

Environmental Update for Small Business

**Iowa Environmental Conference
September 16, 2009**

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Purpose of Presentation

- To briefly review common environmental regulations applicable to small/medium sized businesses and
- Advise where additional assistance is available

Regulations to be Addressed

- ☞ Hazardous and Solid Waste**
- ☞ Used Oil**
- ☞ Wastewater**
- ☞ Storm Water**

Enforced at federal, state and/or local levels

Hazardous and Solid Waste Regulations

- ☛ Often referred to as RCRA**
- ☛ Apply to all private and public industrial, commercial and institutional facilities**
- ☛ Household waste is the only exemption**

Waste Generator Responsibilities

- Determine which facility materials are, in fact, wastes
- Categorize each waste as hazardous or nonhazardous
- Determine the facility's monthly hazardous waste generation rate and on-site storage quantity
- Determine the applicable hazardous waste generator category and corresponding set of regulations

Waste Determination

- **Simple right?**
- **EPA definition – “any discarded material that is not excluded by 40 CFR 261.4(a) or that is not excluded by variance granted under 40 CFR 260.30 and 40 CFR 260.31”**
- **261.4(a) - Specific exclusions** (domestic sewage, nuclear materials, chromium waste from tanning, etc.)
- **260.30 & 31- EPA granted variances for specific materials to be recycled or reclaimed**

Hazardous/Nonhazardous Waste Categorization

- Step 1 - Determine if the waste is **listed** per 40 CFR 261.31 – 261.33
- Step 2 – Determine if the waste exhibits one of 4 **characteristics** per 40 CFR 261.21 – 261.24

“Characteristic” Hazardous Wastes

Ignitability Flashpoint < 140° F (liquids)
Fails burn-rate test (solids)

Corrosivity pH ≤ 2 or ≥ 12.5

Reactivity React violently with air or water; Are capable of detonation or explosive reaction; or generate toxic gases, vapors or fumes when mixed with water or air

Toxicity Wastes that meet or exceed regulatory levels established for any one of 40 regulated contaminants

Example Toxicity Parameters

Arsenic

Barium

Cadmium

Chromium

Lead

Mercury

Selenium

Silver

Benzene

Carbon Tetrachloride

Chloroform

Methyl Ethyl Ketone

Tetrachloroethylene

Trichloroethylene

Lindane

Silvex

Hazardous Waste Inventory

- **Accurately record**
 - **Monthly generation rate**
 - **On-site storage quantity**
- **Maintain these records**
 - **Determine and document applicable generator category**
 - **Establish a baseline from which to gauge PP activities**

Hazardous Waste Generator Categories

- **Conditionally Exempt Small Quantity Generators (CESQG)**
- **Small Quantity Generators (SQG)**
- **Large Quantity Generators (LQG)**

CESQGs

- **Generate < 220 lbs of hazardous waste each month; AND**
- **Never accumulate/store more than 2,200 lbs of hazardous waste on site**
- **Least restrictive category with regard to applicable regulations**

CESQG Requirements

- **Maintain a hazardous waste inventory to verify category**
- **Store waste in a sealed and labeled container**
- **Dispose of waste through EPA-approved means**

SQG

- **Generate between 220 and 2,200 lbs of hazardous waste each month; AND**
- **Never accumulate/store more than 13,200 lbs of hazardous waste on site**
- **Subject to more restrictive regulatory requirements**

SQG Requirements

- **Must have an EPA generator I.D. Number**
- **Storage time limit of 180 days (270 days if transported > 200 miles)**
- **Label and date drums**
- **Weekly storage area inspections**
- **Employee training**
- **Emergency response agency notification**
- **Spill equipment**
- **Communication equipment**

LQG

- **Generate >2,200 lbs of hazardous waste a month; OR**
- **Accumulate/store more than 13,200 lbs of hazardous waste on site**
- **Most restrictive category with regard to applicable regulations**

LQG Requirements

- **All SQG requirements**
- **90-day storage limit**
- **Bi-annual reporting**
- **Formal contingency plan**

Transportation

- **Containers must be labeled and vehicle placarded per DOT requirements**
- **Shipment must be accompanied by a HW manifest and LDR**
- **Shipping papers must be kept on file for at least 5 years**
- **Must register with DOT for shipments > 1,000 pounds**

Used Oil

- **Used oil is regulated under a specific set of EPA regulations if recycled or burned for energy recovery and it has not been mixed with a hazardous waste - 40 CFR Part 279**
- **Used oil should not be included in a facility's hazardous waste inventory**

Used Oil Management Options

- Provide to a used oil Marketer
- Burn on site in a used oil furnace
- Provide to a state-recognized collection center
- Provide directly to a commercial burner (subject to additional regulation)
- Containers must be labeled “Used Oil”

Nonhazardous Solid Waste

- **Must maintain documentation of credible waste determination**
 - **MSDS**
 - **Thorough knowledge**
 - **Lab Analysis**
- **Landfill approval**
- **Special Waste Authorization (SWA)**

Wastewater

- **Often referred to as CWA**
- **Applies to wastewater discharges to:**
 - **Publicly Owned Treatment Works (POTW) – Sanitary Sewers**
 - **Septic Systems**
 - **Surface Water**

POTW Discharge

- General regulations found in Title 40 of the Code of Federal Regulations (CFR), Part 403.5.
- These regulations prohibit:
 - Pollutant which may pass through or cause interference with the treatment process
 - Explosives/Flammables
 - Corrosives
 - Reactives that create toxic gases

POTW Discharge

- **Additional regulations apply to specific processes Title 40 CFR 433 (electroplating, metal finishing, etc.)**
- **These regulations include:**
 - **Initial and period monitoring and reporting**
 - **Established pollutant concentration limits (i.e., zinc at 1.48 mg/l)**

Septic System Discharge

- ✓ Acceptable for sanitary waste only; commercial and industrial waste prohibited**
- ✓ DNR/County permitting required**
- ✓ EPA registration possible (as an underground injection well)**

Surface Wastewater Discharge

- ✓ **Formal permit required (NPDES)**
- ✓ **Treatment likely**
- ✓ **Periodic monitoring and reporting**

Storm Water

- ✓ **Regulations apply to facilities based on their SIC code (most manufacturers, salvage, fleet maintenance, etc.)**
- ✓ **Must prepare a Storm Water Pollution Prevention Plan**
- ✓ **Publish public notices**
- ✓ **Apply for a permit (NOI)**
- ✓ **Monitoring may be required**



**For Additional Assistance
Contact:**

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