

Client-Specific Safety Summit

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Introduction

The purpose of this presentation is to provide:

- An overview of the Federal environmental programs that impact most Client facilities
- A summary of potential enforcement penalties for non-compliance
- A description of site-specific environmental requirements

Primary Federal Environmental Programs

- The Clean Air Act (CAA)
- The Clean Water Act (CWA)
- The Emergency Planning & Community Right-To-Know Act (EPCRA)
- The Oil Pollution Act (OPA) and the Spill Prevention, Control, & Countermeasures (SPCC) regulations
- The Resource Conservation and Recovery Act (RCRA)

CAA

The Clean Air Act is the comprehensive Federal law that regulates air emissions from area, stationary, and mobile sources.

General Duty Clause

- Section 112(r) (General Duty Clause) requires owners and operators of stationary sources to identify hazards and prevent and minimize the effects of accidental releases wherever extremely hazardous substances are present at their facility.

Primary Client Emissions

- Volatile Organic Compounds (VOCs) are released from burning fuel; using/storing solvents, paints, glues and other products.
- Particulate Matter (PM-10); Burning of fuels; spray booths; media blasting.
- Lead - manufacture of circuit boards and radiators, etc.

Client Air Issues

- Ensure all existing emission sources are appropriately permitted or exempted
- Ensure the permitting conditions are met
- Plan well in advance when adding/modifying processes that will emit pollutants

CWA

- Cornerstone of surface water quality protection in the United States.
- Efforts to address polluted runoff have increased significantly starting in the late 1980s.
- Watershed approach places equal emphasis on protecting healthy waters and restoring impaired ones

Authorization to Discharge

- Individual National Pollutant Discharge Elimination System (NPDES) Permits
- General NPDES Permits (Storm water)
- Discharge Agreements with municipalities

Client Wastewater Issues

- Identify individual discharge sources (e.g., cooling water, blowdown, condensate, alkaline cleaners, hydrostatic test water, etc.)
- Ensure discharges including storm water to surface water are permitted
- Ensure industrial discharges to the sanitary sewer system are authorized by the local POTW

Storm Water Enforcement Strategy Update

- “Non-filers”
- Industrial dischargers that do not comply with their permit conditions
- May seek civil penalties for noncompliance of up to \$32,500 per day for each day of violation.

Client Storm Water Issues

- Maintain Storm Water Pollution Prevention Plans
- Improve best management practices (BMPs) to minimize pollutant loading
- Improve annual training programs.
- Improve compliance with routine inspection programs

EPCRA (Title III of SARA) Hazardous Chemical Reporting

- SARA Section 311 – MSDSs Submittals
- SARA Section 312 - Tier One/ Two Report (March 1)
- SARA Section 313 - Form R Report (July 1)

Who Must Submit MSDSs & Tier Two Inventory?

- Facilities with hazardous chemicals present in amounts equal or exceed the minimum reporting threshold of 10,000 pounds
- Facilities with extremely hazardous substances (EHSs) in amounts equal or exceed the minimum reporting threshold of 500 pounds

Who Must Submit Form R s?

- Facilities that manufactured or processed \geq 25,000 pounds or otherwise used \geq 10,000 pounds of any 313 toxic chemical in a year.
- Facilities that manufactured, processed, or otherwise used \geq 100 pounds (10 pounds for highly toxic) of a persistent bioaccumulative toxic (PBT) chemicals (e.g., lead)

Civil and Administrative Penalties for Reporting Violations

- Under Section 311 - \$11,000 civil penalty for each violation.
- Under Section 312 or 313 - \$32,500 per violation per day.

Client EPCRA Issues

- Improve procedures for identifying hazardous substances in raw materials and products
- Ensure submittal of MSDSs under §311
- Ensure submittal of Tier II inventory form by March 1
- Ensure submittal of the Form R toxics release inventory form by July 1

SPCC Regulations

- Establish a program for preventing, preparing for, and responding to oil spills that occur in navigable waters of the United States
- Apply to facilities with an aggregate aboveground storage capacity greater than 1,320 gallons (excluding containers < 55-gal) and that have a reasonable expectation of a discharge to navigable waters of the US

What Types Of Oil?

- Petroleum; fuel oil; sludge; oil refuse; oil mixed with wastes.
- Fats, oils or greases of animal, fish, or marine mammal origin
- Vegetable oils, including oil from seeds, nuts, fruits, or kernels.
- Other oils and greases, including synthetic oils and mineral oils.

Client SPCC Issues

- Maintain accurate oil inventories
- Update SPCC Plans to comply with new rules by 8/17/04
- Provide secondary containment in oil use and storage areas
- Provide annual training to employees

RCRA

- RCRA Subtitle C establishes the regulatory structure for managing hazardous waste from the time it is generated until its ultimate disposal.

Primary Areas for Client

- Waste Identification
- Counting Waste
- Generator Requirements
- Universal Wastes
- Used Oil

Hazardous Waste Identification

- Process knowledge (chemical and physical properties; process, inputs, reactions) or laboratory analysis
- Routine testing (~5 years) is highly recommended to demonstrate that a material is non hazardous.
- Listed wastes (e.g., spent solvent F001)
- Characteristic wastes (Ignitable D001, Corrosive D002, TCLP D004→ D043)

Categories of Generators

- Large quantity generators (LQGs), $\geq 2,200$ pounds/month
- Small quantity generators (SQGs), > 220 and $< 2,200$ pounds/month
- Conditionally exempt small quantity generators (CESQGs), ≤ 220 pounds/month

Counting Waste

Do not include wastes that are:

- Managed immediately in elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities
- Recycled, without prior storage or accumulation, in an on-site process
- Spent lead-acid batteries managed under Part 266
- Universal waste managed under Part 273.
- Used oil managed under Part 279

Typical LQG Requirements

- 90-day accumulation units
- Satellite accumulation units
- Contingency plans
- Annual personnel training
- Waste minimization
- Air emission standards (VOCs)
- Fewer requirements for SQGs (e.g., less training and minimal plans).

Part 273 - Universal Wastes

- Batteries - nickel-cadmium and small sealed lead-acid batteries including electronic equipment, telephones, and emergency backup lighting
- Agricultural pesticides
- Thermostats - may contain up to 3 grams of mercury and are used in most buildings
- Lamps - may contain mercury or lead and include fluorescent lights, HID, neon, mercury vapor, high pressure sodium, and metal halide lamps.

Universal Waste Management

- Inform employees of proper handling and emergency procedures
- Manage in a way that prevents releases.
- Mark the date that waste was placed in the container
- Use labels or markings:
 - Waste or Used Batteries, Lamps, Mercury Thermostats, or Mercury-Containing Devices
- Accumulate for less than 1 year
- Send or take to destination facility.

“STATE ONLY” UNIVERSAL WASTES

- Aerosol Cans (CA, CO)
- Antifreeze (LA, NH)
- Ballasts (MD, ME, VT)
- Cathode Ray Tubes (CA, ME, MI, NH, RI)
- Electronic Devices and Electronic Components (CA, CO)
- Mercury-Containing Devices (CO, MA, MI, NH, PA, RI)
- Mercury Switches (CA, MI)
- Mercury Thermometers (MI)

Part 279 – Used Oil

- Used oil includes automotive lubricating oils, hydraulic fluids, compressor oils from refrigeration units, metal working oils, etc.
- Presumption that all used oil will be recycled until the used oil is disposed of or sent for disposal
- Used oil that is disposed of must be characterized and managed as hazardous if necessary

Rebuttable Presumption

- Used oil that contains more than 1,000 ppm of total halogens is presumed to have been mixed with a regulated halogenated hazardous waste (i.e., spent solvents), and is therefore subject to applicable hazardous waste regulations unless demonstrated otherwise
- Metalworking oils containing chlorinated paraffins and used refrigeration compressor oils containing CFCs are exempt from the rebuttable presumption

Mixtures of Used Oil and Hazardous Waste

- Mixtures of used oil and *listed* hazardous waste are regulated as hazardous waste
- Mixtures of used oil and an ignitable characteristic waste can be managed as used oil if no longer ignitable
- Mixtures of used oil and a characteristic waste (other than just ignitability) can be managed as used oil if no longer a characteristic waste

Mixtures of Used Oil with Products

- The blending of used oil generated in diesel-powered vehicles with diesel fuel is excluded from the processing and re-refining standards when the mixture is used in the generator's own vehicles as a fuel.

Primary Requirements for Client Facilities

- Must be stored in containers and tanks that are in good condition
- Containers and ASTs must be clearly marked with the words "Used Oil" ("Waste Oil" in PA)
- No time or quantity limitations are specified for storing used oil (1 year in PA)
- Must stop and contain a release, properly manage used oil or contaminated materials, and repair or replace the leaking container or tank.

Burning Oil

- Generators can burn their own used oil and DIY-generated used oil in used oil-fired space heaters without complying with regulations for used oil burners in Part 279.
- The heaters must have a maximum capacity of 0.5 million Btu per hour or less and the combustion gases must be vented into the ambient air.

DOT Hazmat Rule

- 49 CFR 107, 171 - 177
- Transportation of Hazmat by:
 - Rail car, aircraft & vessel
 - Motor Vehicle.

Hazmat Training

- For all employees that:
 - Classify hazardous materials (Hazmats)
 - Put Hazmats in packages
 - Mark and label Hazmat packages
 - Prepare or sign shipping papers/manifests
 - Load or unload Hazmats
- Includes new security awareness elements

Registration

- Required for Client facilities that ship:
 - Hazmats \geq 3,500 gallons or 468 cubic feet.
 - One class of Hazmats for which placarding is required.

DOT Site Security

- Written security plan now required for DOT registered facilities:
 - Purpose is to identify and reduce security risks related to the transportation of hazardous materials in commerce
 - Requires in-depth security training

Client Environmental Management in 2003

- Blast media identified as hazardous due to elevated cadmium levels
- Containment in raw and waste material handling, recycling & storage areas limits potential for a release to the environment and potential for fines/imprisonment
- Treatment and discharge of oily wastewater to POTW may significantly reduce operating costs over existing evaporation system
- Storm water discharges now permitted or certified as “No Exposure”