

DEQ Use Only	
File#:	_____
Application #:	_____
Conference:	_____
	_____
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State of Oregon  
 Department of Environmental Quality

## General Permit 1900B Application For New Water Pollution Control Facilities

**For Injection During Geothermal Exploration**  
 (See pages 4-5 for detailed instructions)

DEQ Use Only	
Date Received:	_____
Total Amount Received:	_____
Additional Amount Due (if any):	_____
Check #	_____
Deposit #	_____
Receipt #	_____

Please answer all questions and submit the required attachments and application fees.  
 AN INCOMPLETE APPLICATION OR APPLICATION WITH INCORRECT FEES WILL NOT BE PROCESSED.  
 If the information requested is not applicable, please indicate as such.

### A. Reference Information

1. Business name of applicant:	
2. Landowner:	
3. Geothermal field name or project name:	
4. SIC code:	or NAICS code:

### B. General Location

1. Physical street address, if available:		
City, State, ZIP Code:	County:	
2. Latitude:	3. Township:	Section:
Longitude:	Range:	Tax Lot #:
(center of geothermal field)	(Attach plat maps if field includes more than one tax lot)	

### C. Contacts

1. Legally authorized representative:		
Mailing Address:	Telephone:	
City, State, ZIP Code:	Email:	
2. Operations contact:		
Facility mailing address:	Telephone:	
City, State, ZIP Code:	Email:	
3. Invoice to:		
Billing address:	Telephone:	
City, State, ZIP Code:	Email:	

## D. Injection Information

1. Number of geothermal injection wells planned: \_\_\_\_\_
2. Attach map showing location of geothermal injection wells and list their latitude/longitude. Assign well numbers if there are more than one well.
3. Attach well construction and geologic logs (if available) for each well that will be used to inject geothermal fluids.
4. Estimated or actual water temperature in injection zones: \_\_\_\_\_

## E. Underground Injection Control Registration

Federal and state regulations require that all underground injection systems be registered with DEQ. By completing this application, your injection system(s) will be registered with DEQ and you will be sent a UIC registration confirmation letter.

## F. Land Use Compatibility Statement

Attach a completed Land Use Compatibility Statement signed by the local land use authority. We will not process your application without evidence that the local land use authority has approved your proposal and that it meets statewide planning goals.

## G. Injection Plan

The Injection Plan is the most important part of this application. We use it to evaluate how well your operation will protect shallow groundwater resources and nearby surface water bodies. We recognize that during exploration you may not have all of the information we ask for, but the more you can include, the more likely we will (for instance) accept unlined reserve pits as part of your plan.

Provide one paper copy and one electronic copy of the Plan with this application. To the extent possible, the Plan should:

1. Describe your proposed injection activities, including how you plan to manage your drilling mud and produced water
2. Describe how your waste management methods will protect groundwater or surface water quality and will prevent foreign substances from being introduced into the injectate
3. Describe the geothermal reservoir you plan to inject into, including lithologies, estimated permeabilities, and other geologic or estimated hydrologic parameters of the reservoir
4. Identify any fluid you plan to inject into the geothermal reservoir, including tracers and non-hazardous well testing materials
5. Describe injection test methods that you plan to use on your wells and how these tests will not fracture the formation
6. Be prepared and stamped by an Oregon Registered Geologist, Oregon Certified Engineering Geologist, or Oregon Professional Engineer
7. Include a detailed description of your injection proposal, including estimated volumes of geothermal fluids you plan to inject.
8. (Optional) Include plans for disposal of solid waste and sludges. If you plan to leave drilling muds in place, you must apply for a separate Solid Waste Letter Authorization.

## H. Fees

1. Application fee (\$616): \_\_\_\_\_
2. Annual fee (\$633): \_\_\_\_\_
3. Amount enclosed:  
*Payable to Department of Environmental Quality* \_\_\_\_\_

Note: Application must include application fee and first year annual fee totaling \$1,249.

## I. Signature of Legally Authorized Representative

I hereby certify that the information contained in this application is true and correct to the best of my knowledge and belief. In addition, I agree to pay all permit fees required by Oregon Administrative Rules 340-045.

\_\_\_\_\_  
Name of Legally Authorized Representative  
(type or print)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature of Legally Authorized Representative

\_\_\_\_\_  
Date

## Registration Submittal and Questions

### Please return this form with your payment to:

Department of Environmental Quality  
Attn: Business Office  
700 NE Multnomah St., Suite 600  
Portland, OR 97232

### For more information, contact:

UIC Senior Hydrogeologist  
Water Quality Division  
700 NE Multnomah St., Suite 600  
Portland, OR 97232  
Phone: 503-229-6371  
Fax: 503-229-6957  
[UIC@deg.state.or.us](mailto:UIC@deg.state.or.us)

Visit DEQ's UIC web page: <https://www.oregon.gov/deg/wq/wqpermits/Pages/UIC.aspx>

## Application for New WPCF General Permit 1900B

### Instructions

This permit covers geothermal exploration operations that temporarily store water produced during geothermal exploration well testing in a reserve pit and reinject that geothermal water into the same or comparable geothermal reservoir. The permit also places limits and controls on how you can manage the geothermal water you produce during exploration and testing. Reinjecting geothermal water associated with long-term reservoir production is not covered under this permit.

You do not need this permit if you are only injecting fresh groundwater or surface water during geothermal exploration. Instead of obtaining a 1900B permit, you must register the underground injection control system(s). Registration forms are available at <http://www.deq.state.or.us/wq/uic/forms.htm>.

#### A. Reference Information

1. Enter your (the applicant's) legal business name. This is the person, business, public organization, or other entity that controls the project described in this application and will be responsible for complying with the conditions of the permit. This must be the legal Oregon name (i.e., Acme Products, Inc.) or the legal representative of the company if it operates under an assumed business name (i.e., John Smith, dba Acme Products). The name must be an active business name registered with the Oregon Secretary of State, Corporation Division (<http://www.sos.state.or.us/corporation/index.htm>) unless otherwise exempted by their regulations.
2. Enter the name of the person or entity that owns the land where the injection wells are or will be located.
3. Enter the common name of the geothermal field or area where geothermal exploration injection will be taking place, if it is different than your legal business name.
4. Enter the Standard Industrial Classification (SIC) four-digit code or North American Industry Classification System five or six-digit code (NAICS) for your business. These codes are used to describe the primary activity of the business and may be found on fire marshal reports, insurance papers, or tax forms. The NAICS codes replaced the SIC system in 1997; however, it is usually easy to convert between the two systems so either code is acceptable to us. SIC or NAICS information is also available from the U.S. Census Bureau at <http://www.census.gov/epcd/www/sic.html> or <http://www.census.gov/eos/www/naics/>.

If ownership change and/or name change occurs you must submit a form and fee to transfer the permit and/or change the name. The form Name Change and/or Permit Transfer for NPDES or WPCF Permit can be found at <http://www.deq.state.or.us/pubs/forms.htm>.

#### B. General Location

1. Enter the physical location of the facility (street address, not mailing address), including city, state, zip code, and county, if available. If the facility is located in a rural area with no street address, then use township-range-quarter-quarter section information.
2. Enter the latitude and longitude of the approximate center of the geothermal field or injection sites in decimal degrees using NAD83 as the datum. Latitude and longitude can be obtained from DEQ's location finder web site at <http://deq12.deq.state.or.us/website/findloc/> or from United States Geological Survey topographic maps (instructions for getting latitude/longitudes from USGS maps: <http://www.deq.state.or.us/wq/pubs/guides/LatLongInstr.pdf>).
3. Enter the Township, Range, Section, and Tax Lot numbers for the areas that may contain injection wells. If injection wells are located on more than one tax lot, attach plat maps and a list of the tax lots.

#### C. Contacts

1. Enter the name, mailing address, telephone number, and email address for the legally authorized representative. This is the person that will receive official correspondence from us, such as renewal notices or notices of noncompliance, and may be contacted if there are questions about this application.
2. Enter the name, mailing address, telephone number, and email address for the operations contact if different from the legally authorized representative. The operation contact is the person that has specific knowledge of the site or operation under permit, and may be contacted if there are specific questions about this application.
3. Enter invoicing information if different from the legally authorized representative (e.g., "Invoice To: Business Office - Accounts Payable").
- 4.

#### D. Injection Information

## Application for New WPCF General Permit 1900B

1. Enter the number of geothermal injection wells planned. You may add injection wells at a later date for coverage under this permit by providing DEQ with an amendment to application section D. Injection Information.
2. Attach map displaying the location of geothermal injection wells and list their latitude/longitude.
3. For each geothermal injection well attach well logs that include well construction, well completion dates, perforated intervals, and lithologies, if available.
4. Enter the water temperature in injection zones. Oregon Water Resources Department rules regulate low-temperature geothermal injection well construction (less than 250 degrees Fahrenheit), and Oregon Department of Geology and Mineral Industries rules regulate high-temperature geothermal injection well construction (250 degrees Fahrenheit and higher).

### E. Underground Injection Control Registration

Federal and state regulations require that all UIC systems be registered with DEQ. By completing this application, your UIC system(s) will be registered with DEQ and you will be sent a UIC registration confirmation letter.

### F. Land Use Compatibility Statement

A completed LUCS signed by the local land use authority must be submitted with this application. The application will not be processed without evidence that the proposal is approved by the local land use authority and meets statewide planning goals. A LUCS form can be found at <http://www.deq.state.or.us/pubs/permithandbook/lucs.pdf>.

### G. Injection Plan

The Injection Plan should contain all of the details about your operation, including what materials you plan to use at the site (e.g., drilling mud components), and how you will keep geothermal water from being contaminated with substances like hydraulic fluids or fuels that should not be injected into the geothermal reservoir.

After we review your plan, we may ask you to clarify or change your Plan before we approve. For instance, if you propose to use chromium lignosulfonate as a mud additive, we will ask you to change your Plan to eliminate its use, and ask for a less toxic additive.

Once you make the changes we request, we will approve the Plan and issue an approval letter to you.

### H. Fees

You must submit one application fee and the first year annual fee with the application for a WPCF general permit for injection during geothermal exploration.

### I. Signature of Legally Authorized Representative

The signature of a legally authorized representative must be provided for us to process this application.

#### Definition of Legally Authorized Representative

See 40 CFR 144.32 for more detail. Also, please also provide the information requested in brackets [ ]

- Corporation: President, secretary, treasurer, vice-president, or any person who performs principal business functions; or a manager of one or more facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million that is authorized in accordance to corporate procedure to sign such documents
- Partnership: General partner [list of general partners, their addresses and telephone numbers]
- Sole Proprietorship: Owner(s) [each owner must sign the application]
- City, County, State, Federal, or other Public Facility — Principal executive officer or ranking elected official
- Limited Liability Company: Member [articles of organization]
- Trusts: Acting trustee [list of trustees, their addresses and telephone numbers]