
Visual Inspections or Visible Emissions Observations

What is the Difference ?

- Visual Inspections – Periodic Monitoring requirements often specified in Title V Permits – (“VI”)
 - EPA Reference Methods for Visible Emissions (“VE”) or Opacity Tests
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Visual Inspections – Title V Permits

The owner/operator shall perform a visual inspection on a weekly basis. Visual Inspection means a qualitative observation of opacity during daylight hours where the inspector records results in a log, noting color, duration, density (heavy or light), cause and corrective action taken for any abnormal emissions. The observer does not need to be certified to conduct valid visible emissions observations. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water. Logs shall be kept to record all visual inspections, including cause and corrective action taken for any abnormal emissions and visual inspections from date of recording. The owner/operator shall submit semiannual reports documenting these visual inspections.

Visual Inspection Requirements

- Document that Visual Inspection was performed – date / time / outcome
 - If emissions are observed – take corrective action and document action.
 - Repeat Visual Inspection.
 - If visible emissions continue, then a Method 9 VE test may be required.
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EPA Visible Emissions or Opacity Methods

- M9 – Visual Determination of the Opacity of Emissions
 - M22 – Visual Determination of Fugitive Emissions from Material Handling Sources and Smoke Emissions from Flares
 - M203A – Visual Determination of Opacity of Emissions – for Time-Averaged Regulations (Some Rules Specify an Averaging Time Other than 6-min)
 - M203B - Visual Determination of Opacity of Emissions – for Time-Exception Regulations (Some Rules Allow Opacity Exceedances for X Minutes / Hour)
 - M203C - Visual Determination of Opacity of Emissions – for Instantaneous Limitation Regulations (Opacity Not to Exceed Y %)
 - Visual Inspections for Title V Permit Periodic Monitoring
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Summary of Opacity Methods

Method	Certification	Frequency	Averaging Time
M9	Yes	15 sec	6-min
M22	No	Continuous	% of Time
M203A	Yes	15 sec	2 to 6-min
M203B	Yes	15 sec	Depends
M203C	Yes	5 sec	1-min
Visual Inspection	No	Daily or Weekly	N/A

Thank You for Coming to CAPCA !

