

Municipal Waste Combustors/Waste-to-Energy Facilities

Units of Measure Glossary

Here are definitions of the key terms used to describe and quantify municipal waste combustor operations and emissions.

- **ppmv,d @ 7% O₂** (parts per million per volume dry basis corrected to 7% Oxygen)*
Used to express concentrations of Sulfur Dioxide (SO₂), Nitrogen Oxide (NOX), Carbon Monoxide (CO) and Hydrogen Chloride (HCl).
- **mg/dscm @ 7% O₂** (milli-grams (10⁻³ or 0.001 grams) per dry standard cubic meter corrected to 7% Oxygen)*
Used to express concentrations of Cadmium (Cd), Lead (Pb), Mercury (Hg) and Particulate Matter (PM).
- **ng/dscm @ 7% O₂** (nano-grams [10⁻⁹ or 0.000000001 grams] per dry standard cubic meter corrected to 7% oxygen)*
Used to express concentrations of Dioxins and Furans.
- **Percent (%)**
Used to express the degree to which light is obscured by emissions from the smokestack, opacity, and the portion of time that emissions are visible from ash handling operations.
- **RPM** (Revolutions Per Minute)
Used to express Screw Feeder Speed
- **lb/hr** (pounds per hour)
Used to express the same parameter, Carbon Injection Rate and Carbon Feed Rate.
- **kilo-lbs/hr** (thousand-pounds per hour of steam)
Used to express unit load usually in terms of steam production.
- **F or C** (Fahrenheit or Celcius)
Used to express Particulate Matter Control Device Inlet Temperature (PMCDT).
- **% Reduction**
Used to express the percent reduction of a pollutant with air pollution controls.

*Measurements are corrected to 7% oxygen to correct for excess air in the stack gases. MWC operators may choose to monitor carbon dioxide instead of oxygen to correct for excess air. To do this, they must determine the concentration of carbon dioxide that is equivalent to 7% oxygen. This will generally be about 12% carbon dioxide. Without this correction, the stack gases could be diluted with additional air as a means to comply with an emission limit expressed as a concentration.