Environmental Safety

Course Description:

Environmental safety is becoming more and more critical for industrial and commercial companies as they are required to comply with increasingly stringent regulations from municipal, state, and federal governments. Some key areas of concern in this area of Environmental Safety are Air Quality, Surface and Ground Water, Toxic Substances, and Hazardous Wastes. Poor air quality has been linked to serious health conditions and damage to respiratory and cardiovascular systems. Surface and ground water quality applies to both drinking water and recreational waters. Contamination of water by infectious agents or chemicals can cause mild to severe illness. Protecting water sources and minimizing exposure to contaminated water sources are important parts of environmental safety. And then Toxic substances and hazardous wastes. The health effects of toxic substances and hazardous wastes may be more difficult to determine exactly. There’s actually research underway to better understand how these types of exposures can impact the environment and our health. In the meantime, there is a focus on reducing any exposures in this area.

Learning Objectives:

• Define air quality standards, ambient air quality, point sources, and fugitive sources

• Explain an energy management program, primarily process heating, process cooling, and compressed air systems

• Discuss waste water and ambient water quality basics, as well as waste water management

• Describe water conservation techniques, water monitoring and water reuse

• Identify noise factors in environmental safety and how to reduce noise hazards