

## **COURSE DESCRIPTION: MCP Remediation Waste Management**

The Remediation Waste Management course will provide an overview of how various wastes generated during activities at MCP disposal sites are classified and regulated as the wastes are generated, accumulated, stored, treated and/or disposed. This includes wastes generated during assessment, containment and removal for comprehensive response actions and post-Permanent Solution or post-Temporary Solution construction activities.

The course will review regulatory requirements and interpretive policy and guidance documents from MassDEP and USEPA. To reinforce the application of these concepts there will be several case study scenarios presented where the regulatory requirements for remediation waste management will be demonstrated.

## **COURSE SYLLABUS: MCP Remediation Waste Management**

### **8:00 COURSE INTRODUCTION – A. Irwin (0.5 HOUR)**

- COURSE LOGISTICS
- OVERVIEW OF THE 3 REGULATORY PROGRAMS- MCP/RCRA/TSCA  
GREENER CLEANUPS GUIDANCE
- ROLE/INTERESTS OF THE LSP

### **8:30 MCP REGULATORY FRAMEWORK – A. Irwin (1.0 HOUR)**

- REMEDIATION WASTE MCP SECTION 310 CMR 40.0030
- REMEDIAL WASTEWATER MCP SECTION 310 CMR 40.0040
- REMEDIAL AIR EMISSIONS MCP SECTION 310 CMR 30.049
- REMEDIATION WASTE SHIPMENTS
- REMEDIAL ACTIONS AFTER PS/TS 310 CMR 30.1067
- ACTIVITY & USE LIMITATIONS TO ADDRESS RESIDUAL  
CONTAMINATION
- SIMILAR SOILS

### **9:30 REMEDIATION WASTE – A. Irwin (1.0 HOUR)**

- PETROLEUM WASTE
- REMEDIATION WASTE – ASBESTOS
- CONTAMINATED SEDIMENTS
- BENEFICIAL USE DETERMINATIONS (BUD)

### **10:30 Break**

### **10:45 HAZARDOUS WASTE –B. Sirull (0.75 HOURS)**

- HAZARDOUS WASTE IDENTIFICATION
- REPRESENTATIVE SAMPLING OF WASTE
- CONTAINED-IN POLICY FOR CONTAMINATED MEDIA
- HAZARDOUS WASTE DEBRIS
- INVESTIGATION DERIVED WASTE

**11:30 GENERAL MANAGEMENT OF HAZARDOUS WASTE – B. Sirull (0.75 HOUR)**

- GENERATOR STATUS
- GENERATOR REGISTRATION
- WASTE ACCUMULATION AREAS
- CONTAINER LABELING
- STORAGE LIMITS
- TREATABILITY STUDIES
- ON-SITE TREATMENT
- WASTE SEGREGATION
- WASTE SHIPMENTS

**12:15 Lunch**

**1:15 LAND DISPOSAL RESTRICTIONS – T. Nunno (1.0 HOUR)**

- LAND BAN WASTES
- AOCS AND PLACEMENT
- TREATMENT STANDARDS

**2:15 40 CFR PART 761 PCB REGULATIONS – T. Nunno (1.0 HOUR)**

- PCB REMEDIATION WASTE - 761.61
- PCB BULK PRODUCT WASTE - 761.62
- PCB SPILL CLEANUP POLICY - SUBPART G

**3:15 Break**

**3:30 CASE STUDY EXAMPLES – A. Irwin (1.5 HOUR)**

- INDUSTRIAL CHLORINATED SOLVENT SITE WASTE SCENARIO
- PCBS AND LEAD SITE
- NEW BUILDING CONSTRUCTION ON SITE WITH PERMANENT SOLUTION
- PETROLEUM SITE

**5:00 ADJOURN**

## **INSTRUCTOR BIOGRAPHIES**

### ***J. Andrew Irwin, PE, LSP, CPEA***

Mr. Irwin is President of IRWIN Engineers, Inc. and has over 30 years of experience in environmental engineering consulting. In this consulting role he has been responsible for managing hazardous waste site assessments and cleanup and regulatory compliance for industry including RCRA TSDF Permitting and Facility Closures, management of building PCB decontaminations and PCB spill cleanups, closure of petroleum and CERLA hazardous substance underground tanks, waste water treatment and discharge permitting, and air pollution control and emissions permitting. He also is a Past President of the LSP Association.

Mr. Irwin holds a Bachelor of Science degree in Chemical Engineering and a Master of Engineering in Chemical Engineering both from Cornell University. He is a practicing LSP and a licensed Professional Engineer in MA, NY, CT and RI. He is also a Certified Professional Environmental Auditor (CPEA) recognized by BEAC for regulatory compliance and ISO14000 environmental management systems.

### ***Bill Sirull***

Mr. Sirull has been an on-call Senior Consultant for RCRA issues at Amec Foster Wheeler, Environment & Infrastructure, Inc.'s Chelmsford, MA office since 2014. Prior to that he was with the Massachusetts Department of Environmental Protection (Mass DEP) from 1982 until his retirement in 2013 from the position of Chief of the Enforcement Support Branch in the Bureau of Waste Prevention's (BWP) Boston office. In that role Mr. Sirull oversaw enforcement of reporting requirements for BWP programs and conducted enforcement against hazardous waste transporters and recycling and treatment, storage and disposal facilities. Mr. Sirull was associated with MassDEP's hazardous waste regulatory program in different capacities from 1984 until 2013. Mr. Sirull previously served at MassDEP as a field inspector and as an investigator with MassDEP's Environmental Crimes Strike Force.

Mr. Sirull holds a Bachelor of Arts degree with a major in Chemistry from Brandeis University and a Master's degree in Chemistry from Purdue University.

### ***Thomas Nunno, PE, LSP, LEP***

Mr. Nunno is currently a Principal Engineer in the Littleton, Massachusetts office of Tetra Tech, Inc. He has been a practicing LSP for almost 25 years, designed site remedies since 1987, and has published papers and technical reports on waste treatment and site remediation technologies. He was an adjunct lecturer for Northeastern University for a course entitled Site Remediation Technologies Selection and Design. He also worked as a contractor for EPA's Land Disposal Branch and Waste Treatment Branch evaluating

regulatory options during the development of the RCRA and TSCA regulations. He has specialized in the evaluation and remediation of power plant sites across the US, involving heavy oils, coal ash, PCBs and asbestos. In addition, he has extensive experience at over 20 aerospace manufacturing sites across the US.

Mr. Nunno holds a Bachelor of Science degree in Civil Engineering and a Master of Science in Environmental Engineering both from the University of Massachusetts at Amherst.