

ACRONYMS USED IN
EMISSION MEASUREMENT DISCUSSIONS AND REGULATIONS

- AA(S) - Atomic absorption (spectroscopy) - analytical technique for metal ions.
- ACME - Accreditation and Certification for the Measurement of Emissions - EPA developed program for accreditation of emission testing companies and certification of source testing personnel on a national basis.
- AISI - American Iron and Steel Institute.
- AIRS - Aerometric Information Retrieval System - database for air pollution measurement data.
- ANSI - American National Standards Institute.
- APTI - Air Pollution Training Institute - organization in OAQPS responsible for providing training for implementing air pollution regulations.
- AP-42 - The document codifying the emission factors for stationary sources, available from the Emission Inventory Branch in OAQPS.
- AQMD - Air Quality Management Division - organization in OAQPS responsible for requirements and guidance for developing SIPs.
- ARD - Acid Rain Division - organization in EPA responsible for implementing the acid rain regulations (40 CFR Part 75).
- AREAL - Atmospheric Research and Exposure Assessment Laboratory - the part of the EPA's Office for Research and Development responsible for research on air pollution test methods.
- ASME - American Society of Mechanical Engineers - a professional organization that publishes guidance and protocols for evaluating process operation, efficiencies, and emission measurements among other industrial support activities.
- ASTM - American Society for Testing and Materials - a professional organization that publishes standard methods and performance criteria often incorporated by reference in EPA regulations and methods.
- AWMA - Air and Waste Management Association - a professional organization that coordinates technical information dissemination on environmental issues through workshops, conferences, publications, and other outreach activities.
- BACT - Best available control technology - the basis for

establishing emission limits for major existing sources of hazardous compounds.

- BBS - Bulletin Board System - functional unit of the OAQPS Technology Transfer Network (TTN).
- BIF - Boilers and industrial furnaces - source category burning hazardous waste materials covered by OSW regulations.
- BLIS - BACT/LAER Information System (one BBS of TTN).
- Btu - British thermal unit - measurement unit of heat often used in emission standards, e.g., lb/MMBtu or pounds of emission per million Btu.
- CAAA - Clean Air Act Amendments of 1990.
- CEMS - Continuous emission monitoring system - the equipment for the sampling, analysis, and data reduction of gaseous emissions measurements on a continuous basis.
- CERMS - Continuous emission rate monitoring system - the equipment for the sampling, analysis, and data reduction of stack emission rate (e.g., lb/hr) on a continuous basis.
- CFR - Code of Federal Regulations - codification of all Federal regulations divided by titles and parts. Title 40 contains essentially all of the environmental regulations.
- COMS - Continuous opacity monitoring system - the equipment for the sampling, analysis, and data reduction of stack opacity measurements on a continuous basis.
- CMA - Chemical Manufacturers Association.
- CPB - Chemicals and Petroleum Branch - operations and emissions data collection branch in ESD.
- CPMS - Continuous parameter monitoring system - the equipment for measurement of a control device or process operating parameter or other conditions to correlate with source emissions.
- CPM - Condensible particulate matter as measured with Method 202 involving analysis of back half of Method 5 or 17 sampling train.
- CRM - Certified reference material - an audit material, usually calibration gas certified by the National Institute for Standards and Technology to be of known quantity or value.
- CTC - Control Technology Center - EPA organization providing technical assistance on the selection, operation, and

design of air pollution control equipment (one BBS of TTN).

- CVAAS - Cold vapor atomic absorption spectroscopy - analytical technique for mercury and other metal ions.
- DAR - Data assessment report - report for the responsible enforcement agency prepared by regulated sources that quantifies emission status, usually quarterly.
- DQO - Data quality objectives.
- ECD - Electron capture detector - analytical technique used in gas chromatography.
- EIB - Emission Inventory Branch - TSD organization responsible for publishing AP-42.
- ELCD - Electroconductivity detector (Hall detector) - analytical technique used in gas chromatography.
- EMB - Emission Measurement Branch - About 30 people in OAQPS responsible for developing and publishing emission test methods, collecting and evaluating emission data in support of regulatory development, and providing technical guidance on the application of test methods.
- EML - Emission Measurement Laboratory - location in RTP for the EMB.
- EMMC - Environmental Monitoring Management Council - an EPA workgroup involving all of the program offices in evaluating the Agency's measurement procedures and research programs.
- EMMI - Environmental Monitoring and Measurements Index - a personal computer based information file of all the EPA methods used for environmental measurements.
- EMRD - Enhanced Monitoring Reference Document - background guidance document providing support for implementing the enhanced monitoring and compliance certification regulations.
- EMTIC - Emission Measurement Technical Information Center - the information center in EPA responsible for providing guidance and technical assistance for stationary source emission test methods.
- EPA - Environmental Protection Agency, U. S. Government.
- EPRI - Electric Power Research Institute - research organization representing the utility industry interests.

ESD - Emission Standards Division - organization in OAQPS responsible for publishing the stationary source emission regulations.

ETO - Ethylene oxide.

FCCU - Fluid catalytic cracking unit - device used in SOCOMI and petroleum refining.

FGD - Flue gas desulfurization - SO_x emission control device often used at fossil fuel fired utilities.

FIA or FID - Flame ionization analyzer or detector - analytical technique for organic compounds for total organic compounds or as the analytical technique with gas chromatographic separation.

FPD - Flame photometric detector - analytical detector for organic compounds.

FR - Federal Register - publication vehicle for Federal regulations printed daily.

FTIR - Fourier transform infrared.

GC - Gas chromatography.

GC/MS - Gas chromatography/mass spectrometry - Highly specific analytical technique used for organic compounds.

GFAA(S) - Graphite furnace atomic absorption (spectroscopy) - analytical method for metal ions.

GFC - Gas filter correlation - analytical technique usually applied in the IR for TRS.

HAPs - Hazardous air pollutants - compounds listed in Title III of the 1990 CAAA as the major air toxic pollutants.

HPLC - High performance liquid chromatography.

HRGC/HRMS - High resolution gas chromatography/high resolution mass spectrometry - highly sensitive analytical technique for dioxin and furans.

HON - Hazardous Organic National Emission Standard for Hazardous Air Pollutants - a regulation in Title 40, Part 63, of the CFR addressing the control of hazardous organic emission from some 40 processes in the synthetic organic chemical manufacturing industry.

HWI - Hazardous waste incinerator.

IC - Ion chromatography - analytical technique for anions and cations.

ICE - Internal combustion engine.

ICAP - Inductively-coupled argon plasmography - analytical technique for metal ions.

ICPCR - Ion chromatography with a post column reactor - analytical technique specifically for hexavalent chromium.

IPA - Isopropyl alcohol.

IR - Infrared radiation range.

ISB - Industrial Studies Branch - operations and emissions data collection branch in ESD.

ISO - International Standards Organization - Multinational organization that develops and publishes measurement criteria and performance standards.

LAER - Lowest achievable emission rate - basis for HAP emission limits for existing sources under CAAA.

LUST - Leaking underground storage tanks.

MACT - Maximum achievable control technology - the basis for establishing emission limits for major new sources of hazardous compounds subject to rules under CFR Title 40, Part 63.

MM5 - Modified Method 5 - extractive adsorbing emission sampling train for the measurement of volatile organic compounds, usually toxic or hazardous compounds, with boiling points over about 130°C. Analysis is by GC/MS. Called Method 0010 in SW-846; also labeled semi-VOST method.

MS - Mass spectrometry - highly specific analytical method for organic and inorganic compounds.

MWC - Municipal waste combustor.

MWI - Medical waste incinerator.

NAAQS - National Ambient Air Quality Standard.

NCASI - National Council for Air and Stream Improvement - research organization supporting environmental efforts for the pulp and paper industry.

NDIR - Nondispersive infrared spectroscopy - narrow band infrared absorption.

NESCAUM - Northeast States for Coordinated Air Use Management - organization representing state environmental agencies from the Northeast U.S.

NESHAP - National Emission Standard for Hazardous Air Pollutants - regulations found in Part 61 and 63 of Title 40 of the CFR.

NIST - National Institute for Standards and Technology - Federal organization responsible for evaluating and setting performance and design standards for measurements (formerly NBS).

NMOC - Nonmethane organic compounds - volatile organic compounds other than methane.

NOx - Oxides of nitrogen.

NRDC - Natural Resources Defense Council.

NSPS - New Source Performance Standards - regulations found in Part 60, Title 40 of the CFR.

NTIS - National Technical Information Service - publication center for EPA research documents in Cincinnati.

NTRM - NIST traceable reference material.

OAQPS - Office of Air Quality Planning and Standards - about 700 EPA people responsible for developing, publishing, and providing guidance for implementation of air pollution regulations, both ambient air quality standards and stationary source emission standards.

OMB - Office of Management and Budget, U. S. Government.

OMS - Office of Mobile Sources.

OPM - Open path monitoring system (long path monitoring).

ORD - Office of Research and Development - program office of EPA responsible for research on pollution control, abatement, and measurement issues.

OSHA - Occupational Safety and Health Administration.

OSW - Office of Solid Waste - the EPA organization responsible for publishing regulations addressing the handling and destruction of solid hazardous materials.

OSWER - Office of Solid Waste and Emergency Response.

PAH - Polyaromatic hydrocarbons - long chain organic compounds

often in particulate form at ambient conditions.

- PCB - Polychlorinated biphenyl compounds - includes dioxins and furans.
- PIC - Product of incomplete combustion.
- PID - Photoionization detector - analytical technique used in conjunction with gas chromatography.
- PM - Particulate matter - defined by the test method used to collect and analyze the sample (e.g., Method 5 defines PM as material collected in the sample probe and on the filter at 250°F).
- PM10 - Particulate matter less than 10 microns in aerodynamic diameter.
- POHC - Principal organic hazardous constituents.
- POM - Polycyclic organic matter - includes benzene and related compounds often in particulate form at ambient conditions.
- PS - Performance Specification - performance criteria and procedures for evaluating a CEMS in the field installation, found in Federal regulations including Appendix B, Part 60, Title 40 of the CFR.
- QA/QC - Quality assurance and quality control - procedures and acceptance criteria established for the measurement data quality.
- RACT - Reasonably available control technology.
- RCRA - Resource Conservation and Recovery Act - the regulatory act addressing hazardous waste handling and destruction.
- RECLAIM - Regional Clean Air Incentives Market - the emission control regulation involving the accumulation and potential trading of emission credits for SO_x, NO_x, and ROG sources in the SCAQMD of California.
- ROG - Reactive organic gases.
- RTP - Research Triangle Park, NC - location for several EPA Program offices.
- SCAQMD - South Coast Air Quality Management District.
- SCR - Selective catalytic reduction - NO_x control technique.
- Semi-VOST - Semivolatile organic compounds sampling train - see MM5.

SIP - State Implementation Plan - compilation of regulations developed by each State agency to implement air pollution control requirements.

SMRB - Source Methods Research Branch - group in AREAL responsible for stationary source emission measurement methods research.

SOCMI - Synthetic organic chemical manufacturing industry.

SOTDAT - Source test data.

SOx - Oxides of sulfur.

SRM - Standard reference material (see CRM).

SSCD - Stationary Source Compliance Division - organization in EPA responsible for providing guidance on the compliance issues for implementing stationary source air pollution regulations.

SSEIS - Stationary Source Emissions and Inventory System.

STAPPA - State and Territorial Air Pollution Program Administrators.

SW-846 - The designation for the OSW codification of sampling and analytical methods related to solid waste regulations and referenced in 40 CFR Part 266.

TCDD - Tetrachlorodibenzodioxin.

TCDF - Tetrachlorodibenzofuran.

THC - Total hydrocarbons (see VOC).

TRS - Total reduced sulfur compounds.

TSAR - Test methods storage and retrieval system - library file system for the EMTIC technical document depository.

TTE - Temporary total enclosure - a ventilated enclosure surrounding a line printing or coating operation and used in the evaluation of VOC emissions capture efficiency.

TTN - Technology Transfer Network - computer network for electronic bulletin boards addressing OAQPS activities (telephone number 919/541-5247).

TRIS - Toxic chemical release inventory system.

TSD - Technical Support Division of OAQPS - organizational location for EMB and EIB.

TSDf - Treatment, storage, and disposal facilities - hazardous waste handling and disposal operations regulated by RCRA regulations.

TSP - Total suspended particulate matter.

UARG - Utility Air Regulatory Group - utility industry policy support organization.

UV - Ultraviolet radiation range.

UV-DOAS - Ultraviolet dual optical absorption spectrometry.

VEO - Visible emission observation or observer - opacity measurement according to Method 9, 40 CFR Part 60, Appendix A.

VOC - Volatile organic compounds.

VOST - Volatile organic sampling train - extractive adsorbing emission sampling train for the measurement of volatile organic compounds, usually toxic or hazardous compounds, with boiling points up to about 130°C. Analysis of sample is by GC/MS. Entitled Method 0030 in SW-846.