

Workshop Announcement

DIOXINS and FURANS DATA INTERPRETATION & VALIDATION

An Emission Measurements Information Workshop for Government Agency Staff September 29 - 30, 2003

The Emissions Monitoring and Analysis Division of OAQPS is scheduling a TRAINING WORKSHOP September 29-30, 2003 to be held in the USEPA Auditorium located in Research Triangle Park, NC. The two-day Workshop will cover a variety of topics associated with the interpretation and validation of dioxins and furans air emissions as separated by high-resolution gas chromatography and measured by high-resolution mass spectrometry. The training Workshop is designed for government staff responsible for designing, directing, monitoring, and evaluating emission measurement programs involving dioxin and furan emission data.

Who Should Attend

Governmental agency staff (federal, state, and local) involved in dioxin measurement activities; i.e., regulators, inspectors, permit writers, enforcement staff, and regulatory managers, who have an interest in: 1) learning the basic concepts for dioxins; 2) dioxin analytical methods; 3) the sample analysis process; 4) data review and interpretation; and 5) quality assurance and quality control validation. PLEASE NOTE; it is not the objective of this 2-day Workshop to review dioxin sampling methodology in depth.

Registration Cost

The Workshop is sponsored by EPA, OAQPS, EMAD; there is no registration fee.

Instructor

Dr. Yves Tondeur, Alta Analytical Perspectives, Wilmington, NC
For those of you who do not know Dr. Tondeur, he is an internationally-known expert in dioxin laboratory methodology. He was instrumental in developing several EPA dioxin analytical methods: Office of Solid Waste (OSW) dioxin analytical Method 8290 and the Office of Air Quality Planning & Standards (OAQPS) dioxin Method 23 (analytical only). He was involved in the design of Methods 1613 for the Office of Water and Methods 428 and 429 for the California Air Resources Board.

Location

**USEPA Campus
Auditorium - Room C111A
109 T.W. Alexander Drive
Research Triangle Park, NC 27709**

Session Areas

Session 1 - Basics on Dioxins includes a history of dioxins; why they are a hazardous risk; formation, fate, and transport paths; GC/MS principals; definitions; and much more.

Session 2 - Dioxin Methodology includes a historical review of the dioxin analytical methods that have emerged through the years; problems with current procedures; and what is planned for the future.

Session 3A - Analytical Process includes a step-by-step review of the laboratory core steps; sample preservation & storage; conditioning; extraction; cleanup; standards; injection; and specific method requirements.

Session 3B - Sample Analysis includes review of the high resolution gas chromatography (GC) separation and high resolution mass spectrometry measurement protocols; isomer-identification (specificity); homologue retention time; calibration requirements; and much more.

Session 3C - Quality Assurance & Quality Control includes review into the use of surrogate standards; internal standards; sample recovery standards; instrument calibration & system performance; lab method blank; field blank; detection limits; and much more.

Session 4A - Data Interpretation includes the review of the structure and organization of the laboratory report; data generation; raw analytical data parameters; signal-to-noise ratios; final data reporting; and hands-on data review and interpretation.

Session 4B - Data Reporting includes review of the dioxin results; identification criteria; sample and method detection limits; estimated maximum possible concentration (EMPC) values; TEQs; and homologue groups and totals.

Session 4C - Data Validation includes assessing the dioxin data as compared to the specific method requirements; standards validation and verification QA/QC; standards percent recoveries; interferences; method detection limits; and how to spot data deficiencies.

Special Topics of Interest

For the ever-changing regulatory implementation, high profile topics of interest include: 1) Incorporation of Performance Based Measurement System (PBMS) procedures into the new dioxin analytical protocol; 2) Dioxin Finger Prints includes a review of the concept for identifying specific emission sources from their dioxin isomer and homologue results; and how to present these dioxin identification data in a report; and 3) development of a dioxins and furans data interpretation and validation self-training CD in English, Spanish, etc.; and 4) Dr. Tondeur has asked the audience to share with him their program problems, concerns, and possible solutions related to dioxins and furans emission measurements in support of environmental compliance regulations.

Registration Information

Early registration is encouraged as the Workshop will be limited to 48 participants. To register, please contact the EPA Workshop Coordinator, Wade Peele, at peelee.wade@epa.gov; Telephone No. (919) 541-4945; or Gene Riley at riley.gene@epa.gov, Telephone No. (919) 541-5239. Registration deadline is September 24, 2003.

General Information

Lodging accommodation reservations can be made direct to the facility at: <http://www.durham-nc.com/visitor/results.php>; (Using internet explorer). Recommend facilities located at Exit 278. Please contact the EPA Workshop Coordinator if you have additional questions.