Air Emissions Management

Requirement References:
- Clean Air Act Amendments of 1990

Description/ Goal: Upon completion of this lesson, the student will be able to identify the purpose and goals of the Clean Air Act Amendments of 1990, define key terms associated with National Ambient Air Quality Standards of Title I, and identify the requirements for limiting Hazardous Air Pollutants as defined in Title III. The student will also be able to identify the purpose of Operating Permits as defined in Title V, and the steps involved in the air permitting process.

Objectives: Upon completion of this lesson the student will be able to:

1. Identify the purpose and goals of the Clean Air Act Amendments (CAAA) of 1990.
2. Define attainment and nonattainment areas as described by the Clean Air Act.
3. Define key terms associated with Title I compliance requirements, including National Ambient Air Quality Standards (NAAQS), degrees of nonattainment, major source, Criteria Air Pollutants, and New Source Performance Standards (NSPS).
4. Identify the requirements for attainment and maintenance of National Ambient Air Quality Standards as defined in Title I.
5. Identify the requirements for limiting Hazardous Air Pollutants as defined in Title III.
6. Define key terms associated with Title III compliance requirements, including Hazardous Air Pollutants, Maximum Air Control Technology, and Risk Management Planning, and NESHAPS.
7. Identify the purpose and requirements of Operating Permits as defined in Title V.
8. Define key terms associated with Title V compliance requirements, include Potential To Emit, Actual Emissions, and Allowable Emissions.
9. Identify the process for determining air-permitting compliance.
10. Identify the types of air permits from degree of least stringency to highest, including permit exemption, construction permits, minor source permits, synthetic minor permit, and major source permit.

Emergency Planning and Community Right-to-Know Act (EPCRA)

Requirement References:
- Emergency and Community Right-to-Know Act (EPCRA)
- 40 CFR 302.4 – Hazardous Substances
- 40 CFR 355 Appendix A & B – Extremely Hazardous Substances
- 40 CFR 372.65 – Toxic Chemicals

The revised Hazard Communication Standard (HCS) version of this course is available starting December 31, 2012 in accordance with The Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Description/ Goal: The lesson covers the origin and goals of EPCRA, including the subtitles and sections. It also covers the specific types of chemicals listed in the regulation, and how to determine EPCRA applicability for a facility. Emergency planning and emergency release notification requirements, the provisions and exemptions for Safety Data Sheets (SDS) submissions and chemical inventory reporting, and the requirements for toxic chemical release reporting are addressed in further detail. The student will identify the origin and goals of EPCRA and recognize the reporting requirements of the four major areas: emergency planning, emergency release, Safety Data Sheets (SDS) submissions and chemical inventory reporting, and toxic chemical release reporting.

Objectives:
- Identify the origin and goals of the EPCRA regulation.
- Identify the four specific types of chemicals listed in the regulation.
- Identify the emergency planning requirements of Section 302 and 303.
- Identify the emergency release notification requirements of Section 304, including release possibilities at a facility.
- Identify the requirements and exemptions for Safety Data Sheets (SDS) submissions in Section 311 and chemical inventory reporting in Section 312, specifically Tier II reporting.
- Identify the requirements of toxic chemical release reporting in Section 313.

Environmental Management

Requirement References:
- 42 USC Sections 13101-13109, "Pollution Prevention Act of 1990" Resource Conservation and Recovery Act (RCRA)
- CERCLA (Superfund)
- SARA Title III
- Clean Air Act
- Federal Water Pollution Control Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act
- Hazardous Materials Transportation Act
- Waste Minimization Nation Plan

Description/ Goal: Upon completion of this lesson, the student will be able to identify waste management concepts, the hazards of environmental waste, the regulations in place to manage waste reduction and waste generation, and actions to take if a spill or release of hazardous material occurs.

Objectives:

- Identify hazards of environmental waste
- Identify waste management concepts and ways to reduce waste and to prevent pollution
- Identify how to respond effectively to a spill or release of hazardous material

Hazardous Waste Management

Requirement References:

- Resource Conservation and Recovery Act, 40 CRF part 260-265
- 40 CFR 261 Subpart D
- 40 CFR 261 Subpart C

The revised Hazard Communication Standard (HCS) version was available starting December 31, 2012 in accordance with The Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Description/ Goal:

This lesson defines the categories of waste, and describes steps to control or minimize the generation of hazardous waste. It also covers the purpose for regulating hazardous waste, which regulatory standards apply, and the three classifications of waste generators under RCRA. Container labeling and storage requirements for hazardous waste are also addressed. It covers requirements for implementing a hazardous waste inspection program. It also covers transportation and disposal requirements, as well as emergency preparedness and contingency planning requirements. The requirements for training personnel, reporting, and recordkeeping are covered. Proper management and disposal procedures for examples of typical hazardous, universal, and potentially hazardous wastes. Finally, methods for minimizing the generation of hazardous waste and evaluating those methods are covered.

Objectives:

- Identify the purpose of a waste management program.
- Define the categories of waste, including hazardous, universal, “potentially" hazardous, and nonhazardous.
- Identify the purpose for regulating hazardous waste, which regulatory standards apply to hazardous waste management, and the three classifications of waste generators under RCRA.
- Recognize the criteria for determining if “you” generate a hazardous waste.
- Identify the container, labeling, and storage requirements for hazardous waste.
- Identify the requirements for developing and implementing an inspection program for hazardous waste.
- Identify transportation and disposal requirements for hazardous waste.
- Identify the requirements for emergency preparedness and contingency planning.
- Recognize the requirements for training personnel, reporting, and recordkeeping.
- Identify typical hazardous wastes, universal wastes, and potentially hazardous wastes.
- Identify proper management and disposal procedures for typical hazardous, universal, and potentially hazardous wastes.
- Recognize methods for minimizing the generation of hazardous waste and evaluating those methods.

Spill Prevention, Control, and Countermeasure (SPCC) Plan

Requirement References:

- 40 CFR Part 112, Subparts A through C - Oil Pollution Prevention and Response; Non-Transportation-Related Onshore and Offshore Facilities

Description/ Goal:

To familiarize employees who handle oil as part of their job duties with the EPA's oil pollution prevention regulation and the general requirements of a facility Spill Prevention, Control, and Countermeasures Plan, or SPCC Plan.

Objectives:

- Harmful effects of spilled oil and the applicable laws and regulations for oil pollution prevention.
- The purpose and general requirements of a facility SPCC Plan.
- General operating procedures designed to prevent spills.
- General control measures to prevent an oil spill from reaching navigable waters and adjoining shorelines.
- Basic countermeasures for stopping a spill

Storm Water Management

Requirement References:

- Clean Water Act (CWA), 33 USC 1251 to 1387
- 40 CFR 122
- 40 CFR 124
- National Pollutant Discharge Elimination System (NPDES): 33 USC 1342
- 29 CFR 1910.38 - Emergency Action Plans
- 40 CFR 112 - SPCC Program

Description/ Goal:

At the completion of the lesson, the student will be able to identify the regulatory background and compliance requirements for stormwater discharges, the basic components of a Stormwater Pollution Prevention Plan (SWPPP), and Best Management Practices to help prevent toxic or hazardous stormwater run-off.

Objectives:

- Identify the regulatory background and requirements for stormwater discharges.
- Identify the components of a typical Stormwater Pollution Prevention Plan (SWPPP).
- Identify the Best Management Practices including good housekeeping, prevention, inspections, and erosion control.
- Identify the procedures for responding to a toxic spill or hazardous material release.

Wastewater & Storm Water Management

Requirement References:

- Clean Water Act (CWA)
- Safe Drinking Water Act (SDWA)
- 40 CFR 438
- Appendix D - SIC Code Categories

Description/ Goal:

At the completion of the lesson, the student will be able to identify the regulatory background and compliance requirements for industrial wastewater and storm water discharges and permits. The student will also identify the compliance requirements of a Storm Water Pollution Prevention Plan (SWPPP).

Objectives:

- Describe the regulatory background and requirements for wastewater, storm water, and septic system discharges.
- Identify potential sources of industrial wastewater and potential contaminants.
- Identify wastewater permitting requirements for municipal system and surface water discharges.
- Identify potential sources of storm water.
- Identify storm water permitting requirements for your facilities.
- Describe the components of a typical Stormwater Pollution Prevention Plan.