



PUGET SOUND

Clean Air Agency

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## NOC APPLICATION SUPPLEMENTAL FORM

### Thermal or Catalytic Oxidizer

This application is for activities or equipment that is (check all that apply):

- New (including existing, unpermitted equipment)
- Replacement of an existing oxidizer
- Substantial alteration of an existing oxidizer
- Relocation of an existing oxidizer

Specify the operation or process being controlled: \_\_\_\_\_

Hours of operation per day: \_\_\_\_\_ Hours of operation per year: \_\_\_\_\_

### Oxidizer Type

- catalytic oxidizer
- recuperative thermal oxidizer
- regenerative thermal oxidizer
- thermal (direct fired) oxidizer

### Design and Technical Specifications

Make: \_\_\_\_\_ Model: \_\_\_\_\_ Model Number: \_\_\_\_\_

Inlet process flowrate: \_\_\_\_\_ acfm

Fan design flowrate: \_\_\_\_\_ acfm @ pressure drop of \_\_\_\_\_ inches water column

Blower hp: \_\_\_\_\_

Combustion retention time: \_\_\_\_\_ seconds

Burner fuel type:  Natural Gas  Fuel Oil  Other: \_\_\_\_\_

Burner maximum fuel usage: \_\_\_\_\_ BTU/hr

Minimum operating temperature: \_\_\_\_\_ °F

Number of burner nozzles: \_\_\_\_\_ Is burner low NOx design?  Yes  No

## Thermal or Catalytic Oxidizer

### For Catalytic Oxidizers

Catalyst material:  Precious metal  Ceramic  Base metal  Other: \_\_\_\_\_

Volume of catalyst: \_\_\_\_\_ cubic feet per layer # of layer of beds: \_\_\_\_\_

Temperature rise across catalyst: \_\_\_\_\_ °F Expected catalyst lifetime: \_\_\_\_\_

Describe catalytic cleaning and replacement procedures and frequency:

### For Regenerative Thermal Oxidizers

Number of chambers: \_\_\_\_\_ Chamber dimensions: \_\_\_\_\_

### For Direct-Fired or Recuperative Thermal Oxidizers

Combustion chamber dimensions: \_\_\_\_\_

#### Stack Parameters

Exhaust stack parameters:

Stack diameter: \_\_\_\_\_ inches

Stack height above ground: \_\_\_\_\_ feet

Exhaust airflow: \_\_\_\_\_ scfm

Exhaust Temperature: \_\_\_\_\_ °F

#### Building Dimensions of Project Location

Building Height (highest point of roof) \_\_\_\_\_ ft

Building Width \_\_\_\_\_ ft

Building Length \_\_\_\_\_ ft

Stack damper/rain guard:

None  Hexagonal  Stack within stack

Butterfly  Inverted Cone

Other (specify): \_\_\_\_\_

### VOC Emissions

Maximum inlet VOC emissions: \_\_\_\_\_ ppm or lbs/hr

Maximum NOx emissions: \_\_\_\_\_ ppm or lb/hr

Maximum outlet VOC emissions: \_\_\_\_\_ ppm or lbs/hr

Maximum CO emissions: \_\_\_\_\_ ppm or lb/hr

## Thermal or Catalytic Oxidizer

### Required Attachments

1. Brochure or technical fact sheet from manufacturer or supplier
2. Technical drawings of the oxidizer, including location of monitoring equipment
3. A list of instrumentation used to monitor temperature and flowrate. Specify if continuously monitored and recorded.
4. Description of any concentrators or particulate control devices associated with the oxidizer
5. If there are source test data available for this unit, include with application
6. Copy of the Operations and Maintenance Manual for control equipment, including provisions for shut down of inlet stream if oxidizer shuts down.