

Environmental Justice Analysis of the Definition of Solid Waste Final Rule

Briefing for SBA Small Business
Roundtable

March 19, 2010



Intent of the October 2008 Final DSW Rule

- To define when hazardous secondary materials being recycled are discarded and are thus regulated by EPA.
- To encourage legitimate reclamation of hazardous secondary materials.

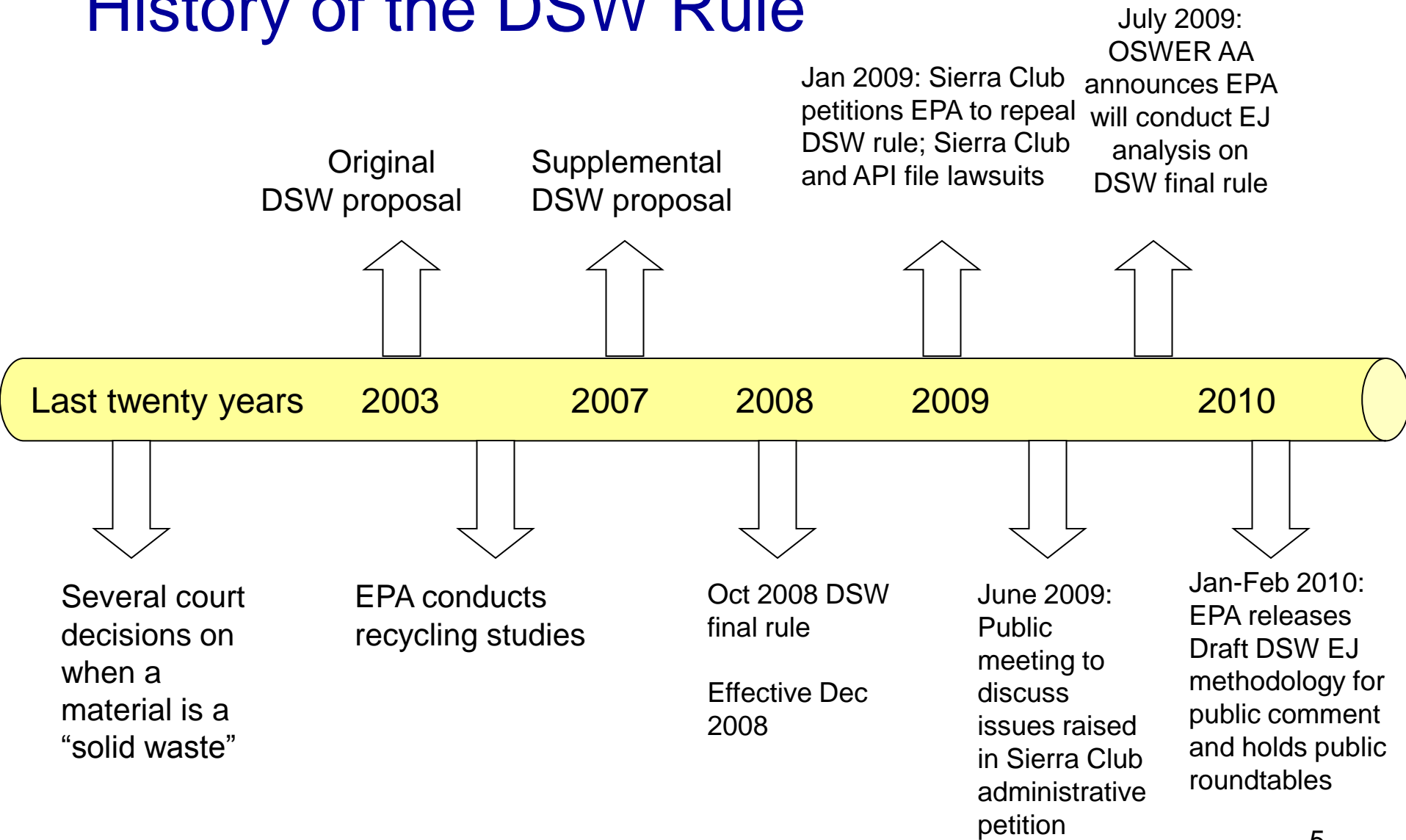
Basic Facts of the DSW Rule

- Only applies to “**hazardous secondary materials,**” which are secondary materials that, when discarded, would be hazardous wastes.
- Is limited to reclamation, and does not include burning for energy recovery or “use constituting disposal” (i.e., used directly on the land).
- DSW is an **optional** rule:
 - RCRA authorized states can choose to adopt the rule.
 - Facilities in states that adopt can choose to manage hazardous secondary materials under the rule.

Background of the DSW Rule

- Under the Resource Conservation and Recovery Act (RCRA), EPA has the authority to regulate solid wastes. RCRA defines solid waste as:
 - “...any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and *other discarded material*... resulting from industrial, commercial, mining, and agricultural operations, and from community activities...” (RCRA Section 1004 (27) (emphasis added)).
- A key issue since the 1980’s has been whether RCRA provides EPA the authority to regulate recycling or reuse of hazardous secondary materials and, if so, when such recycling or reuse constitutes “discard” and therefore is potentially subject to RCRA regulation.

History of the DSW Rule



Jan 2009: Sierra Club petitions EPA to repeal DSW rule; Sierra Club and API file lawsuits

July 2009: OSWER AA announces EPA will conduct EJ analysis on DSW final rule

Four major components of final rule:

1. ***Under the Control of the Generator Exclusion*** Self-implementing exclusion for materials generated and reclaimed under the control of the generator. Includes reclamation performed on-site, at the same company, or under specific types of toll manufacturing agreements. Materials must be legitimately recycled, contained, not speculatively accumulated, and generators must submit biennial notifications.
2. ***Transfer-based Exclusion***
Self-implementing exclusion for materials generated and transferred to another company for reclamation. Includes all requirements of the generator-controlled exclusion plus additional recordkeeping. Generators must audit reclaimers without permits and reclaimers must have financial assurance.
3. ***“Legitimate” Recycling Provision***
4. ***Non-waste Determination Procedure***
Materials that are non-wastes (determined through a petition process).

Major Differences Between Hazardous Waste Regulations & DSW

Hazardous Waste Regulations	DSW Conditions
<ul style="list-style-type: none"> • RCRA permit for generators storing >90 days • RCRA permit for recyclers who store • No permit for recyclers who do not store 	<ul style="list-style-type: none"> • No permit for generators < spec accum • Recyclers and intermediate storage facilities: <ul style="list-style-type: none"> – RCRA permit, or – “reasonable efforts” audit by generator
<ul style="list-style-type: none"> • Technical tank and container standards • No land management 	<ul style="list-style-type: none"> • Materials must be “contained” and not released to the environment • Land management OK in some cases
<ul style="list-style-type: none"> • Hazardous waste manifest • Retain for 3 years 	<ul style="list-style-type: none"> • Records of off-site shipments and confirmations of receipt • Retain for 3 years
<ul style="list-style-type: none"> • Emergency plan and coordinator • Test and maintain emergency equipment • Personnel training 	<ul style="list-style-type: none"> • No specific requirements • OSHA and EPCRA apply
<ul style="list-style-type: none"> • Public participation part of permitting 	<ul style="list-style-type: none"> • No public participation requirements
<ul style="list-style-type: none"> • Financial assurance for permitted facilities • None for recyclers who don’t store 	<ul style="list-style-type: none"> • Financial assurance for intermediate storage facilities and recyclers

What has happened since publication of the DSW final rule?

- On January 29, 2009, the Sierra Club submitted an administrative petition to the Agency requesting that EPA repeal the rule and stay its implementation.
- March 6, 2009, letter from industry associations requesting that EPA deny the Sierra Club's petition on the grounds that the DSW final rule is consistent with court decisions regarding EPA's jurisdiction to regulate waste under RCRA.
- In addition, both Sierra Club and the American Petroleum Institute have submitted petitions to the court for judicial review, with fourteen additional industry groups filing to intervene.

What has happened since publication of the DSW final rule? (continued)

- On June 30, 2009, EPA held a public meeting to allow all interested stakeholders an opportunity to comment and provide input before the Agency makes a decision on Sierra Club's administrative petition.
- Of the 33 speakers at the public meeting, approximately 2/3 raised the issue of potential environmental justice impacts of the DSW rule.
 - Commenters noted that studies of hazardous waste treatment, storage and disposal facilities (of which recycling is a subset) show them to be located disproportionately in minority communities, with over 56% of the population within 3 kilometers of the facilities consisting of people of color, as compared to approximately 30% of the population in comparable areas without hazardous waste facilities.
- In response to these concerns, OSWER announced at the July 2009 meeting of the National Environmental Justice Advisory Committee (NEJAC) that we will do an expanded analysis of environmental justice impacts of the rule as part of the petition response.
- We have received over 4,000 written comments (most of which were from a mass email campaign).

Summary of Public Comments

- Comments were received from state and local government, waste generators, recyclers, waste management industry, environmental, public health, and community organizations, and academics.
 - **Environmental and community organizations** commented in favor of repealing the rule, expressing concerns over its protectiveness, enforceability, and the potential disproportionate impact to minority and low-income communities.
 - **Generating Industry** comments were in favor of denying the Sierra Club petition to repeal the rule, citing legal issues and the protectiveness of the rule.
 - **Small business advocates** in particular singled out the rule as reducing regulatory burden on small businesses and increasing opportunities for recycling.

Summary of Public Comments (continued)

- **Waste management/recycling industry** generally advocated retention of the rule, sometimes with suggested improvements.
 - Suggestions included more stringent storage and management standards, requiring financial assurance for generators, and transportation manifests.

Summary of Public Comments (continued)

- **States** (with some exceptions) were generally in favor of repealing or significantly revising the transfer-based exclusion and suggested specific improvements to the rule, principally concerning storage standards.
 - One group of state comments (CO, NM, OR, UT, WA) included a detailed request to “withdraw or significantly revise the rule,” noting, among other things, that the rule was not required by the courts.
 - States’ concerns include the enforceability of the DSW conditions and the demand on state resources for implementing the rule.

Draft Definition of Solid Waste Environmental Justice Methodology

- The draft DSW Environmental Justice Methodology is a draft plan for conducting the DSW Environmental Justice Analysis.
- Released to the public January 15, 2010.
 - Press release
 - Email notices to DSW listserv and EPA's EJ Listserv
 - Available at <http://www.epa.gov/epawaste/hazard/dsw/ej.htm>
- Is a draft for public discussion, to engage stakeholders very early in the process so we can make improvements to the methodology before actually conducting the analysis.

Draft Definition of Solid Waste Environmental Justice Methodology

- The purpose of the draft methodology is to provide enough detail that the public can fully understand the approach and thus can provide substantive and meaningful input.
- The draft methodology is applicable only to the DSW rule and is not intended to be a model for all rules.
 - If the development of the DSW EJ analysis yields useful information and “lessons learned” applicable to EJ analysis in general, that information will be shared with other EPA Offices.

Draft DSW EJ Methodology Design

Step 1:
Hazard characterization



Step 2: Identification of potentially affected communities



Step 3: Demographics of potentially affected communities



Step 4: Identifying other factors that affect vulnerability in communities



Step 5: Information synthesis: assessment of disproportional impact



Step 6: Identification of potential preventive and mitigation strategies



Goal: Use results of DSW EJ analysis to develop proposed response to Sierra Club administrative petition

Draft DSW EJ Methodology Design (cont'd)

Step 1: Hazard characterization

- Includes two phases:
 1. Identifying potential hazards that could pose risks to human health and the environment, including accidental releases of hazardous constituents, and
 2. Analyzing the likelihood of such hazards occurring under the requirements of the DSW exclusions as compared to the pre-2008 DSW hazardous waste regulations.

Draft DSW EJ Methodology Design (cont'd)

Step 2: Identification of potentially affected communities

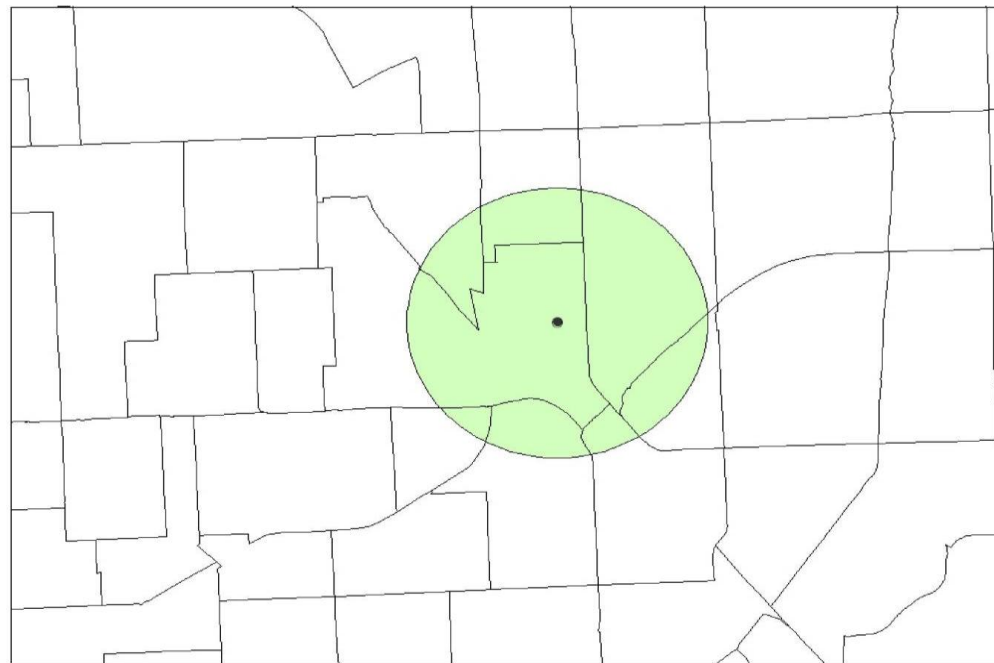
- Modeling the locations of facilities (including potential new facilities) that are likely to choose to participate in the DSW rule.
- Three main categories of communities potentially affected by the DSW rule:
 1. Facilities that have notified EPA that they plan to operate under the DSW rule,
 2. Hazardous waste facilities likely to begin accepting hazardous secondary materials under the DSW rule, and
 3. New facilities reclaiming hazardous secondary materials for the first time under the DSW rule.

Draft DSW EJ Methodology Design (cont'd)

Step 3: Demographics of potentially affected communities

- Mapping the location of the facilities modeled in Step 2 and identifying the demographics (i.e., minority population and income level) of the surrounding communities.
- The proposed methodology is modeled after the work of Dr. Paul Mohai and Dr. Robin Saha, as described in chapter three of *Toxic Wastes and Race at Twenty 1987-2007*.
- Under this approach, EPA would analyze the communities surrounding facilities potentially using the DSW rule with an “areal apportionment method.”
 - Under this method, every census tract that is at least partially inside a specified distance (e.g., 3 km) will be given weight in determining the characteristics of the potentially affected community.
 - For example, if 20% of a census tract is captured by a circle around the facility with the specified radius, then 20% of its population will be used. The sum of these apportioned populations will then be used to determine the characteristics of the potentially affected communities.

Example: Areal Apportionment Method



Example figure from Kearney and Kiros *International Journal of Health Geographics* 2009 **8**:33

Draft DSW EJ Methodology Design (cont'd)

Step 4: Identifying other factors that affect vulnerability in communities

- Identifying important vulnerability factors, such as the presence of other pollution sources and any information on public health of the surrounding population.

Step 5: Information synthesis

- Synthesizing information to characterize whether the DSW rule would result in any adverse impacts and whether some population groups (e.g., minority or low income populations) would be overrepresented in the impacted communities.

Step 6: Identification of preventive and mitigation strategies

- Identifying potential strategies to prevent non-compliance and releases to the environment and also strategies to mitigate impacts identified under step 5.

Public Roundtable Discussions

- The draft methodology was presented to the NEJAC during their January 2010 meeting in New Orleans, LA and a public roundtable break-out session was held concurrent with the NEJAC meeting.
- Two additional public roundtable discussions were held in February (one in Arlington, VA and one teleconference/webinar) and the public docket was open for comments through March 15, 2010.
- Meeting attendees and commenters included environmental groups, community organizations, academics, industry groups, other federal agencies, states and tribes.

Public Roundtable Discussions (cont'd)

- Roundtable participants expressed appreciation for the opportunity and offered specific comments on issues, including:
 - Assessing impacts of the lack of public participation provisions in the DSW rule.
 - Expanding the data sources for characterizing potential environmental damages from hazardous secondary material recycling.
 - Evaluating the enforceability of the DSW rule conditions.
 - Taking into consideration the lack of representation of Tribal populations in census data.

Next Steps

- Environmental Justice Analysis
 - Revise methodology and conduct the analysis.
 - Conduct peer review and solicit public comment on draft EJ analysis.
 - Use revised draft EJ analysis, along with analyses of other issues raised with the rule, to develop proposed response to Sierra Club petition.

Next Steps (continued)

- Proposed response to Sierra Club petition
 - Federal Register notice published for public comment
 - Options are:
 - proposed denial
 - proposed rule changes
 - advanced notice of proposed rule making
- Final Response to Sierra Club petition
 - Federal Register Notice