



State of Oregon  
Department of  
Environmental  
Quality

## BOILERS

Use this form for any type of boiler other than hogged fuel (wood waste) boilers.

1. For each boiler, assign an identification number and provide the requested information. Guidance for some of the items that are not self-evident are provided below.

Rated design capacity: Provide the manufacturer's (nameplate) design capacity of the boiler. Be sure to also include the capacity units (e.g., pounds of steam per hour, million Btu per hour, fuel capacity per hour, etc.). It is preferred that both the heat input (million Btu/hour) and steam (pounds per hour) be listed.

Fuel type: Specify the type (e.g., #2 distillate oil, #6 crude oil, coal, natural gas, propane, etc.) of fuel used in the boiler. If more than one type of fuel can be used, list them separately as the "primary" fuel and "secondary" fuel. For example, many boilers are operated with natural gas as the primary fuel and oil as a backup fuel.

Maximum fuel quantity used per hour: Enter the maximum amount of fuel that corresponds to the maximum design capacity.

Maximum fuel quantity used per year: Enter the projected maximum amount of fuel that could be burned per year during the permit term. This value will correspond to the estimated maximum steam demand during the year and not necessarily the capacity of the boiler.

Sulfur content: For fuel oil, enter the maximum sulfur content of the fuel as a percent (%) by weight. This information can be obtained from the fuel oil supplier.

Stack gas flow rate: Enter the stack gas flow rate at the maximum operating rate. This information can be obtained from the manufacturer if a source test has not been performed that would provide an actual measurement. The flow rate can also be estimated based on the amount of fuel burned. The stack gas flow rate should be stated in terms of dry standard cubic feet per minute (dscf/min.).

Control device: If there is a control device on the boiler, fill out the appropriate series AQ300 form and list the identification number of the control device on this form.

Continuous monitoring systems: If there are continuous monitoring systems, list them on this form. Continuous monitoring systems include, but are not limited to the following: pollutant (carbon monoxide, sulfur dioxide, nitrogen oxides) emissions monitors; diluent gas (oxygen or carbon dioxide) monitors; opacity monitors; steam flow monitors; steam pressure monitors; steam temperature monitors; fuel monitors; etc.

2. Describe the typical operating schedule(s) for the boiler(s). This would include information about seasonal variations, boiler rotations, base loaded boilers, peaking boilers, etc. For example, a boiler may only be operated in the winter to provide heat for a school. Another example might be that one boiler is operated at a base load and when the steam demand increases other boilers provide the additional steam. In some cases where there is more than one boiler, the boilers may be operated for sequential periods of time rather than all at once.



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Facility Name:  Permit Number:

1. Boiler Information:				
Boiler identification				
Manufacturer				
Date manufactured (month/year)				
Date construction commenced (month/year)				
Date installed (month/year)				
Rated design heat input capacity (million Btu per hour)				
Rated steam production capacity (pounds per hour)				
Primary fuel type				
Max. fuel quantity used per hour (include units)				
Max. fuel quantity used per year (include units)				
If oil is used, sulfur content (% by wt.)				
Secondary fuel type				
Max. fuel quantity used per hour (include units)				
Max. fuel quantity used per year (include units)				
If oil is used, sulfur content (% by wt.)				
Stack identification				
Stack height (feet)				
Stack gas flow rate at maximum load (dscf/minute)				
Control device(s) identification from AQ300				
Continuous monitoring systems				

2. Describe how the boiler(s) is operated. (Refer to instructions for guidance)