WHAT IS A HAZARDOUS WASTE?

Kansas Department of Health and Environment
Bureau of Waste Management
REGULATORY BACKGROUND

• Resource Conservation & Recovery Act (RCRA) 1976
• EPA implemented hazardous waste regulations in 1980
• Kansas Hazardous Waste Program began in 1982
Why???
Why???
Why???
GENERATOR’S RESPONSIBILITY

• Generators must:
  – Identify all solid and hazardous waste streams
  – Determine quantity of each hazardous waste generated over time (no averaging)
  – Ensure proper handling and disposal
WHAT IS A SOLID WASTE?

• Solid Waste is any discarded material that is not excluded or covered by a variance
• Solid Waste can be:
  – Liquid
  – Semi-Solid
  – Gas
WHAT IS HAZARDOUS WASTE?

• Must first be a solid waste
• A material is considered discarded if it is:
  – Abandoned
  – Recycled
  – Considered inherently waste-like
WHAT IS HAZARDOUS WASTE?

• Materials are considered abandoned if:
  – Disposed
  – Burned or incinerated
  – Accumulated, stored, or treated

• Materials are solid waste if they are recycled or are accumulated, stored, or treated prior to recycling
HAZARDOUS WASTE DETERMINATION

• Is the waste specifically exempted (40 CFR 261.4)?
  – Discharged to the POTW or a permitted NPDES outfall
  – Mining overburden
  – Household Wastes
  – Agricultural Waste
HAZARDOUS WASTE DETERMINATION

• Does the waste appear on the F, K, P, or U lists?
  – F-Listed (Non-specific sources)
  – K-Listed (Specific sources)
  – P-Listed (Acutely hazardous discarded commercial chemicals-regulated at 2.2 lbs)
  – U-listed (Discarded commercial chemicals)
CHARACTERISTIC

• Does the waste meet one of the four characteristics?

Ignitability (D001)  Corrosivity (D002)
(Less than 140 °F)  (pH ≤2 or ≥ to 12.5)

Reactivity (D003)  Toxicity (D004 – D043)
TOXICITY

• Analyze using Toxicity Characteristic Leaching Procedure (TCLP) for one or all of the following:
  – Heavy Metals
  – Volatile Compounds
  – Pesticides/Herbicides
HAZARDOUS WASTE DETERMINATION

• Determinations can be made in two ways:
  – Knowledge of process (or Generator Knowledge)
    • MSDS Sheets (may not provide all info)
  – Testing by KDHE Certified Laboratory

http://www.kdhe.state.ks.us/envlab/
SOLID WASTE DISPOSAL

- Municipal Solid Waste Landfill (MSW) & Small Arid Landfill (SAL)
  - No liquids allowed
  - Waste may be brought directly or through a transfer station
  - Special Waste Disposal Authorization (SWDA) may be required

- Construction and Demolition Landfill (CDL)
  - Only Construction & Demolition Waste

- Industrial Landfill
  - Specific waste from a specific facility
UNIVERSAL WASTES

• Applicable to:
  – Certain batteries
  – Certain pesticides
  – Mercury containing thermostats
  – Certain lamps

• Two types of Universal Waste Handlers
  • Small Quantity (< 11,000 lbs)
  • Large Quantity (11,000 lbs or more)
USED OIL

• Used oil that is recycled for energy or material recovery is not subject to the HW regulations

• Used oil can be burned in a space heater if:
  – The heater burns only used oil generated on-site or from Household do-it-yourselfers;
  – The heater is designed to have a maximum capacity of not more than 0.5 million Btu’s per hour; and
  – The combustion gases from the heater are vented to the outside air.
USED OIL

• Used oil cannot be discharged onto the ground, into waterways or used as sealant, coating, or dust control agent for roads or parking lots
IMPENDING HAZARDOUS WASTE CHANGES

• Mixtures of hazardous waste and used oil will be regulated more consistently with EPA (40 CFR 279.10(b)(2))

• Quantity determination - Waste that will be recycled on-site (ex. solvent in a solvent still) will no longer have to be counted each time it is recycled, only on the first time that it will be recycled. 40 CFR 261.5

• Accumulation time limits for Kansas Generator’s will be imposed so that we are at least as stringent as EPA
CONTACT INFORMATION

• BWM web site:
  www.kdhe.state.ks.us/waste

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QUESTIONS???