

## METHOD 22 VISIBLE EMISSIONS (VE) MONITORING INSTRUCTIONS

for

- **DRY ABRASIVE BLASTING** – (Objects > 8 feet without PM control equipment)
- **WELDING OPERATIONS** – (MFHAP consumable usage  $\geq$  2,000 lbs/rolling 12 months)

National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR Part, 63, Subpart XXXXXX (6X)

### *What equipment do I need?*

- You need two stopwatches (SW1 and SW2). They must be the accumulative type and must measure to at least ½ of a second.
- A Method 22 VE Observation Log Sheet (attached).

### *Where do I stand to look for visible emissions?*

- For indoor operations (welding and/or abrasive blasting), you must perform visual determinations at the primary vent, stack, exit, or opening from the building housing the operation.
- For outdoor abrasive blasting, observe at the fence line or property border nearest to the outdoor abrasive blasting operation.
- Choose a location with a clear view of the potential emissions point. Make sure it is safe - not in the way of moving equipment -- and does not pose any other safety hazard.
- The method recommends that you stand no closer than 15 feet and no farther away than ¼ mile from the emissions point.
- Pick a spot where the sunlight is not shining directly into your eyes.

### *How long do I have to observe for emissions?*

- The duration of each EPA Method 22 determination for 6X Tier 1 monitoring is at least 15 minutes.

### *What if visible emissions are observed?*

#### **Dry Abrasive Blasting Operations:**

If visible emissions are “present” (i.e., emissions are visible for more than 6 minutes of accumulated time during the 15 minute monitoring period), you must:

- Perform corrective action until visible emissions are eliminated
- Perform a follow-up Method 22 VE observation

#### **Welding Operations:**

If visible emissions are “present” (i.e., emissions are visible for more than 6 minutes of accumulated time during the 15 minute monitoring period), you must:

- Perform corrective action (e.g., inspect welding sources, evaluate fume control measures implemented at the facility)
- Perform a follow-up Method 22 VE observation

**METHOD 22 VISIBLE EMISSIONS MONITORING  
RECORD LOG**

<b>Company name:</b> <b>Location:</b> <b>Date:</b>	<b>Observer:</b>
<b>Process Observed:</b>	<b>Visible emission testing frequency (circle one):</b> Daily   Weekly   Monthly   Quarterly
<b>Sky conditions:</b> <b>Precipitation:</b>	<b>Wind direction:</b> <b>Wind speed:</b>

*Sketch of observer position relative to the point monitored for visible emissions. Identify potential and/or actual emission points (e.g., fence line or property border nearest to the abrasive blasting operation, welding vent/stack, building ventilation fan, building door opening, etc.). Indicate location of sun relative to observer's position.*

**OBSERVATIONS**

**SW1**

**SW2**

*Begin Observation*

**Observation time  
(15 minutes)**

**Interval of time emissions  
are observed (emissions time)  
minutes:seconds**

*Clock Time: \_\_\_\_\_ am / pm*

Record total time of continuous emissions:

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Record total time of continuous emissions:

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Record total time of continuous emissions:

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Record total time of continuous emissions:

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Record total time of continuous emissions:

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*End Observation*

*Clock Time: \_\_\_\_\_ am / pm*

*(15 min. later)*

**TOTAL ACCUMULATED TIME**

**EMISSIONS OBSERVED\*:**

*\* Immediate corrective action is required if the total accumulated emissions time is greater than 6 minutes.*