## Name of Company:

As shown on Line 1 of Form E001

## Equipment Name:

As shown on Line 9 of Form E001

### Equipment Data:

- **Manufacturer of Wet Scrubber:**
- **Model Number:**
- **Cost of Wet Scrubber:**
- **Date of Manufacture:**
- **Date of Installation:**
- **Pre-cleaning Equipment:** Yes
  
  If yes, what type (File appropriate form for control equipment)

### Volume of gas discharged from wet scrubber at dry standard conditions:

... dscfm

### Pressure Drop Across Wet Scrubber:

- **Stated by the manufacturer:**
- **Inches of H2O**
- **Measured (Actual):**
- **Inches of H2O**

### Inlet Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet Gas Temperature</td>
<td>°F</td>
</tr>
<tr>
<td>Inlet Gas Pressure</td>
<td>Inches of H2O</td>
</tr>
<tr>
<td>Inlet Gas Velocity</td>
<td>Ft/sec.</td>
</tr>
<tr>
<td>Inlet Gas Density</td>
<td>Lbs/ft³</td>
</tr>
<tr>
<td>Inlet Gas Temperature Instrumentation</td>
<td></td>
</tr>
<tr>
<td>Gas Temperature Instrumentation</td>
<td></td>
</tr>
<tr>
<td>Gas Viscosity</td>
<td>Lbs/ft·sec.</td>
</tr>
<tr>
<td>Moisture in Gas Stream</td>
<td>%</td>
</tr>
<tr>
<td>Dew Point of Gas Stream</td>
<td>°F</td>
</tr>
</tbody>
</table>

### Wet Scrubber Components:

- Flow Rate Instrumentation
- Inlet Gas Temperature Instrumentation
- Transmissometer
- Differential Pressure Instrumentation
- Heat Exchanger
- Gas Preheater

### Wet Scrubber Type:

- Spray Chamber
- Mechanical Scrubber
- Venturi Scrubber
- Packed Tower
- Centrifugal Scrubber
- Cyclonic Scrubber
- Variable Pressure Drop Orifice Scrubber
- Orifice Type Scrubber
- Wet Impingement Collector
- Wet Filter

### Wet Scrubber Operation:

- Continuous
- Intermittent

### Description of Scrubber:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of Scrubber</td>
<td>Ft³</td>
</tr>
<tr>
<td>Construction Material</td>
<td></td>
</tr>
<tr>
<td>Shape of Scrubber</td>
<td></td>
</tr>
<tr>
<td>Rectangular</td>
<td></td>
</tr>
<tr>
<td>Cylindrical</td>
<td></td>
</tr>
<tr>
<td>Other (Describe)</td>
<td></td>
</tr>
<tr>
<td>Dimensions of Scrubber</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>Ft</td>
</tr>
<tr>
<td>Width</td>
<td>Ft</td>
</tr>
<tr>
<td>Height</td>
<td>Ft</td>
</tr>
</tbody>
</table>
10. **Scrubbing Media Data:**
- **Chemical Agent (Specify):**
  - [ ] Water
  - [ ] Chemical Agent (Specify):
    - [ ] Surface Reactant
    - [ ] Neutralizing Agent
    - [ ] Wetting Agent
    - [ ] Other (Specify):

  Purpose for Chemical Agent:
  - [ ] Surface Reactant
  - [ ] Neutralizing Agent
  - [ ] Wetting Agent
  - [ ] Other (Specify):

  Liquid Consumption Rate: _______ Gallons per 1000 cfm of gas
  Liquid Inlet Pressure: _______ Psi
  Inlet Liquid Temperature: _______ °F Maximum
  _______ °F Minimum

11. **Technical Data:** *(Answer only the questions applicable to your equipment.)*

  - Direction of Spray (to gas flow):
    - [ ] Normal
    - [ ] Parallel
    - [ ] Tangential
  - Type of Spray Nozzle:
    - [ ] Hollow Cone
    - [ ] Full/Solid Cone
    - [ ] Atomizing
  - Describe Impingement Plates:
    -
  - Number of Impingement Plates: _______
  - Number of Holes per Impingement Plate: _______
  - Area of Each Impingement Plate: _______
  - Ave. Area of Each Opening through Plate: _______
  - Type of Packing (Describe):
    -
  - Type of Mist Eliminator (Describe):
    -

12. **Particle Size Distribution in Microns (µ):**

  - Particle Type(s):
    -

<table>
<thead>
<tr>
<th>Size</th>
<th>0-5µ</th>
<th>5-10µ</th>
<th>10-20µ</th>
<th>20-44µ</th>
<th>Greater than 44µ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give % by</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. **Sludge Disposal Method:**

  - [ ] Automatic
  - [ ] Manual
  - [ ] Other (Describe):

  How often are hoppers emptied? Every _______ Hours

  Is a water clarification and recycling system used with this equipment? [ ] Yes [ ] No

  Site of sludge disposal:

14. **Particulate Control Efficiency:**

  - Manufacturer’s stated efficiency: _______ %
  - Required Efficiency: _______ %
  - Operation Efficiency (Performance Testing): _______ %

<table>
<thead>
<tr>
<th>Size</th>
<th>0-5µ</th>
<th>5-10µ</th>
<th>10-20µ</th>
<th>20-44µ</th>
<th>Greater than 44µ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give % by</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Fan Data:**

- **Fan Location:**
  - [ ] Clean air side (pull through)
  - [ ] Dirty air side (push through)

- **Fan Design (Check one – A, B, or C):**
  - A. [ ] Centrifugal (radial flow)
  - B. [ ] Axial-flow (propeller)

**Fan Type:**

<table>
<thead>
<tr>
<th>Fan Type</th>
<th>Blade Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Centrifugal (radial flow)</td>
<td>Forward Curve</td>
</tr>
<tr>
<td>B. Axial-flow (propeller)</td>
<td>Propeller</td>
</tr>
</tbody>
</table>

**Fan Properties:**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Inches</th>
<th>Braking Horsepower</th>
<th>BHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>RPM</td>
<td>Inlet Area</td>
<td>Ft²</td>
</tr>
<tr>
<td>Volume</td>
<td>CFM @ STP</td>
<td>Outlet Area</td>
<td>Ft²</td>
</tr>
<tr>
<td>Static Pressure</td>
<td>Inches WC</td>
<td>Motor Horsepower</td>
<td>HP</td>
</tr>
</tbody>
</table>

- [ ] Standard
- [ ] Heavy Duty
- Submitted copy of Manufacturer’s Multirating Tables
- [ ] Yes
- [ ] No

**Special Construction Materials:**

- [ ] Bronze Alloys
- [ ] Aluminum
- [ ] Stainless Steel
- [ ] Bisonite
- [ ] Zinc Chromate Primer
- [ ] Rubber, Phenolics, Vinyls, or Epoxy Coverings

**C. Compressor**

- [ ] Positive Displacement
- [ ] Dynamic
- [ ] Reciprocating

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*This is to certify that I am familiar with the operations concerning this equipment and that the information provided on this application is true and complete to the best of my knowledge. This form must be completely filled out before it will be processed.*

Mail to:

CHATTANOOGA-HAMILTON COUNTY
AIR POLLUTION CONTROL BUREAU
6125 Preservation Drive
Chattanooga, TN 37416

Company Official: __________________________
Title: __________________________
Date: __________________________

Do not write below this line.