

# **Solid Waste Definition**

# Course Objectives

- **Define “solid waste”**
- **Identify solid waste exclusions**
- **Determine which recyclable materials are solid wastes**
- **Use 40 CFR 261.2, Table 1, as a tool for making solid waste determinations**

What is a “solid waste”?

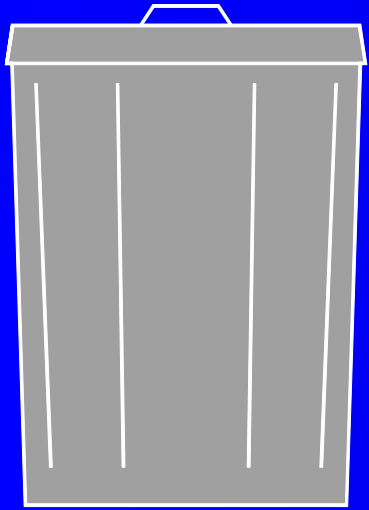


# What Is “Solid Waste?”

## The Law Says It Is

**“Any garbage, refuse, sludge. . ., and any other *discarded* material, including: *solid, liquid, semisolid or contained gaseous material*, resulting from industrial, commercial, mining, and agricultural operations and from community activities. . .”**

# The Regulation Says A Solid Waste Is:



- ***Any discarded material not excluded by regulation or variance.***
- ***A discarded material is one that has been:***
  - **abandoned**
  - **recycled**
  - **considered inherently waste-like**

# Abandoned Materials Are

- **Disposed of**
- **Burned or incinerated**
- **Accumulated, stored, or treated before or in lieu of disposal, burning, or incineration**

# Recycled Materials

- **Uses constituting disposal (i.e., applying to land or adding to other materials that are applied to land)**
- **Burning for energy recovery**
- **Reclamation (processing to recover usable product)**
- **Speculative accumulation before recycling**

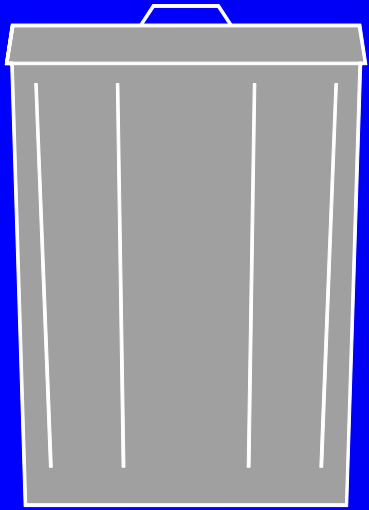
# Inherently Waste-Like Materials

- **Certain wastes from non-specific sources (hazardous waste nos. F020-F023, F026, F028)**
- **Wastes fed to a halogen acid furnace**

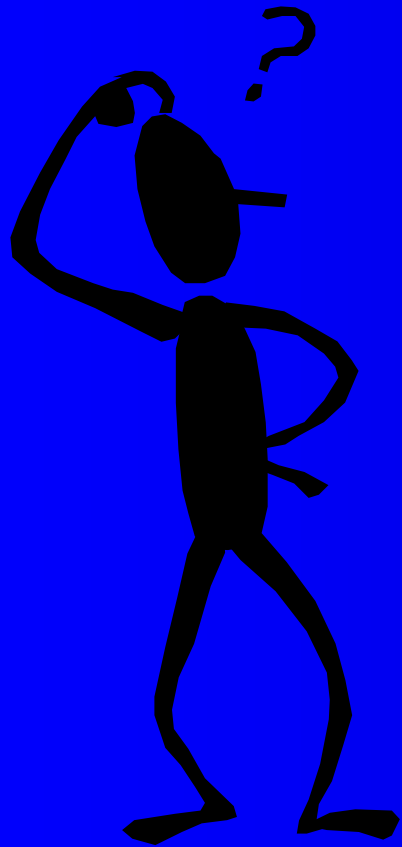


# But What Does This Really Mean?

## Solid Wastes Are Materials That:



- **Can no longer serve their original intended purpose**
- **Are thrown away**
- **Are stored and managed to facilitate their disposal**
- **Are discarded from one use but are accumulated for reuse elsewhere (with a few exceptions)**



Which used items are  
not solid wastes?

# What Is *Not* A Solid Waste?

- **Domestic sewage (untreated) and mixtures of sewage and other materials that pass through a POTW**
- **Industrial wastewater discharges that are point sources under NPDES**
- **Source, special nuclear, and by-product material subject to the AEA, as amended**
- **Materials recycled in a closed loop**

# What Is *Not* A Solid Waste? Materials Recycled In A Close Loop

**The materials that are reclaimed must be returned to the original process in which they were generated and involve:**

- **only tank storage, which must be connected by pipes to the rest of the process;**
- **no controlled flame combustion in recovery process;**
- **no storage longer than 12 months; and**
- **no use of reclaimed materials as fuel or in land application.**

# What is *Not* A Solid Waste? (cont.)

- **Irrigation return flows**
- **Materials from in-situ mining techniques**
- **Pulping liquors that are reclaimed**
- **Spent sulfuric acid used to produce virgin acid**
- **Reclaimed wood preserving solutions/wastewaters**
- **Recycled wastes from the coke by-product process**
- **Nonwastewater splash condenser dross residue**
- **Recovered oil from petroleum refining, exploration, production, and transportation thereto**

# What is *Not* A Solid Waste? (cont.)

Effective August 11, 1997

- **Excluded scrap metal being recycled, which includes:**
  - processed scrap metal,
  - unprocessed home scrap metal, and
  - unprocessed prompt scrap metal.
- **Shredded circuit boards being recycled, provided they are:**
  - stored in containers sufficient to prevent release
  - free of mercury switches/relays and nickel-cadmium batteries

# What Is *Not* A Solid Waste? Wastes Granted A Variance

**Regulators may grant variances from the definition of solid waste for materials that:**

- **are accumulated speculatively without sufficient amounts being recycled**
- **are reclaimed and then reused within the original production process in which they were generated**
- **have been reclaimed but must be reclaimed further before the materials are completely recovered**

How Do We Determine Which  
Recyclables Are Solid Waste?

**Recyclable Materials *May Or May*  
*Not Be Solid Waste, Depending On*  
*The Specific Material And Method*  
*Of Recycling***



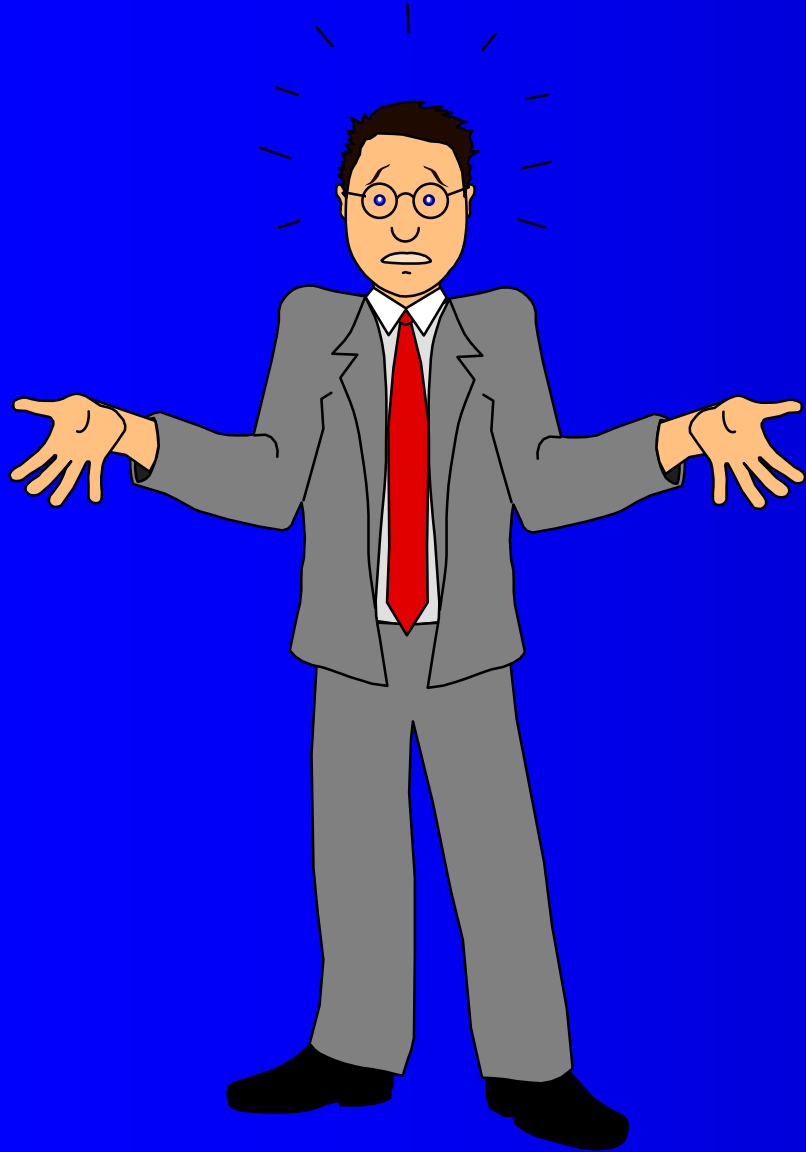
# What Do We Know For Sure? Materials Are Solid Wastes When *Recycled* Through:

- **Uses constituting disposal (i.e., applying to land or adding to other materials that are applied to land)**
- **Burning for energy recovery**
- **Reclaiming (processing to recover usable product)**
- **Speculatively accumulating before recycling**

# What Do We Know For Sure? Materials Are Not Solid Waste When Recycled IF They Are

- **Used or reused as ingredients in an industrial process to make a product, provided they are not being reclaimed**
- **Used or reused as substitutes for commercial products**
- **Returned to the original process from which they are generated without first being reclaimed or land disposed (must substitute for raw material feedstock in a process that uses mainly raw materials as feedstocks)**

Are You Confused?



How Do We Sort Out  
Which Other Recyclable  
Materials Are Solid  
Wastes?

Table 1, 40 CFR 261.2,  
has some answers

# Table 1 Addresses The Following Wastes That May Be Beneficially Reused:

- **spent materials**
- **sludges**
- **by-products**
- **commercial chemical products**
- **scrap metal**

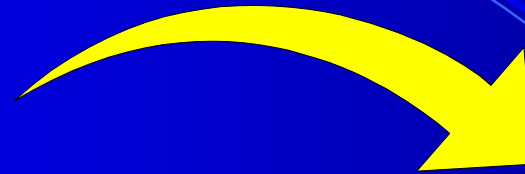
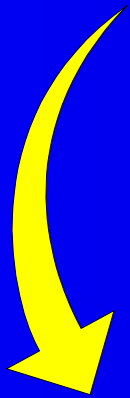
# Try Out Your Solid Waste Definition Knowledge

**Spent Solvent**

**Reclaim**

**Reuse Directly**

**Reuse**



# Summary Of The Solid Waste Definition

- **Solid wastes are discarded materials that are not specifically excluded from the definition by regulation or a variance**
- **Recyclable materials are often solid wastes**
- **Solid wastes must be properly managed by either:**
  - **determining that they are hazardous wastes and managing them accordingly or**
  - **verifying they are solid wastes and managing them according to solid waste management requirements**

# Definition of Hazardous Waste

