

# *Definition of Solid Waste*

## *What Happened?*

### *What Now?*

*ISRI Safety & Environmental Council Meeting*  
*Marriott Plaza, San Antonio, Texas*  
*November 10, 2015*

David L. Waggoner, Ph.D.  
Director of Environmental Management, ISRI



**ISRI**

Voice of the Recycling Industry

Institute of  
Scrap Recycling  
Industries, Inc.

# Survey Questions

- What is the Definition of Solid Waste (DSW)?
- Why is DSW important?
- How important is DSW?

# Overview

- Background on Definition of Solid Waste (DSW)
- What Happened?
- Proposed DSW Rule
- New DSW Rule
- ISRI Guidance
- DSW as a State / Local Issue
- Questions

# Definition of Solid Waste: Background

- Defined in Resource Conservation and Recovery Act (RCRA)
  - “The term ‘solid waste’ means any garbage, refuse, sludge from a waste treatment plant . . . and **other discarded material**, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial . . . operations . . .”
- Dependent upon meaning of “discarded”
- DSW interpreted by EPA differently in two sets of RCRA regulations
  - Solid waste (“Subtitle D”) regulations
  - Hazardous waste (“Subtitle C”) regulations

# Solid Waste (“Subtitle D”) Regulations

- Statutory DSW
- Mainly administered at state/local level
- Mainly about landfills and solid waste management plans
- Guarantee ability of local government to set “long-term contracts for the supply of solid waste to resource recovery facilities”
- **Result: Confusion and geographic variation about what is solid waste**

# Hazardous Waste (“Subtitle C”) Regulations

- Not statutory DSW, but a process with exclusions and exemptions.
- Address solid waste that is “hazardous” (e.g., toxic, ignitable).
- Mainly administered at federal level via delegated state authority
- “. . . [do] not apply to materials (such as non-hazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes and that are recycled.”
- **This DSW applies mainly to recycled scrap metal and circuit boards.**

# Definition of Solid Waste: What Happened?

- <1997 Scrap metal being recycled exempted from federal regulation as a hazardous waste.
- 1997 New DSW exclusions for
  - Recycled processed, home, and prompt scrap metal
  - Recycled prepared shredded circuit boards
- 2007 EPA proposes DSW recycling exclusions for certain hazardous secondary material unrelated to scrap metal and circuit boards.
- 2008 EPA finalizes rule and then gets sued.
- 2009 EPA settles lawsuit and agrees to revisit 2008 Final Rule.
- 2011 EPA proposes revised rule to replace 2008 Final Rule.

# Recycling and RCRA Regulations

- Solid Waste (“Subtitle D”) Regulations
  - Origin of “Flow Control”
  - Becoming more important as states try to improve their “recycling rates”.
  
- Hazardous Waste (“Subtitle C”) Regulations
  - Recycling DSW exclusions
    - Processed, home, and prompt scrap metal
    - Shredded circuit boards conditionally
  
  - Recycling DSW exemptions
    - Unprocessed scrap metal
    - Spent lead-acid batteries
  
- **ISRI: “Scrap is not waste. Recycling is not disposal.”**



# 2011 Proposed DSW Rule

- New mandatory “Legitimacy Criteria” for recycling
  - “Legitimacy Criteria” previously existed as EPA policy.
- New “Legitimacy Variance”
- New “Contained” standard for recycled materials
- New notification requirements for certain recycled scrap materials
- “Sham Recycled” as part of DSW

# 2011 Proposed “Legitimacy Criteria”

- Four Legitimacy Criteria to be met and documented
  1. “Useful contribution”
  2. “Valuable product”
  3. “Managed as a valuable commodity” compared to analogous material, or otherwise “contained”
  4. “Comparable or lower” level of hazardous constituents compared to analogous material

# 2011 Proposed “Legitimacy Criteria”

- Legitimacy Variance available if Criterion 3 and/or 4 not met
  - Petition to Regional Administrator with uncertain outcome and timing
- Full hazardous waste regulation if not “legitimate” and without variance
- No indication of trigger, frequency, and detail for legitimacy documentation

# Problems with 2011 Proposed DSW Rule

- Reversed EPA's long-standing position that recycled scrap metal and prepared shredded circuit boards are not waste.
- Exceeded EPA's RCRA authority by regulating undiscarded scrap metal and shredded circuit boards.
- Supported by flawed Market Forces, Environmental Problems, and Environmental Justice Studies
- Failed to identify and properly assess potential regulatory impact
- Unwise policy choice that would discourage recycling, cripple scrap recycling industry, and harm environment.

# ISRI Responded to 2011 Proposed DSW Rule



Institute of  
Scrap Recycling  
Industries, Inc.

- ISRI Board made response to Proposed DSW Rule highest priority.
- Team of attorneys and experts assembled and directed by ISRI-member task force, supported by ISRI staff.
- Developed detailed comments, supported by three rebuttal studies, within 60-day comment period.
- Members given information and encouraged to submit their own comments.
- ISRI and 50+ ISRI members submitted comments by deadline.
- ISRI met with EPA and OMB staff after comment period.

# New DSW Rule

- Effective July 13, 2015
- Good news — Not like Proposed DSW
  - Pre-2008 recycling exclusions and exemptions (e.g., scrap metal) unchanged
  - No upfront approval or registration required
  - Vast majority of recyclers not required to make any operational changes
- However — Four “Legitimacy Criteria” Codified at 40 CFR §260.43(a)
  - **Must be prepared to demonstrate being a “legitimate recycler” via written documentation**
- Not being a “legitimate recycler” means being a “sham recycler”.
  - “Sham recycling” is hazardous waste disposal.
- Yet, pre-2008 recycling exclusions and exemptions may be changed in future rule.

# ISRI Guidance on New DSW Rule

## The “New” Four Questions For “Legitimate Recyclers”\*

### Material / Criterion

1. Did you pay for the scrap materials that you accepted for recycling (i.e., are they valuable)?
2. Are you managing those materials to prevent them from being discarded?
3. Did you sell the output of the recycling process?
4. Does the output that you sold meet a commodity specification?

Input / Factor 1

Input / Factor 3

Output / Factor 2

Output / Factor 4

\* Source: ISRI’s 2015 DSW Compliance Guidance

# Factor 1 (40 CFR §260.43(a)(1))

## Documenting Incoming Material Recycled into Valuable Products

- Prepare document describing inbound scrap bought, products produced and sold, and use of products as substitutes in manufacturing.
- Maintain copies of scale tickets (input) and sales invoices (output).
- Keep records of proper disposal of waste from recycling operations.



## Factor 3 (40 CFR §260.43(a)(3))

### Documenting Incoming Material Handled as Valuable Material

- Incoming Material must be handled either similarly to material that it displaces, or “contained”, so as not to escape into the environment
  - Scrap metal piles are allowed, but need to be identifiable (e.g., site map).
  - Any physical container used must be in good condition, designed to prevent releases, and labeled to identify its contents.
- Documentation
  - A written Stormwater Pollution Prevention Plan (SWPPP)
  - A dust management program
  - Clear housekeeping procedures to show incoming material handled as valuable raw material.

## Factor 2 (40 CFR §260.43(a)(2))

### Documenting Outbound Material Has Value and is Sold or is Otherwise an Effective Substitute for Another Material

- Maintain invoices and receipts from sale of recycling materials.
- Keep records for at least three years and for as long as six.
  - Recommended retention time, but not in the regulation
- Provide explanation why any material that is not sold, or results in a “negative dollar” transaction, is an effective substitute for another material or otherwise has some intrinsic value for recycling.

## Factor 4 (40 CFR §260.43(a)(4))

### Documenting Outgoing Material Meets Industry Commodity Specifications

- Keep record or copies of the specifications that your products meet.
  - ISRI's Scrap Specifications Circular ([www.isri.org/specs](http://www.isri.org/specs))
  - Particular mill / consumer specifications

# Where Does New DSW Rule Apply?

- New DSW Rule is a federal rule.
- Generally, the DSW exclusions and exemptions do not take effect unless and until a state adopts them.
- Applicable in Idaho, Illinois, New Jersey, and Pennsylvania.
- Other states need to adopt those parts of the New DSW Rule that are more stringent than their current regulations.
- While the timing of broader state adoption is unclear, it is best to be prepared with the documentation.

# DSW Becoming State/Local Issue: Trends

- Federal Activities

- U.S. EPA's Sustainable Materials Management (SMM) Program
  - Successor to MSW Characterization Program, but broader in scope
- U.S. EPA's State Data Measurement Sharing Program (SMP)
  - National rollout of Re-Trac Database for State Recycling Programs

- State Activities

- Increasing concern about states' recycling rates.
  - Usually a lack of municipal recycling programs
- Looking to improve recycling statistics . . . by any means
  - Actual improvement in recycling
  - Statistical "improvement" in recycling

# DSW as a State/Local Issue

- To improve recycling statistics, states looking to include private-sector recycling by forcing private-sector recyclers to report

$$\frac{\text{Muni. Recy. Obtained}}{\text{Muni. Mat. Collected}} < \frac{\text{Muni. Recy. Obtained} + \text{Priv. Recy. Out}}{\text{Muni. Mat. Collected} + \text{Priv. Recy. In}}$$

$$\text{Example: } \frac{1}{4} = 25\% < \frac{1 + 0.9}{4 + 1} = 38\%$$

- States trying to use RCRA authority to coerce recyclers (as handlers of solid waste) to report their recycling activity.
  - Connecticut — Scrap metal reporting under “Solid Waste Management”
  - Michigan — Current activity on reporting requirements
  - Washington — Recyclers fighting reporting as “Intermediate Solid Waste Handling Facilities”

# DSW as a State Issue: Washington

From Washington State Statute (WAC 173-350-100):

- "Solid waste" or "wastes" means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to
  - Garbage
  - Rubbish
  - Ashes
  - Industrial wastes
  - Swill
  - Sewage sludge
  - Demolition and construction wastes
  - Abandoned vehicles or parts thereof
  - Contaminated soils and contaminated dredged material, and
  - **Recyclable materials.**
- "Recyclable materials" means those solid wastes that are separated for recycling or reuse, including, but not limited to, papers, metals, and glass, that are identified as recyclable material pursuant to a local comprehensive solid waste plan.

- SMM Objectives
  1. Decrease the disposal rate, which includes **source reduction, reuse, recycling** and **prevention**;
  2. Reduce the environmental impacts of materials across their life cycle;
  3. Increase socio-economic benefits; and
  4. Increase the capacity of state and local governments, communities and key stakeholders to adopt and implement SMM policies, practices and incentives.
  
- SMM Strategic Priorities
  - The Built Environment
  - Sustainable Packaging
  
- SMM Additional Emphasis Areas
  - Sustainable Electronics Management
  - Life Cycle Assessment and SMM International Efforts
  - Overarching Measurement Efforts



# DSW as a State/Local Issue

- These trends threaten to blur line between non-waste and waste activities and to pull recyclable materials into DSW.
- **ISRI needs your help to identify states and localities where recyclers are reporting or efforts are underway to compel recyclers to report.**

# Discussion

# Thank you!

**David L. Wagger, Ph.D.**  
**Director of Environmental Management**  
**1615 L Street, NW, Suite 600**  
**Washington, DC 20036**  
**(O) 202-662-8533**  
**(F) 202-626-0933**  
**(M) 202-288-2616**  
**DavidWagger@isri.org**