

OPACITY

How do I become certified to evaluate visible emissions (opacity) in accordance with U.S. Environmental Protection Agency (U.S. EPA) Reference Method 9?

You go to “smoke school.” You can find a “smoke school” by conducting an Internet search for either “smoke school” or “EPA Method 9 Training.” Smoke school provides training for individuals who need to become certified to evaluate visible emissions in accordance with U.S. EPA Reference Method 9. Those certified will be able to identify the opacity (see definition below) of the visible emissions from stacks.

The cost of smoke school training is approximately \$400 for individuals who have never received certification and approximately \$250 for individuals who have been certified at previous smoke schools and, therefore, only need to attend a “field” session.

Definition of Opacity

Opacity is a measurement of how dense the dust particles are in the air and takes into account how much light is obscured by the rising dust when looking at a solid, colored background. Opacity is measured in percentages from 0 to 100 percent, and measurement is actually performed by visible observation. When there is no visible smoke, the opacity is 0 percent, meaning all of the light is able to pass through. Therefore, when the statement is made that an activity is operating at a “25 percent opacity” level, that means that the dust, soot, and smoke levels are blocking only 25 percent of the visual background light, leaving 75 percent of the background light clearly visible. An example of standard opacity levels is illustrated by the figure below. The more dust or smoke that is generated, the more difficult it is to see the landscape background.

Figure 1 Opacity Levels

