CLARK COUNTY DEPARTMENT OF AIR QUALITY
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For assistance, please call:
702-455-5942

Protecting the air we share
Air Quality

DAQ Use Only

Form SS-PER-008-06: Scrubber Worksheet

Please see instructions on page 3 before filling out the form.

☐ Supplemental Information

IDENTIFICATION

1. Source Name:	2. Source ID No.:
3. Brief description of project:	

SCRUBBER SPECIFICATIONS

4. Manufacturer:

5. Model No.:

6. Serial No.:

7. Date of manufacture:

8. % rated control efficiency:

9. Pollutants controlled: ☐ CO ☐ NO_x ☐ VOC ☐ PM_{10} ☐ $PM_{2.5}$ ☐ SO_2
☐ Other (specify):

10. Normal pressure drop across scrubber: inches of water (maximum) inches of water (minimum)

11. Device measuring pressure drop: ☐ Magnehelic gauge ☐ Monometer ☐ Other (specify):

12. Scrubber type:
☐ Impingement scrubbing tower Indicate type: ☐ Target plate ☐ Packed bed ☐ Other
☐ Spray tower scrubber Number and arrangement of nozzles:
☐ Venturi scrubber Integral mist injection eliminator used? ☐ Yes ☐ No
☐ Self-induced spray scrubber
☐ Wet centrifugal scrubber Indicate type: ☐ Impingement ☐ Cyclone ☐ Combination ☐ Other
☐ Wet dynamic scrubber
☐ Other (specify):

13. Emission unit(s) or process(es) of emissions vented to the scrubber:

14. Operating parameters: ☐ Flow rate (liquid) ☐ Flow rate (gas) ☐ pH ☐ Temperature:
☐ Other (specify):

Attach manufacturer's specification sheet(s) for the control device.

All information above this line is required for this form to be considered complete. Duplicate sheet as needed.

The information below is not required, but may assist in processing the application.

Liquid flow rate: gpm	Scrubbing solution: pH	Solution temp: °F	
Length of packing (if applicable): inches at °F			
Volume of air or gas discharged to the atmosphere: cfm			
Complete the following questions about the control device:			
Emissions discharged to the atmosphere: feet above grade through stack or duct			
Diameter (inches):	Temperature (°F):	Flow rate (cfm):	Velocity (fps):

The information in this section guides you to other forms that may have to accompany this worksheet.

- For other emission control equipment, use the appropriate **CONTROL EQUIPMENT** form (Baghouse: SS-PER-008-01, Cyclone Tower: SS-PER-008-03, or Control Device: SS-PER-008-05) and duplicate as needed. Be sure to indicate the emission unit that the control equipment is affecting.

- Use the Engine form (SS-PER-007-03) if not operating on grid power and/or there is an engine on-site.

Form Instructions

Before filling out this worksheet, locate the **Supplemental Information** box at the top right.

- If submitting this worksheet with a permit application, do not check the box.
- If submitting this worksheet without a permit application, or in response to a DAQ request for supplemental/requested information, check the box.

1. Provide the source name as it appears on the application. If a permit already exists for this operation, the source name should match the name on the permit.
2. If the source is existing and already has a permit, provide the Source ID number as it appears on the permit. Otherwise, enter "New."
3. Provide a brief description of the proposed project as it appears on the permit application. Indicate whether the scrubber is being proposed as a new control device or being modified. If it is being modified, indicate what changes are being proposed.

USE ATTACHMENT IF ADDITIONAL SPACE IS REQUIRED.

Scrubber Specifications:

4–7. Specify the scrubber manufacturer, model number, serial number, and date of manufacture.

8. Specify the scrubber's rated control efficiency.
9. Specify the pollutant(s) associated with the rate control efficiency.
10. Specify the normal pressure drop across the scrubber in inches of water. Specify the high and low range.
11. Specify the type of device measuring the pressure drop across the scrubber.
12. Specify the type of scrubber being used.
13. Specify the emission unit(s)/process(es) vented to the scrubber. Include emission unit number if listed in an existing permit.
14. Specify the parameter that is used to monitored normal operation. Specify the associated value(s) below or separately, as necessary.

Optional

- Specify the flow rate of the scrubbing solution in gallons per minute.
- Specify the pH of the scrubbing solution.
- Specify length of packing (if applicable) in inches.
- Specify the volume of air or gas discharged to the atmosphere in cubic feet per minute.
- Specify the scrubber exhaust stack parameters: how many feet above grade the top of the stack or duct is, along with its diameter, exhaust temperature (°F), flow rate (cfm), and velocity (feet per second).

Auxiliary Equipment:

All equipment should be included in the flow diagram. Submit separate forms for screens, crushers, and engines.