answers your questions. If you need additional information or have questions, please call or email me at 360 902-5330 or [somd235@lni.wa.gov](mailto:somd235@lni.wa.gov).

Sincerely,



 David J. Soma  
Industrial Statistician  
Prevailing Wage Program Manager

# STREET PAVERS, SEWER, WATERMAIN AND TUNNEL WORKERS

565 - 13th Avenue  
Seattle, WA 98122  
(206) 329-1540  
Fax (206) 329-0156

**LOCAL 440**  
Affiliated with  
Laborer's International Union of North America  
(Affiliated with AFL-CIO)

**OFFICE HOURS**  
5 A.M. TO 5 P.M.  
Monday - Friday

December 5, 2008

Dept. of Labor & Industries  
Attn: David Soma  
PO Box 44810  
Olympia, WA 98504

Dear Mr. Soma:

We are asking for a determination for work being performed on Geo Thermal Heating and Cooling Systems.

Geo Thermal systems exchange heat to and from the ground. These systems are composed of loops of HDPE pipe, either installed horizontally in ditches or vertically in holes bored in the ground. The horizontal application is backfilled using soil, the vertical application is backfilled using grout to maximize the heat exchange. (See attached) The water used for the Geo Thermal systems comes from an established water supply and circulates in a closed loop.

The primary contractor performing this work is Geo Loop Tec., Inc. They have been classifying this work as Laborers work; however, they have begun to classify the work as well drillers and irrigation pump installers. (WAC 296-127-01391) This work does not meet the criteria of the definition because there is no drilling for water or exploratory drill as described under WAC-297-127-01391. This work is more aptly described under the Laborers scope to include grout machine tender, chuck tender and general labor.

We ask that this work be properly classified under the Laborers scope.

Respectfully,



Dale Bright  
Business Agent  
(425) 246-1745

DB:msr

Encl:

opeiu #8

23-244008 DEC 09 '08 #1013

U:DB:geothermal.L&I.ltr.doc

## Common Geothermal systems

### Closed loop fields

A closed loop system, the most common, circulates the fluid through the loop fields' pipes and does not pull in water from a water source. In a closed loop system there is no direct interaction between the fluid and the earth; only heat transfer across the pipe. The length of vertical or horizontal loop required is a function of the ground formation thermal conductivity, ground temperature, and heating and cooling power needed, and also depends on the balance between the amount of heat rejected to and absorbed from the ground during the course of the year. A rough approximation of the initial soil temperature is the average daily temperature for the region. Although copper and other metals can be used, polyethylene seems to be the most common tubing material used currently by installers; often 3/4 inch (19mm) inside diameter tubing.

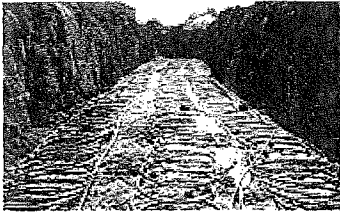
There are four common types of closed loop systems; vertical, horizontal, slinky, and pond. (Slinky and pond loops depicted below.)

#### Vertical closed loop field

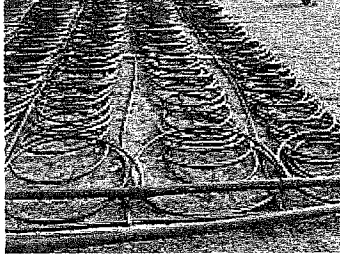
A vertical closed loop field is composed of pipes that run vertically in the ground. A hole is bored in the ground, typically, 150 to 250 feet deep (45–75 m). Pipe pairs in the hole are joined with a U-shaped cross connector at the bottom of the hole. The borehole is commonly filled with a bentonite grout surrounding the pipe to provide a good thermal connection to the surrounding soil or rock to maximize the heat transfer. Vertical loop fields are typically used when there is a limited square footage of land available. Bore holes are spaced 5–6 m apart and are generally 15 m (50 ft) deep per kW of cooling. During the cooling season, the local temperature rise in the bore field is influenced most by the moisture travel in the soil. Reliable heat transfer models have been developed through sample bore holes as well as other tests.

#### Horizontal closed loop field

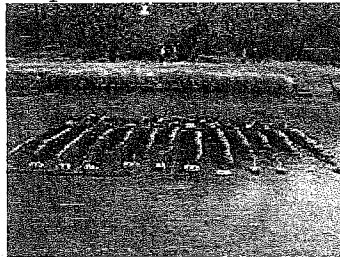
A horizontal closed loop field is composed of pipes that run horizontally in the ground. A long horizontal trench, deeper than the frost line, is dug and U-shaped coils are placed horizontally inside the same trench. A trench for a horizontal loop field will be similar to one seen under the slinky loop field; however, the width strictly depends on how many loops are installed. Horizontal loop fields are very common and economical if there is adequate land available.



A 3-ton slinky loop prior to being covered with soil. The three slinky loops are running out horizontally with three straight lines returning the end of the slinky coil to the heat pump



Loop field for a 12-ton system (unusually large for most residential applications)



12-ton pond loop system being sunk to the bottom of a pond

Slinky closed loop field

A slinky closed loop field is also installed in the horizontal orientation; however, the pipes overlay each other. The easiest way of picturing a slinky field is to imagine holding a slinky on the top and bottom with your hands and then move your hands in opposite directions. A slinky loop field is used if there is not adequate room for a true horizontal system, but it still allows for an easy installation.

Closed pond loop

A closed pond loop is not as common, but is becoming increasingly popular. A pond loop is achieved by placing coils of pipe at the bottom of an appropriately sized pond or water source. This system has been promoted by the DNR (Department of Natural Resources), who support geothermal systems and the use of ponds for geothermal systems. A pond loop is extremely similar to a slinky loop, except that it is attached to a frame and located in a body of water versus soil.





STATE OF WASHINGTON  
DEPARTMENT OF LABOR AND INDUSTRIES

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August 11, 2011

Robert A. Beattie  
Spencer Law Firm, LLC  
1326 Tacoma Avenue S, Suite 200  
Tacoma, WA 98402

Re: Request for Reconsideration of Determination  
Cascade Drilling NW, Inc.  
Valley View Middle School Geothermal System, Snohomish County

Dear Mr. Beattie:

Thank you for your June 20, 2011 letter in which you ask for reconsideration of my determination of May 26, 2011 concerning Cascade Drilling NW, Inc. (Cascade) and the work they performed for the Valley View Middle School in Snohomish County with respect to construction of a geothermal system.

I appreciate the effort your discussion entailed and the importance of this decision to your client. In that discussion you implied that the Department of Labor & Industries (L&I) had some duty to oversee the worker classifications your client has been applying to the various projects. Please understand that it is clearly not within the capacity of the department to inquire of each and every contractor and subcontractor on each public work project regarding the accuracy of the worker classifications they apply. For that reason, prevailing wage investigations are generally "complaint driven." However, when an issue of whether a worker is paid consistent with prevailing wage requirements arises, we will inquire further and provide guidance. The issue of whether the proper worker classification was utilized by Cascade for its work on the referenced construction project came to the attention of our program through Heery International, which managed this capital project for Snohomish County.

In reconsidering my prior determination, I reviewed in detail the discussion in your June 20 letter, the information that your client previously provided, and I consulted again with Heery International, who manages capital projects for Snohomish County, and with the project manager for J. R. Hayes & Sons, Inc., the prime contractor for the project. My understanding is that the work Cascade performed on this construction project entailed drilling of approximately 270 bores or shafts into the ground, installing pipe into those bores in a coil like fashion, capping off the pipe, and filling the bores/shafts with concrete slurry.

You are correct in your understanding that for determining the prevailing wage classification (scope of work) the classification is based upon the prevailing wage which is paid to workers "in the same trade or occupation." Washington has established rules within the Washington Administrative Code (WAC) that set forth the descriptions for trades or occupations as adopted by L&I. Having said that, there are instances where scopes of work overlap and sometimes more than one scope of work may cover the same tasks.

However, when comparing two scopes of work, one which is rather specific in its application and another which has broader application, it is appropriate to include within the more specific scope only such tasks as are clearly addressed by that scope's language. Those tasks which fall outside the scope's specific language could be included within another appropriately specific scope of work, or within a broader scope. In comparing the Power Equipment Operators scope of work (WAC 296-127-01354) with the Water Well Drillers scope (WAC 296-127-01391), both address "drilling," and it is the Water Well Drillers scope which is the more specific rule. There is no other scope of work that specifically addresses the type of drilling as occurred here. So, if the work does not come within the more specific scope, and it fits within the broader scope, it is the broader scope which will apply.

The drilling at issue here, drilling for construction of a closed loop geothermal system, is not covered by the Water Well Drilling scope of work or trade. That conclusion is consistent with the Lockheed Shipbuilding case you cited, which looks to the type of work rather than where the work is performed or by whom it was done. In this instance it does not matter that the work was performed by workers who generally drill water wells. Clearly, the nature of the work had nothing to do with water well drilling, exploration drilling, water well pump installation, or equipment oilers, and nothing to do with drilling a well for "water supplies for other purposes" as those efforts are addressed in the Water Well Drilling scope. Rather, the drilling here was performed in order to permit construction of a geothermal system, a type and nature of work included within the provisions of the Power Equipment Operators scope of work, and which is not addressed, generally or specifically, in the Water Well Drillers scope.

One of the points you make in your June 20 letter is that Cascade "was drilling wells for water supplies 'for any other purpose' and for the installation of water well pumps for a purpose other than a commercial water supply." You used this terminology, which is the language of the Water Well Drillers scope, in an attempt to support your conclusion that the Water Well Drillers scope applies here. However, on at least two occasions, I confirmed with Mr. Gosling, and also confirmed with others directly related to the project that the drilling performed for this project was for the purpose of constructing a *closed loop* geothermal system, and not for the purpose of pumping of water into any system. Nor, according to information I received, did Cascade "install water well pumps for a purpose other than a commercial water supply." My understanding is that no water is extracted from the ground and pumped into this system. Work performed by others on this project will include installation of pumps in support of the system, but the purpose of that pumping is to provide for movement of fluid (water with additives) through the closed system. Clearly, the work performed by Cascade Drilling as described in this instance was not for the



Robert A. Beatty  
August 11, 2011  
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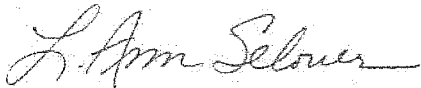
drilling of a water well for "water supplies for any other purposes" within the meaning of WAC 296-127-01391, nor was it "for the installation of water wells. . ."

While I appreciate your reference to the Occupational Classification System manual created by the U.S. Bureau of Labor Statistics, the provisions you cite, although interesting, are not dispositive of this issue. All references within the Water Well Drilling scope of work are with respect to water wells, and drilling for geologic or hydrologic "information." The plain meaning of the rule is with respect to those specific types of drilling relating to the use of water and/or obtaining geologic or hydrologic data.

For the reasons identified above, I affirm my prior determination that the drilling that occurred here is outside the scope of WAC 296-127-01391 and in this instance, by its nature, falls within the provisions of WAC 296-127-01354, Power Equipment Operators. Please note also that the work of placing the pipe into the bores/shafts requires payment at the Plumbers, Pipefitters, and Steamfitters (WAC 296-127-01364) rate of wage, and filling the bores/shafts with concrete slurry requires payment at the Laborers (WAC 296-127-01344) rate of wage.

If I can be of further assistance, please contact me at 360 902-5330 or [Sela235@lni.wa.gov](mailto:Sela235@lni.wa.gov).

Sincerely,



L. Ann Selover  
Acting Industrial Statistician/Program Manager





STATE OF WASHINGTON  
DEPARTMENT OF LABOR AND INDUSTRIES  
*Prevailing Wage*  
PO Box 44540 • Olympia, Washington 98504-4540  
360/902-5335 Fax 360/902-5300

August 28, 2012

Lawrence Gregory, President & CEO  
Gregory Drilling, Inc.  
17609 NE 70<sup>th</sup> Street  
Redmond, WA 98052

Re: Prevailing Rate of Wage for Closed Loop Geothermal Drilling

Dear Mr. Gregory:

Thank you for your August 3, 2012 letter to Prevailing Wage Industrial Relations Agent Beatriz Hart indicating you disagree with the guidance provided in my May 26, 2011 letter to Cascade Drilling NW, Inc. (Cascade Drilling) on public work to drill for closed loop geothermal projects. There is also an August 11, 2011 letter responding to the June 20, 2011 letter from Cascade Drilling's attorney, Robert A. Beatty (copies enclosed). My response letters applied the prevailing rates of pay for the Power Equipment Operator (WAC 296-127-01354 (copy enclosed) to such drilling for a public work. You object to that guidance and provided some reasons for your perception that the determinations are incorrect and a violation of law.

Determinations of the prevailing rate of wage are made by the industrial statistician of the Department of Labor & Industries (L&I). See RCW 39.12.015 and the enclosed "*Prevailing Wage Determination Request and Review Process*." As part of a reconsideration of the prior guidance, I have reviewed the issues you identify and your conclusions.

I understand that you disagree with our application of chapter 39.12 RCW, the Prevailing Wages on Public Works Act. The issues you raise seem to fall into three major groups reviewed below: (1) factual findings, (2) interpretations of scope of work descriptions, and (3) relationships or conflicts with other laws and regulations.

**Factual Findings** - You disagree with L&I's characterization of wells for the purposes of WAC 296-127-01391:

- You disagree that the closed loop geothermal systems are not a water well.
- You disagree that the closed loop geothermal systems are not drilling of an exploration well.

The scope of work description, WAC 296-127-01391 (copy enclosed), identifies when the prevailing rate of pay for that trade and occupation may be used on public work. That scope

includes well drilling for certain types of water "supplies," "dewatering," and includes hole or core drilling for "geologic or hydrologic information." The drilling performed for installing a closed loop geothermal system is not for any of those stated functions. Instead, the closed loop system circulates the enclosed coolant solution through the closed loop and to a heat exchanger for heating and cooling of structures. The closed loop geothermal system is not the type and nature of work performed at the prevailing rate of pay for the Water Well Drillers, Exploration Drillers, Water Well Pump Installers, and Equipment Oilers, WAC 296-127-01391.

**Interpretations of Scope of Work Descriptions** - You further disagree with L&I's interpretation of the language of the scope of work for the Water Well Drillers, Exploration Drillers, Water Well Pump Installers, and Equipment Oilers, WAC 296-127-01391:

- Your disagreement interprets the language of the scope, "water supplies for any other purpose" to include thermal conductivity of the water that may or may not come into contact with the underground geothermal closed loop piping as a "water supply."
- You state that the "includes but is not limited to" language in the scope of work allows the ground source heat pump drilling at this prevailing rate of pay.

Although I respect your opinion, absent some extractive action or function to remove and utilize the water at another location (actions not present in these facts), I do not agree that this is a "water supply."

The "includes but is not limited to" language is used in over forty (40) different scope of work descriptions (scopes). Each of those scopes is used to identify a unique trade and occupation for purposes of the applicable prevailing rate of pay. Such language allows some minor flexibility in correctly reading and applying the scope but does not amount to a carte blanche that expands the scope to include all other actions or activities. I believe the correct application of WAC 296-127-01391 for well drilling will be within the two major categories actually identified in the scope: (1) well drilling for water supplies, and (2) well drilling for geologic or hydrologic information. The drilling to install closed loop geothermal piping systems has a distinct purpose of exchanging heat to or from the ground not within the well drilling in WAC 296-127-01391.

**Relationships or Conflicts with Other Laws and Regulations** - Many of the remaining points you make can be grouped together in that they all suggest that other, unrelated standards and regulations either preclude L&I's decisions regulating the prevailing rate of wage or mandate a different conclusion for the applicable prevailing rate of wage. These points claim that:

- A prior prevailing wage determination letter fails to recognize the need for certain technical expertise required by other areas of statute.
- The well driller licensing requirements control the interpretation and application of prevailing wage laws that pertain to well drilling.
- The Department of Ecology rules on the environment determine prevailing wage outcomes.
- U.S. Census Bureau definitions of occupations are controlling on prevailing wage scope of work descriptions.
- The prevailing wage determination authorizes people to circumvent licensing requirements of chapter 18.104 RCW.

- The wage determination is in conflict with federal and state safe drinking water standards.
- The scope of work for Power Equipment Operators does not protect against cross contamination of aquifers by ground water.
- There is no exemption for L&I from the groundwater protections in chapter 18.104 RCW or chapter 173-160 WAC.
- The determinations and the scope for Well Drillers (WAC 296-127-01391) violate the statute for well drilling.

There are many activities that must meet certain environmental laws and standards, may require certifications of knowledge and ability, and may require certain permits or licensing. In some instances, the Washington State Prevailing Wage on Public works Act, chapter 39.12 RCW, may also apply to the same activity. In fact, the probability that a prevailing wage requirement would be the only applicable regulation on some specific work is not likely. Almost always, there will be some permits required, perhaps some environmental regulations, possibly some contractor or worker certifications or licenses required, etc. None of these layers of regulations, requirements, or laws will set aside other valid standards. Rather, the standards will all need to be satisfied.

Simply stated, if the Department of Ecology has a law and rules on drilling wells, and L&I has a law and rules on wages for public work, both standards may apply to the same work. Neither body of laws will negate or control the other. Both laws have standards that must be independently met to comply with the respective laws. Requiring a particular prevailing rate of wage on public work will not provide any exemption from or make any modification to other standards that may be present from other regulations or laws. You describe parallel regulations. If two applicable laws did happen to regulate the very same detail, compliance with both laws can be achieved by meeting the higher or more stringent standard.

L&I draws on a range of resources when it drafts and develops scope of work descriptions and then works through the public administrative process to adopt the descriptions as Washington Administrative Code (WAC). The language developed during this process generally draws on numerous authoritative resources with definitions of occupations but the final outcome of the rule making is not controlled by any such individual source.

While I appreciate your reference to the Occupational Classification System manual created by the U.S. Bureau of Labor Statistics, those provisions are not dispositive of this issue. All references within the Water Well Drilling scope of work are with respect to water wells, and drilling for geologic or hydrologic "information." The plain meaning of the rule is with respect to those specific types of drilling relating to the drilling for a "water supply" or obtaining geologic or hydrologic "information."

For the reasons identified above, I affirm my prior determination that the public works drilling that occurred for closed loop geothermal piping on the Valley View Middle School in Snohomish County is outside the scope of WAC 296-127-01391 and, by its type and nature, falls within the provisions of WAC 296-127-01354, Power Equipment Operators. Please note that the work of placing the pipe into the bores or shafts requires payment of the Plumber, Pipefitters, and Steamfitters, WAC 296-127-01364 (copy enclosed) prevailing rate of wage, and filling the

Lawrence Gregory  
August 29, 2012  
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bores or shafts with concrete slurry or grout requires payment at the Laborers, WAC 296-127-01344 (copy enclosed) prevailing rate of wage.

Nothing in the regulation of the prevailing rate of wage will modify or circumvent applicable environmental regulations, worker or contractor certifications or licensing requirements, or other state or federal laws that may apply to such work.

I believe I have sufficiently addressed the points raised in your August 3, 2012 letter. I previously provided you with the letters from Mr. Gosling and Robert A. Beatty, Mr. Gosling's attorney which were requests for my May 26, 2011 and August 11, 2011 determinations, respectively. Unless the work your company performed that is the subject of Ms. Hart's investigation is distinctly different from the work addressed in those letters, for prevailing wage purposes the May 26, 2011 and August 11, 2011 determinations also apply to your situation.

If you have further questions, please let me know.

Sincerely,



L. Ann Selover  
Industrial Statistician  
Program Manager  
360-902-5330  
[Sela235@Lni.wa.gov](mailto:Sela235@Lni.wa.gov)

Enclosures

cc: Governor Christine Gregoire  
Senator Rodney Tom  
Representative Ross Hunter  
Representative Deb Eddy  
Gary Smith, Independent Business Association  
Judy Schurke, Director  
Ernie LaPalm, Deputy Director for Field Operations  
José A. Rodríguez, Assistant Director for Specialty Compliance  
Bea Hart, Industrial Relations Agent  
Robert A. Beatty, Spencer Law Firm, LLC.



August 3, 2012

Ms. Hart  
Industrial Relations Agent  
Department of Labor and Industries  
616 120<sup>th</sup> Ave NE Suite C 201  
Bellevue, Washington 98005-3800

DEPARTMENT OF  
LABOR & INDUSTRIES  
AUG 07 2012  
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Response To Your Letter July 26, 2012 – Prevailing Wage Complaints

Sent by: Certified Mail

Dear Ms. Hart:

We are in receipt of your letter dated July 26, 2012 regarding complaints received by the Department of Labor and Industries regarding alleged violations of the Washington State Public Works Act (RCW 39.12). The complaints allege that workers performing work, and employed by our firm on two projects, did not receive the correct prevailing wage as required by RCW 39.12.020. Those two projects are:

- Early Site Package Public Works Project, contract 2007-142H(2), Tacoma Community College
- Rainer Beach Community Center Redevelopment, contract PW # 2011-005, City of Seattle

You included with your letter two letters of determination issued by the Acting Industrial Statistician, Program Manager Ann Selover, dated May 26, 2011, on the matter of drilling geothermal projects, and August 11, 2011 for our review. These letters stated that geothermal well drilling falls under the Equipment Operators scope of work rather than the Well Drillers & Irrigation Pump Installers classification.

You requested our firm to send you a written response by August 8, 2012 and any documents that we have that will help you understand our side of this dispute, including:

- Certified Payroll Records for the above stated projects.
- Copies of the employee's time records showing hours worked per day and per week for the time they have worked on these projects.
- Earning statements showing the pay basis, rate or rates of pay, gross wages and all deductions for each pay period for the duration of the projects.
- Copy of your contracts.
- Agreements to work four ten-hour days are required to be in writing and submitted with the requested certified payroll records.
- Other documents you believe may be appropriate for this investigation.

17609 NE 70th Street  
Redmond, WA 98052  
425.869.2372  
fax 425.882.2284

Per your e-mail message of August 1, 2012, enclosed are:

- Certified Payroll Records for the above stated projects.
- A copy of Department of Ecology Publication Number: 09-11-010
- A copy of RCW 18.104
- A copy of WAC 296-127-13
- A copy of WAC 296-127-01391
- A copy of WAC 296-127-01354
- A copy of your e-mail dated 8/1/2012 stating provide copies of certified payroll records for both projects and a written response regarding the scope of work to use by 8/8/12. The rest of the requested documentation can be submitted at a later time.

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We do not have a copy of Mr. Gosling's original letter to you regarding the work he did at Valleyview Middle School and thus cannot determine if the work we have done on the above named projects which are the subject of this complaint is similar to that done by Mr. Gosling at the Valleyview Middle School. We understand that you and the Department are claiming that the Department of Labor and Industries scope of work determination dated May 26, 2011 should also apply to our firm on the above named projects for the work we have done.

**Therefore we request a copy of Mr. Gosling's original letter to you that describes the work he did at Valleyview Middle School which was the basis of the Department of Labor and Industries scope of work determination dated May 26, 2011**

Also, we do not have a copy of Mr. Beattey's original letter to you requesting the Reconsideration of Determination in the Cascade Drilling NW, Inc. case and thus cannot determine if the work we have done on the above named projects which are the subject of this complaint is similar to that described by Mr. Beattey. We understand that you and the Department are claiming that the Department of Labor and Industries scope of work determination dated May 26, 2011 and August 11, 2011 should also apply to our firm on the above named projects for the work we have done. **Therefore we request a copy of Mr. Beattey's original letter to you that describes the work done by the Cascade Drilling NW, Inc. which was the basis of the Department of Labor and Industries scope of work determination reconsideration dated August 11, 2011**

Gregory Drilling is responding to the complaints and rejecting/disputing both of them for the following reasons,

- As stated above, we do not have copies of the original letters from Mr. Gosling and Mr. Beattey that describe the work which was the basis of the May 26, 2011 scope of work letter of determination and the August 11, 2011 reconsideration of the May 26, 2011 scope of work letter of determination. We are requesting copies of those original letters from the Department of Labor and Industries as soon as possible.
- The letters of determination issued by Acting Industrial Statistician, Program Manager Ann Selover and dated May 26, 2011 and August 11, 2011 are incorrect on their face and are a violation of both state and federal law for the following reasons:
  - The letter of determination "May 26, 2011" states, "*The work you described is not the drilling of a well for water and is not drilling of an exploration well, thus it does not fit into any of the descriptions within the rule.*" This conclusion by the Department is patently incorrect as can be plainly seen by the items below.
  - WAC 296-127-01391 states "*The work of water well drillers, exploration drillers, water well pump installers, and equipment oilers includes, but is not limited to:* (underlined emphasis added ours) The phrase "*but is not limited to*" clearly allows work activities done by water well drillers which are also applied in ground source heat pump well drilling as being included in the water well drillers and irrigation pump installers scope of work (WAC 296-127-01391).
  - The letter of determination "May 26, 2011" is in error. Most ground source heat pump wells do access ground water. WAC 296-127-01391 states in part, "(c) *water supplies for any other purpose.*" The groundwater is commonly used as a thermal conductor in ground



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- source heat pump heating and cooling systems. This fact clearly meets the definition of WAC 296.127-0139(1)(c) "water supplies for any other purpose." Clearly the use of water for thermal conductivity is included in the phrase "water supplies for any other purpose" and includes ground source heat pump well drilling in the scope of work in WAC 296-127-01391.
- All of the activities included in the scope of work in WAC 296-127-01391 require the well driller to be licensed and comply with all of the applicable regulations for water well drilling as established by the Washington State Department of Ecology as required by RCW 18.104 and WAC 173-160.
- The work of drilling a well is much more than operating the equipment as the letter of determination of May 26, 2011 implies:
  - The well driller must be licensed before doing any well drilling by completing required training, gain the required experience under the direction of a licensed well driller, pass an examination and have passed a well inspection by the Department of Ecology. Licensed well drillers must also complete continuing education to maintain their license.
  - The licensed well driller must notify state officials of his/her intent to drill a well before starting to drill the well.
  - The licensed well driller must provide exact location of that well so that it can be located on a well map kept by the WA Department of Ecology.
  - The licensed well driller must keep a written log of the soils from that boring and provide that log to the Department of Ecology when the well has been finished.
- The letter of determination "May 26, 2011" is in error when it states: "*Our scopes of work are rules, and in each instance, we must look to the language of those rules in rendering a determination such as you request here, Department of Ecology requirements that apply to drilling of geothermal wells, although interesting, and even critical for your licensing requirements, do not operate to dictate what prevailing wage scope of work applies to any given task.*" The Department of Labor and Industries' statement is incorrect because the Department of Labor and Industries' rules are out-of-date and the Department must comply with all applicable state laws, regardless of what the Department's WACs may state. In this case, ground source heat pump wells are considered water wells by the state agency designated to make that decision, the WA Department of Ecology.
- In making a determination of a scope of work, the Department is directed by WAC 296-127-013(2) to consider "*The scope of work descriptions shall be created using authoritative sources available to the department.*" and, "*Recognized labor and management industry practice.*" The U.S. Census Bureau which defines occupations and industries through the internationally recognized NAICS classification system has defined water well drilling as including geothermal well drilling since 1997. NAICS 235810 states: "*Water Well Drilling Contractors This U.S. industry comprises establishments primarily engaged in drilling, tapping, and capping of water wells, and geothermal drilling. The water well drilling work performed includes new work, servicing, and maintenance and repairs.*" Clearly, geothermal well drilling is included in the definition of water well drilling by the U.S. Census Bureau.
- The critical issue in this case is the fact that any worker operating well drilling equipment that may come in contact with an underground aquifer must also have the required license to operate that equipment under state law RCW 18.104 and also must comply with all applicable regulations issued under RCW 18.104. It is illegal and a violation of state law for the Department of Labor and Industries to, in any way, authorize any person not properly licensed to engage in such well drilling operations. Only those workers doing the work of a Well Drillers & Irrigation Pump Installers are likely to have that license and meet the other state law requirements for drilling ground source heat pump wells. Thus the scope of work

- for Operating Engineers is totally inappropriate for ground source heat pump well drilling as the Department has stated in its determinations of May 26, 2011 and August 11, 2011.
- The federal Safe Drinking Water Act (40 CFR Parts 141 – 149) clearly regulates water well drilling and the Washington State Department of Ecology has been delegated by the U.S. EPA to implement the federal Safe Drinking Water Act in Washington State. The Department of Labor and Industries' letter of determination May 26, 2011 is in direct violation of the federal Safe Drinking Water Act as it fails to recognize the well driller licensing requirements required by that Act.
- The letter of determination "May 26, 2011" is incorrect as it fails to recognize the critical issues that Well Drillers and Irrigation Pump Installers must deal with. Drilling a well for any purpose usually results in penetrating one or more groundwater aquifers. Federal and state laws require that the well driller take actions to protect against the cross contamination of groundwater from one groundwater aquifer to another that may be penetrated by one well, and protect groundwater from contamination from surface water. Those actions include grouting the well with special materials as defined by the Department of Ecology to protect against cross contamination between all groundwater aquifers penetrated by that well, plus placing a well cap at the surface of the well to avoid contamination of groundwater from any surface water. None of these activities are included in the scope of work definition for operating engineers WAC 296-127-01354.
- The Legislature and the Governor have clearly set state public policy with respect to well drilling they stated in RCW 18.104.010, "*The legislature declares that the drilling, making or constructing of wells within the state is a business and activity of vital interest to the public. In order to protect the public health, welfare, and safety of the people it is necessary that provision be made for the regulation and licensing of well contractors and operators and for the regulation of well design and construction.*" Those regulations and licensing requirements are contained in state statutes RCW 18.104 and WAC 173-160. RCW 18.104 and WAC 173-160 provide no exemption for the Department of Labor and Industries or for RCW 39.12, from the requirements of this state law to protect groundwater.
- RCW 18.104 specifically applies to ground source heat pump wells to protect groundwater, water quality. The Department of Ecology is the designated agency by state law that is responsible for well drilling including well drilling for ground source heat pump wells. See Department of Ecology Publication Number: 09-11-010 which states in part: "*A ground source heat pump boring is considered both a water well and a resource protection well...*" While the Department of Labor and Industries' letter of determination of May 26, 2011 states "*the work you described is not for the drilling of a well for water ....*" The Department of Labor and Industries' letter is clearly in error as the state agency that state law has designated as defining water wells and that is responsible for implementing state laws for water well drilling emphatically and categorically states that based on state law, that drilling ground source heat pump wells is water well drilling which directly refutes the position stated in the Department of Labor and Industries' May 26, 2011 letter of determination.
- The fact that the Department of Labor and Industries' WAC rules with respect to water well drilling have failed to keep up with the rest of state law is no justification for the Department to issue an incorrect scope of work determination, based on an out-of date administrative rule – (WAC 296-127-01391 has not been revised since 2000 while state laws dealing with water well drilling (RCW 18.1040 has been amended in 2000, 2002, 2005 and 2011 and WAC 173-160 has been amended in 2006 and 2008). The Department of Labor and Industries' current scope of work for Well Drillers and Irrigation pump installers (WAC 296-127-01391 is in direct violation with state law with respect to well drilling that involves water and so are its scope of work determinations dated May 26, 2011 and August 11, 2011.
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- The letter of determination dated May 26, 2011 fails to recognize the need for technical expertise to perform the scope of work in WAC 296-127-01391. For example, plumbers and inside wiremen (electricians) commonly do similar activities. Both install pipes and use similar tools but each requires unique and different technical expertise and proficiency. Plumbers and inside wiremen (electricians) have different scopes of work in WAC 296-127 as do Well Drillers and Irrigation Pump Installers and Operating Engineers because of their differences. Those scopes of work do not allow inside wiremen (electricians) to install pipes for plumbing and vice versa as must be the case for Well Drillers & Irrigation Pump
- Installers, and Power Equipment Operators.

Sincerely



Beverly Gregory for Lawrence Gregory, President and CEO  
Secretary, Treasurer

cc: Governor Christine Gregoire  
Director Judy Schurke  
Senator Rodney Tom  
Representative Ross Hunter  
Representative Deb Eddy  
Gary Smith, Independent Business Association

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STATE OF WASHINGTON  
**DEPARTMENT OF LABOR AND INDUSTRIES**  
P.O. Box 44000 • Olympia, Washington 98504-4000

February 22, 2013

Mr. Lawrence Gregory, President & CEO  
Gregory Drilling, Incorporated  
17609 NE 70<sup>th</sup> Street  
Redmond, WA 98052

RE: Request for Redetermination, Prevailing Rate of Wage for Closed Loop Geothermal Drilling

Dear Mr. Gregory:

Thank you for your email request for reconsideration of the determination for the prevailing rate of wage for closed loop geothermal drilling. On August 28, 2012 you received a determination on this topic from L. Ann Selover, Department of Labor & Industries (L&I), Industrial Statistician and Prevailing Wage Program Manager. You are requesting that I review that determination.

The answer below is limited to the facts of these particular projects and the information you provided, as well as my review of a number of documents related to this issue. The documents I reviewed include, but are not limited to:

- Your email request for redetermination, received on November 30, 2012
- L. Ann Selover's August 28, 2012 determination
- Affidavit of Wages Paid, Gregory Drilling Inc., #393082
- Affidavit of Wages Paid, Earthheat Inc., #396351
- Scope of work descriptions in WAC 296-833-20005, WAC 296-127-01391, WAC 296-127-01354 and WAC 173-160
- RCW 39.12.010 and RCW 18.104.020
- Telephone conversations with Gerard Maloney, Earthheat, and Bill Lum, Hydrologist, Department of Ecology
- Various geothermal heat pumps systems and drilling equipment websites

Unlike the L&I determination, Gregory Drilling believes that the phrase in WAC 296-127-01391 that states, "water supplies for any other purpose" includes thermal conductivity of the water that may come into contact with the underground geothermal closed loop piping as a "water supply." Your opinion is that the term "*water supply for any other purpose*" is legally unlimited and effectively means any water supply. And, you believe that phrase in the scope makes any water in the ground a "water supply" without any limitation. Following is a summary of the statements you offer in support of your position:

- Water in the ground is a water supply.
- Nothing requires that water from a water supply must be transported and utilized at another location to qualify the water as a "water supply."
- Groundwater is a "water supply" that may potentially be used for future purposes.
- WAC 296-833-20005 states in part "Don't endanger any domestic or public water supply with their drainage." Clearly no extraction or removal function is required by L&I to define this water as a "water supply."
- The phrase "water supplies for any other purpose" in WAC 296-127-01391 is infinitely broad and does not allow L&I to limit its application.
- The phrase "includes, but is not limited to" that is used in 40 distinct scope of work descriptions allows an expanded application of the Water Well Driller worker classification to include other related actions or activities.
- The list of topics following the words "includes but is not limited to" in the Power Equipment Operators (WAC 296-127-01354) scope of work description is a specific list and is properly used to narrow and limit the application of that worker classification.
- "Self-propelled" is the key word in the scope of work for Power Equipment Operators and you disregard other terms such as "remote controlled."
- The Legislature and the Governor have specifically defined ground source heat pump borings to be "water wells" and you cite "chapter 196, 2011 laws" for that definition.

Based on your thoughts as summarized above, you provide conclusions different from those that the Industrial Statistician supplied to you. Gregory Drilling contends that the scope of work description for the Power Equipment Operators (WAC 296-127-01354) does not apply to drilling for a ground source, closed loop, geothermal heat pump.

For purposes of the prevailing wage scope of work descriptions and their corresponding rates of wage, the question at issue can be stated as follows: Does closed loop geothermal drilling for the purposes of constructing a geothermal heat pump system constitute drilling for a "water well" as that term is used in WAC 296-127-01391; or is such drilling actually the operation of equipment on a construction project performed under WAC 296-127-01354?

First, I should clarify that Power Equipment Operators do operate many types of equipment that may be quite stationary while in their actual use. This includes mobile cranes that, when in use on a construction project for lifting and moving items are stationary on their outriggers, tower cranes that are set up in place and operated remotely from the operator's cab, etc. For example, a truck mounted drilling outfit (just like a mobile crane), is self-propelled and might be remotely operated even though it would be stationary in position while actually performing drilling.

It is vitally important in interpreting regulations to note that context matters. The same or similar terms may be used in other regulations and may even be assigned specific definitions for the purposes of such other regulations. Those facts from other contextual situations are not controlling on the prevailing wage context. In the same manner, the prevailing wage interpretations are not controlling for other regulations that are on topics other than the required rate of wage on public works.

Certainly, nothing in the regulation of the prevailing rate of wage will modify or circumvent applicable environmental regulations, worker or contractor licensing requirements, or other federal or state laws that may apply to such work. Those standards stay in effect. The required prevailing rate of wage is just that, a rate of wage and not a regulation of these other matters. Similarly, such other regulations, on issues that are not wage regulations, are not controlling for the correct way to interpret, regulate, or mandate an outcome for the required prevailing rate of wage under chapter 39.12 RCW.

The assertion that any language in a prevailing wage scope of work is "infinitely broad" and cannot be limited in its use is incompatible with the definition of the "prevailing rate of wage" in statute which requires wages by "trade or occupation." See RCW 39.12.010(1). Finite limits are necessary to have such a distinction by trade or occupation.

Limits related to context may be present in other examples such as your reference to chapter 196, 2011 laws. SHB 1467 passed the 2011 legislature and was signed into law by the Governor. This bill added some exclusions from the definition of "well" to RCW 18.104.020. That area of the statute already contained definitions of various types of wells including the one you reference for "ground source heat pump boring." That particular definition reads:

"Ground source heat pump boring" means a vertical boring constructed for the purpose of installing a closed loop heat exchange system for a ground source heat pump.

RCW 18.104.020(9).

Later in that same statute there is a definition of "water well:"

"Water well" means any excavation that is constructed when the intended use of the well is for the location, diversion, artificial recharge, observation, monitoring, dewatering, or withdrawal of groundwater. "Water wells" include ground source heat pump borings and grounding wells.

RCW 18.104.020(21).

The application of the definitions above is addressed in that statute:

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

RCW 18.104.020.

The "chapter" to which those definitions for "water well" and for "ground source heat pump boring" apply is chapter 18.104 RCW. Noting again that context matters, the prevailing wage law is chapter 39.12 RCW, and not a chapter to which those definitions will apply. Those definitions are interesting, but in no way are they controlling for any answer to prevailing wage questions.

The Industrial Statistician noted that all references within the Water Well Drillers scope of work description are with respect to the specific types of drilling related to drilling for a "water supply" or obtaining geologic or hydrologic "information."

A comparison of the scope of work description for the Water Well Drillers and the work in question is appropriate.

**Water well drillers, exploration drillers, water well pump installers, and equipment oilers.**

For the purpose of the Washington state public works law, chapter 39.12 RCW, the work of water well drillers, exploration drillers, water well pump installers, and equipment oilers includes, but is not limited to:

(1) Water well drillers. The drilling of wells for:



- (a) Commercial water supplies.
  - (b) Irrigation water supplies.
  - (c) Water supplies for any other purpose.
  - (d) Dewatering, or similar purposes.
- (2) Exploration drillers.
- (a) Hole drilling for geologic or hydrologic information.
  - (b) Core drilling for geologic information.
- (3) Water well pump installers. The installation of water well pumps for all purposes, except commercial water supplies.
- (4) Equipment oilers. Assist the drillers and pump installers in the performance of the tasks described above.

WAC 296-127-01391.

There are no arguments presented that this work to drill for a closed loop geothermal system falls into the work of the equipment oiler, water well pump installer, or the exploration driller. Rather the focus is on the portion of the scope of work description related to the “water well driller” and only one of the possible components of that work: the “water supplies for any other purpose.” Some common definitions may be helpful in that analysis.

The definition of “water” as usually being a liquid and H<sub>2</sub>O seems pretty straight forward. Then we need to look at what is a “supply” in the “water supplies for any other purpose.”

Looking in the dictionary, I find some useful definitions for “supply” and “supplies” including “materials or provisions stored and dispensed when needed.” This is consistent with the Industrial Statistician’s statement that “absent some extractive action or function to remove and utilize the water at another location (actions not present in these facts), I do not agree that this is a “water supply.” See *Webster’s II New Riverside University Dictionary* (1984). I agree that the drilling for the closed loop thermal system that may, or may not, contact any groundwater but does not move, remove, add to, or extract any water from the hole that is drilled is not a “water supply” for purposes of chapter 39.12 RCW.

You mention a court case, *Lockheed Shipyard v. L&I*, 56 Wn.App. 421 (1989). There the type and nature of the work was important for the correct prevailing wage scope of work description. [See *Lockheed* at 424 and at 429.] The facts considered by the court involved shipyard boilermakers working in the shipyard, using tools that boilermakers normally use in the shipyard. However, the Director, trial court and appellate court all found that pipefitter construction rate was

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correct and the shipyard boilermaker rate was incorrect. [See *Lockheed* at 422.] In *Lockheed*, the construction pipefitter rates were correct for the type and nature of work to perform welding on pipe that would become an outfall pipe for a waste water treatment plant. *Lockheed* at 424.

The *Lockheed* case supports the Industrial Statistician's determination where this work is for installation of a closed loop geothermal pipe as part of a heat pump system. If the *Lockheed* case had the opposite outcome, it would be useful for your arguments.

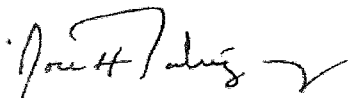
In her August 28, 2012 determination on this topic, the Industrial Statistician addressed the points raised in your August 3, 2012 letter. She previously provided you with the letters from Mr. Gosling and Robert A. Beattley, Mr. Gosling's attorney, which were requests for her May 26, 2011 and August 11, 2011 determinations on this topic, respectively. Unless distinctly different from the work addressed in those letters, for prevailing wage purposes, the May 26, 2011 and August 11, 2011 determinations also apply to the work your company performed.

Although I understand your concerns, I must conclude the Industrial Statistician made a carefully considered analysis that provides correct guidance to you on how to comply with chapter 39.12 RCW, the prevailing wage law.

If, as indicated in your request for redetermination, you feel that the department's rules "do not appropriately reflect changes and additions to the work done by workers in various classifications," and you wish to pursue such change with respect to the work discussed here, there is a process for that. Please see RCW 34.05.330 and chapter 32-05 WAC for assistance in that regard. Additionally, Washington's Office of Fiscal Management has a form they created as a convenience for petitioning a state agency to adopt, amend, or repeal an administrative rule which you might find helpful. The link for the form is:

<http://www.ofm.wa.gov/reports/petition.pdf>. Petitions to the Department of Labor & Industries for rule adoption, amendment or repeal should be directed to: Department of Labor & Industries; Legislative and Government Affairs; PO Box 44001; Olympia, WA 98504-4001.

Sincerely,



José A. Rodriguez, Assistant Director  
Specialty Compliance Services

cc: Governor Jay Inslee  
Joel Sacks, Director  
Ernie LaPalm, Deputy Director, Field Operations

## **WAC 296-127-01344**

### **Laborers.**

For the intents and purposes of the Washington state public works law, chapter 39.12 RCW, laborers perform a variety of tasks such as:

- Erect and repair guard rails, median rails, guide and reference posts, sign posts and right of way markers along highways.
- Mix, pour and spread asphalt, gravel and other materials, using hand tools, and mix, pour, spread and rod concrete.
- Lift, carry and hold building materials, tools and supplies.
- Measure distances from grade stakes, drive stakes and stretch tight line.
- Bolt, nail, align and block up under forms.
- Signal operators of construction equipment to facilitate alignment, movement and adjustment of machinery to conform to grade specifications.
- Level earth to fine grade specifications, using pick and shovel.
- Mix concrete, using portable mixer.
- Position, join, align, wrap and seal pipe sections.
- The placement and testing of plastic conduit for electrical cable, when the conduit is buried underground.
- Erect scaffolding, shoring and braces.
- Mop, or spread bituminous compounds over surfaces for protection (outside buildings).
- Spray material such as water, sand, steam, vinyl, or stucco through hoses to clean, coat or seal surfaces.
- Apply caulking compounds by hand or with caulking gun to seal crevices.
- The application of penetrating sealer and primer protective coatings to concrete floors and steps when safe to walk on.
- Installation of plastic panels on the inside of existing window frames for insulation (instead of storm windows). The panels are held in place magnetically (with metal brackets) and with self-taping screws.

The cleaning and grinding of concrete floors and walls by high pressure waterblasting or sandblasting preparatory to the application of waterproofing.

- The removing of rough or defective spots from concrete surfaces, using grinder or chisel and hammer and patching holes with fresh concrete or epoxy compound when not preparatory to sacking (finishing a large surface of patched holes).
- The setting of concrete curb, gutter and sidewalk forms as a composite crew with cement masons.
- The laying of concrete, granite and brick pavers in beds of sand.
- General cleanup required after damage caused by water or fire.

All clean-up work required in connection with the above work. Clean tools, equipment, materials and work areas:

(1) When the cleanup is performed for more than one trade (usually employed by general contractor).

(2) When assisting those trades for which laborers have been specifically designated as tenders, e.g., carpenter tender, cement finisher tender, etc.

## **WAC 296-127-01364**

### **Plumbers, pipefitters, and steamfitters.**

For the purpose of the Washington state public works law, chapter 39.12 RCW, plumbers, pipefitters and steamfitters assemble, install, and maintain piping systems, fixtures and equipment for the transportation of water, steam, gas, air, sewage, oil, fuels, liquids, gases, or similar substances.

The work includes, but is not limited to:

- (1) Piping systems installed in structures (e.g., buildings, industrial plants, etc.).
  - (a) The handling and moving of any plumbing, pipefitting and steamfitting materials, supplies, and equipment on the job site.
  - (b) Cutting, threading, and bending pipe.
  - (c) Joining pipes by use of screws, bolts, fittings, solder, welding and caulking, or any other method of making joints in the pipefitting industry.
  - (d) Assembling, installing, and repairing valves, pipe fittings, and pumps.
  - (e) Testing the piping system.
  - (f) Installing and repairing plumbing fixtures, such as sinks, bathtubs, water heaters, and water softeners.
  - (g) Cutting holes in floors and walls for pipes:
    - With point and hammer.
    - Core-drilled.
  - (h) Responsible for all cleanup required in connection with plumbers, pipefitters and steamfitters work.
- (2) Distribution lines (e.g., water mains, sewer mains, oil and gas lines, etc.).
  - (a) The handling and moving of any plumbing, pipefitting and steamfitting materials, supplies, and equipment on the job site.
  - (b) Steel pipe: Welding of pipe joints and joining pipes with screws, bolts, fittings, solder, caulking, or any other method for making joints in the industry.
  - (c) Ductile iron pipe: Joining pipes by using any method for making joints in the industry, when the pipe will be under pressure.
    - Assembling, installing, and repairing valves and pumps.
    - (d) Testing the piping system.
    - (e) Responsible for all cleanup required in connection with plumbers, pipefitters and steamfitters work.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.270 and 43.22.051. 00-15-077, § 296-127-01364, filed 7/19/00, effective 7/19/00.]

**WAC 296-127-01367**  
**Refrigeration mechanic.**

For the purpose of Washington state public works law, chapter 39.12 RCW, refrigeration mechanics install industrial, commercial, residential, and marine refrigeration systems involved in cold storage, ice making, cooling, heating, air conditioning, humidifying, dehumidifying or dehydrating and charge (pump gas or fluid in the system), start, test, service, and repair the installed systems.

The work includes, but is not limited to:

- Lay out reference points for the installation of the structural and functional components, using tape, transit, plumb bob, level, and square.
- Lay out and drill holes and cut chases and channels, set and erect belts, inserts, stands, brackets, hangers, supports, sleeves, thimbles, conduits and hoses.
- Lay out, cut, thread, bend and connect pipe to functional components and water or power system of premises.
- Move, lift, and install all compressors, pumps, motors, controls, switches, gauges, valves, condensers, evaporators, and other fixtures and appurtenances included in such systems.
- Bolt, rivet, weld, braze and solder parts to structural and functional components.
- All clean-up work required in connection with refrigeration mechanics' work.
- Excluded is the installation of sheet metal duct work leading to and/or from units described above.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.270 and 43.22.051. 00-15-077, § 296-127-01367, filed 7/19/00, effective 7/19/00.]

## **WAC 296-127-01340**

### **Laborers in utilities construction.**

For the purpose of the Washington state public works law, chapter 39.12 RCW, the work for laborers includes, but is not limited to:

(1) Pipe layer.

- Shoring, building of manholes and catch basins.
- Sealing, doping and wrapping of the pipe after the joints have been welded and before the pipe is lowered into the trench or ditch.
- Joining ductile iron pipe by using screws, bolts, fittings, caulking or any other method for making joints in the industry, when the pipe will not be under pressure. Lowering the pipe into the trench or ditch.

(2) Topman. Assists the pipe layer from the surface, he does not work in the trench or ditch.

(3) General laborer.

- Performs all other laborers' work which is not done by pipe layers and topmen.
- Responsible for all cleanup required in connection with utilities construction work.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.270 and 43.22.051. 00-15-077, § 296-127-01340, filed 7/19/00, effective 7/19/00.]

**WAC 296-127-01389**

**Utilities construction (underground sewers and water lines).**

For the purpose of the Washington state public works law, chapter 39.12 RCW, utilities construction is defined as follows:

The construction, alteration, repair or improvement of water mains, sanitary sewer mains, underground storm sewers and branch lines to buildings but not underneath buildings, within cities, towns, suburbs and subdivisions. The work includes, but is not limited to:

- (1) Clearance of right of way preparatory to the excavation of trenches or ditches.
- (2) Excavation and trimming of trenches or ditches (including establishing and maintaining grade).
- (3) Shoring, building of manholes, catch basins, etc.
- (4) Distribution of pipe and skids, placing of skids and pipe over the trench or ditch.
- (5) The cleaning, sealing, doping and wrapping of the pipe after the joints have been welded and before lowering the pipe into the trench and alignment.
- (6) Lowering of the pipe and the removal of the skids.
- (7) Backfilling, compaction and resurfacing of trenches or ditches (e.g., asphalt work necessary to cover the trench or ditch, but all other asphalt work is excluded).
- (8) Cleanup and restoration of right of way (e.g., restore landscaping).