

# 1999 Accomplishments of the SETAC Whole Effluent Toxicity Experts Advisory Panels.

## Background

- Following the 1995 SETAC Pellston workshop on Whole Effluent Toxicity (WET), the USEPA conducted several meetings to invite interested parties to voice opinions on issues surrounding WET
- The USEPA wanted to ensure that the technical bases for the use of WET testing, toxicity identification evaluations (TIEs), and toxicity reduction evaluations (TREs) were founded on sound scientific principles.
- To insure that sound scientific principles are applied to the challenging issues in the WET program, the SETAC Foundation for Environmental Education was awarded a cooperative agreement from the USEPA to provide expert advice related to the technical aspects of WET testing.

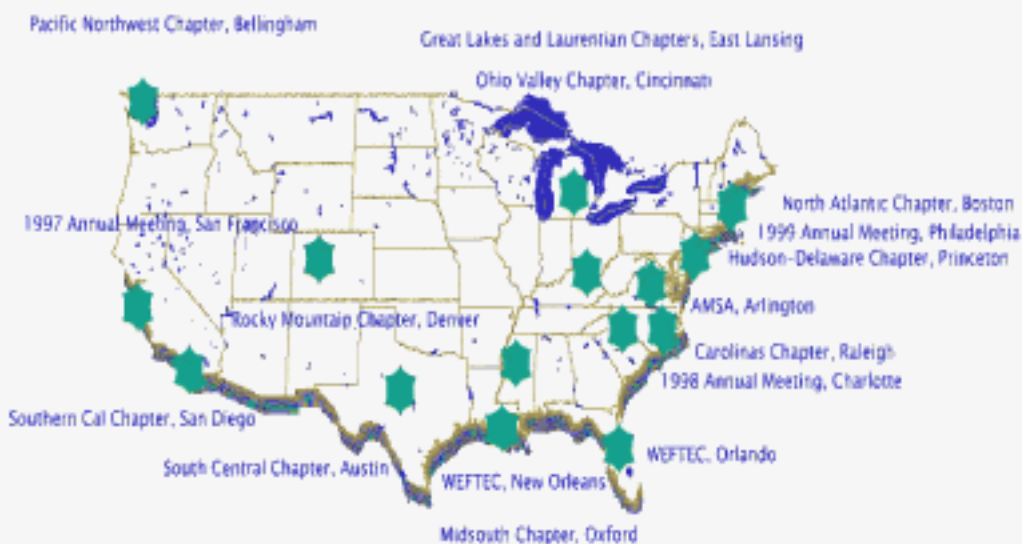
## Steering Committee Charter

- Provide expert scientific advice related to technical aspects of WET including testing, characterizing, and identifying sources of toxicity in complex effluents.
- Use of a balanced steering committee - academia, government, and private sector members to develop consensus opinion and advice.
- Solicit and select key technical issues
- Does not handle issues related to EPA's policies

## Accomplishments

- 2- day Basic WET Training Course: Taught in 15 cities across US and have trained ~500.
- TRE/TIE Course: Taught at '98 and '99 SETAC Annual Meetings and trained about 100.
- Data Interpretation Course: Taught at '98 and '99 SETAC Annual

## SETAC 2-Day WET Courses 1997-1999



Meetings and  
trained about 80

- [Annual Review issue of ET&C on WET \(first issue in 2000\)](#)
- Steering committee paper *Major Ion Toxicity in Effluents: A review with permitting recommendations*. William L. Goodfellow, Larry W. Ausley, Dennis T. Burton, Debra L. Denton, Philip B. Dorn, Donald R. Grothe, Margarete A. Heber, Teresa J. Norberg-King, John H. Rodgers, Jr, pages 175–182. [ET&C](#)
- Website developed for WET
- WET Frequently Asked Questions (FAQs)- Consensus panel discussion of questions submitted to the EAP. All are posted on [www.setac.org](http://www.setac.org)
- Application of TREs/TIEs to Whole Effluent Toxicity: Principles and Guidance (Available on web)
- Compilations of ET&C WET articles

### Training Provided

- A WET Tale: Toxicity of Complex Effluents: A 2-D Course that covers: Implementation of the whole effluent program based on statutory, regulatory, and policy publications. Topics include: standards, regulation, policy guidance, and technical aspects of test methods, quality assurance, statistical evaluation techniques, NPDES permit development, compliance and enforcement, TIE/TRE procedures along with case histories.
- TRE/TIE Training Course Covers: Concepts of TRE/TIEs to provide a basic understanding of the tools used in the TRE strategy. Includes permitting issues, TRE strategy, TIE procedures, toxicity treatment evaluations and refractory toxicity assessments, suggestions for successful TIES, and case examples.
- Taming the Wild, Wild WET: Analysis and Interpretation of Toxicity Tests: Basic overview of WET statistical analysis, common difficulties in analysis, effective experimental design and analysis, and common questions related to WET data interpretation. Guidance on ways to prevent, minimize, analyze and/or interpret problem toxicity test data.

### Works in Progress

- SETAC TIP (Technical Issue Paper) on ion imbalance (Submitted)
- WET related literature on CD-ROM (Pending)
- Workshop in development: *Toxicity Identification Evaluation (TIE) Forum: What Works, What Doesn't, and New Developments for Effluents, Ambient Waters and Other Aqueous Media* (Tentatively Scheduled for fall 2000)

### WET EAP Steering Committee

Philip Dorn (Co-Chair) Equilon  
Teresa Norberg-King (Co-Chair) USEPA, ORD

Larry Ausley NC Division of Water Quality  
Dennis Burton University of Maryland  
Debra Denton USEPA, Region 9  
William Goodfellow EA Engineering, Science, & Technology  
Joseph Gully LA County Sanitation District  
John Rodgers Clemson University  
Tom Waller University of North Texas  
Florence Fulk, ex officio USEPA, ORD  
Jim Pletl, ex officio Hampton Roads Sanitation District

### **WET Training Panel**

Jim Pletl (Chair) Hampton Roads Sanitation District  
Ray Arnold Exxon Biomedical Sciences, Inc.  
G. Allen Burton Wright State University  
Debra Denton (SC Rep) US EPA, Region 9  
Richard Diehl Burlington Research, Inc.  
Matt Matthews NC Division of Water Quality  
Phillip Jennings USEPA, Region 6  
Stephen Klaine Clemson University  
John Velte Duke Power Company  
Scott Hall The Advent Group

### **Performance Evaluation & WET Data Interpretation Panel**

Florence Fulk (Chair) USEPA, ORD  
John Cooney New England Bioassay  
Patrick Downey FTN and Associates  
Daniel Fisher University of Maryland  
Kari Fleming WI Dept. Of Natural Resources  
Joseph Gully (SC Rep) LA County Sanitation District  
James Heltshe University of Rhode Island  
Jim Pletl Hampton Roads Sanitation District  
Carrie Rowland Wright State University  
Victor de Vlaming CA State Water Res. Control Board

### **TRE/TIE Panel**

Ray Arnold Exxon Biomedical Sciences, Inc.  
Larry Ausley NC Division of Water Quality  
Debra Denton US EPA, Region 9  
William Goodfellow EA Engineering, Science, & Technology  
Margarete Heber USEPA, OW  
Russ Hockett ENSR  
Stephen Klaine Clemson University  
Don Mount ASci Corporation

Teresa Norberg-King USEPA, ORD  
Peter Ruffier City of Eugene  
Tom Waller University of North Texas

**Toxicity Identification Evaluation Workshop Ad hoc Panel**

Larry Ausley NC Division of Water Quality  
Phil Dorn Equilon  
William Goodfellow EA Engineering, Science, & Technology  
Jeff Miller Aqua-Science  
Teresa Norberg-King USEPA, ORD  
Tom Waller University of North Texas

*The WET group would like to acknowledge the support from the SETAC Foundation and in particular note the Staff that routinely support our activities:*

Barbara Albrecht (Ensafe Environmental Consultants)  
Greg Schiefer  
Linda Longworth  
Rod Parrish

[Return to EAP](#)