

AGENDA Day 1

Managing Uncertainty with Systematic Planning: (Developing Defensible Sample Designs for Environmental Decision-Making)

8:00 AM to 5:00 PM

8:00 AM – 8:15 AM Introductions of Class Members

The members of the class will be asked to introduce themselves, who they represent, and why they are attending and/or what they hope to get out of the training.

8:15 AM – 9:15 AM Module 1: Introduction, Objectives, and Agenda

Presenter: Sebastian Tindall

This module briefly discusses the DOE EM-3 mission to institutionalize a systematic planning process throughout the DOE complex and provides an overview, the agenda and objectives, the contents of the Appendices, and the course evaluation form.

9:15 AM – 10:00 AM Module 2: Key Concepts: Part 1

Presenter: Sebastian Tindall

Using innovative, interactive demonstrations, the class will become familiar with the important and often critical environmental sampling statistical concepts in order to develop defensible sampling designs.

10:00 AM – 10:15 AM Morning Break

10:15 AM – 12:00 PM Module 3: Key Concepts: Part 2

Presenter: Sebastian Tindall

Using innovative, interactive demonstrations, the class will become familiar with the important and often critical environmental sampling statistical concepts in order to develop defensible sampling designs.

12:00 PM – 1:00 PM LUNCH BREAK

1:00 PM – 2:15 PM Module 4: How Many Samples Do I Need – Part 1

Presenter: Sebastian Tindall

Sampling and analysis methods are used to estimate the true condition of site. However, estimation introduces uncertainty into the decision-making process. This uncertainty can be managed through planning so that you can “do it and prove it” efficiently and effectively. Concepts in Module 3 include census versus estimates and the DPGD.

2:15 PM – 2:30 PM 1st Afternoon Break

2:30 PM – 3:15 PM Module 5: How Many Samples Do I Need – Part 2

Presenter: Sebastian Tindall

Concepts in Module 5 include the UCL, sample representativeness, and need for knowing the distributions of contaminants in formulating sampling designs are presented in this module.

3:15 PM – 3:30 PM 2nd Afternoon Break

3:30 PM – 4:00 PM Module 6: How Many Samples Do I Need – Part 3

Presenter: Sebastian Tindall

Gy’s Sampling Theory, the concept of Fundamental Error, and more are presented in this module.

4:00 PM – 5:00 PM Module 7: How Many Samples Do I Need – Part 4

Presenter: Sebastian Tindall

An introduction to Multi-Increment Sampling is presented in this module.