

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

As the state's environmental protection and public health agency, KDHE promotes responsible choices to protect the health and environment of all Kansas.

Through education, direct services and the assessment of data and trends, coupled with policy development and enforcement, KDHE will improve health and quality of life. We prevent illness, injuries and foster a safe and sustainable environment for the people of Kansas.



How to Classify Your 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
- Major revisions to Kansas Hazardous Waste Program in 2009 (estimated)

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 of all wastes

HAZARDOUS WASTE DETERMINATION

- First, is it a waste? A material is considered discarded if it is:
 - Abandoned (disposed, burned, accumulated, treated, or stored)
 - Recycled
 - Considered inherently waste-like

Abandoned?



HAZARDOUS WASTE DETERMINATION

- Second, is it a SOLID WASTE ?

- Solid waste can be:

- Liquid
 - Semi-Solid
 - Gas



- Materials are solid waste if they are recycled or are accumulated, stored, or treated prior to recycling.

HAZARDOUS WASTE DETERMINATION

- Third, is the waste specifically exempted (40 CFR 261.4)?
 - Discharged to the POTW or a permitted NPDES outfall
 - Mining overburden
 - Household waste
 - Agricultural waste



HAZARDOUS WASTE DETERMINATION

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

<http://www.kdhe.state.ks.us/envlab/>



HAZARDOUS WASTE DETERMINATION

- Is it “Listed” Hazardous Waste?
- Is it “Characteristic” Hazardous Waste?

LISTED HAZARDOUS WASTE

- 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)

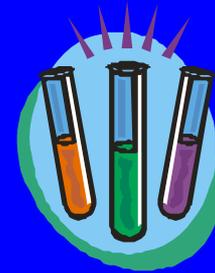


CHARACTERISTIC HAZARDOUS WASTE

- Does the waste meet one of the four characteristics?



Ignitability (D001)
(Less than 140 °F)



Corrosivity (D002)
(pH ≤ 2 or ≥ 12.5)



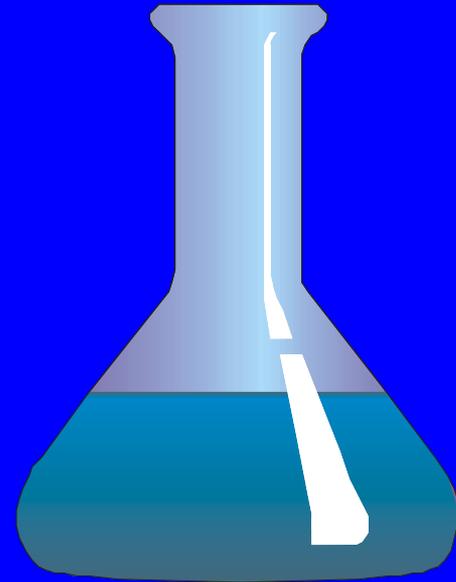
Reactivity (D003)



Toxicity (D004 – D043)

TOXICITY

- Analyze using Toxicity Characteristic Leaching Procedure (TCLP) for one or more of the following:
 - Heavy Metals
 - Volatile Compounds
 - Pesticides/Herbicides



DOCUMENT THE DETERMINATION

- Document how each waste determination was made.
- Include copies of all supporting documentation that was used (analytical reports, design plans, MSDSs, etc.).
- Keep documentation for 3 years from the date the waste was last shipped off site.

UNIVERSAL WASTES

(a subset of hazardous waste)

- Applicable to:
 - Certain batteries
 - Certain pesticides
 - Mercury containing equipment
 - Certain lamps (bulbs)
- Two types of Universal Waste Handlers
 - Small Quantity (< 11,000 lbs)
 - Large Quantity (11,000 lbs or more)

HAZARDOUS MATERIALS VS HAZARDOUS WASTES

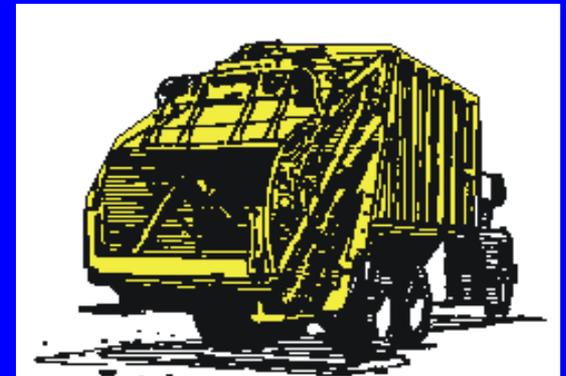
- Medical Waste – waste generated in connection with human or animal care, which is potentially capable of causing disease or injury. Not necessarily a hazardous waste, but probably a “special waste”.
- Used Oil – Used oil that is recycled for energy or material recovery is not subject to the hazardous waste regulations.

SPECIAL WASTE DISPOSAL AUTHORIZATION (SWDA)

- SWDA is required for:
 - Any industrial waste that has to be segregated at the point of generation or requires special handling at the landfill
 - Any waste arriving at the landfill in drums (barrels)
 - Any waste from a remediation site or a remedial system
- Generator must fill out special waste disposal request form found at <http://www.kdheks.gov/waste/> and send it to KDHE via swda@kdhe.state.ks.us or fax it to 785-296-8909 or 785-296-8721.

SOLID WASTE DISPOSAL

- Municipal Solid Waste Landfill (MSWLF) and 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 and demolition waste
- Industrial Landfill
 - Specific waste from a specific facility



CONTACT INFORMATION

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QUESTIONS???