



## NOC APPLICATION SUPPLEMENTAL FORM

### Wet Scrubber

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

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

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

Specify the type of air pollutant being controlled:

- Odor    NOx    SOx    Inorganic fumes and gases    Particulate
- Other : \_\_\_\_\_

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

### Scrubber Type

- Spray Chamber    Packed Bed or Tower    Tray/plate column    Venturi
- Other : \_\_\_\_\_

Type of flow:    Countercurrent    Concurrent                      Configuration:    Vertical    Horizontal

### Design and Technical Specifications

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

Control efficiency: \_\_\_\_\_ % (if different for different pollutants, attach separate document)

Design maximum gas stream flowrate: \_\_\_\_\_ acfm

Inlet gas stream temperature: \_\_\_\_\_ °F (minimum)      \_\_\_\_\_ °F (maximum)

Inlet gas stream moisture content: \_\_\_\_\_ % by volume (minimum)      \_\_\_\_\_ % by volume (maximum)

# Wet Scrubber

## Scrubbing Liquid Medium

Scrubbing liquid composition	Weight %

Scrubbing Solution:  Once-through  Recirculating

Liquid flowrate: \_\_\_\_\_ gallons per minute    Make-up rate: \_\_\_\_\_ gallons per minute

Blow-down rate: \_\_\_\_\_ gallons per minute    Temperature: \_\_\_\_\_ °F

Auto caustic injection:  yes  no    pH meter present:  yes  no

pH of scrubbing medium: \_\_\_\_\_ (minimum)    \_\_\_\_\_ (maximum)

## For Packed Bed

Type of Packing material: \_\_\_\_\_    Packing size: \_\_\_\_\_

Packing Volume: \_\_\_\_\_ ft<sup>3</sup>    Packed Bed Height: \_\_\_\_\_ ft

Number of Transfer Units: \_\_\_\_\_    Height of Transfer Units: \_\_\_\_\_ ft

Pressure drop: \_\_\_\_\_ inches (minimum)    \_\_\_\_\_ inches (maximum)

## For Tray/Plate Columns

Number of Plates \_\_\_\_\_    Plate spacing: \_\_\_\_\_ inches    Liquid Seal Height: \_\_\_\_\_ inches

## For Venturi

Throat diameter: \_\_\_\_\_ inches    Throat length: \_\_\_\_\_ inches

Throat velocity: \_\_\_\_\_ ft/min

Pressure drop across the throat: \_\_\_\_\_ inches (minimum)    \_\_\_\_\_ inches (maximum)

## Wet Scrubber

### Post Treatment (if applicable)

Mist eliminator    High efficiency particulate arrestor (HEPA)    Other: \_\_\_\_\_

Model #: \_\_\_\_\_ Pressure drop: \_\_\_\_\_ inches (minimum)

### 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): \_\_\_\_\_

### Required Attachments

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