

US EPA ARCHIVE DOCUMENT



Draft Environmental Justice Methodology for the Definition of Solid Waste Rule

*Public Roundtable Discussion
February 23, 2010*



Goals of Public Roundtable Discussion

- Discuss the draft Definition of Solid Waste (DSW) Environmental Justice Methodology as a “straw man” proposal.
- Develop concrete recommendations about how to make it better.
 - Overall method
 - Data sources
- Gather ideas to enhance ongoing public participation.

Background

- On October 30, 2008, EPA published a change to the hazardous waste regulations entitled *Revisions to the Definition of Solid Waste*, also known as the “DSW rule.”
- The DSW rule creates specific conditions for recycling hazardous secondary materials under the Resource Conservation and Recovery Act (RCRA).
- These conditions are different from the hazardous waste requirements; as long as the conditions of the DSW rule are met, the hazardous secondary materials are not defined as “solid waste” and therefore are not subject to hazardous waste requirements.

Background (continued)

- The goal of the DSW rule was to make it more efficient to safely recycle hazardous secondary materials, and to resolve uncertainty about when materials that are sent to recycling are “solid wastes.”
- On January 29, 2009, the Sierra Club submitted an administrative petition requesting that EPA repeal the DSW rule.
 - Among other things, the petition expressed concerns about potential disproportionate impacts to minority and low-income communities.

Background (continued)

- On June 30, 2009, EPA held a public meeting to solicit input to the decision-making process in responding to Sierra Club's administrative petition.
- Many commenters expressed strong concerns that the Agency did not adequately address Environmental Justice in the rulemaking.
- In response to these concerns, at the NEJAC meeting last July, EPA committed to conducting an expanded analysis of the environmental justice impacts of the DSW rule.



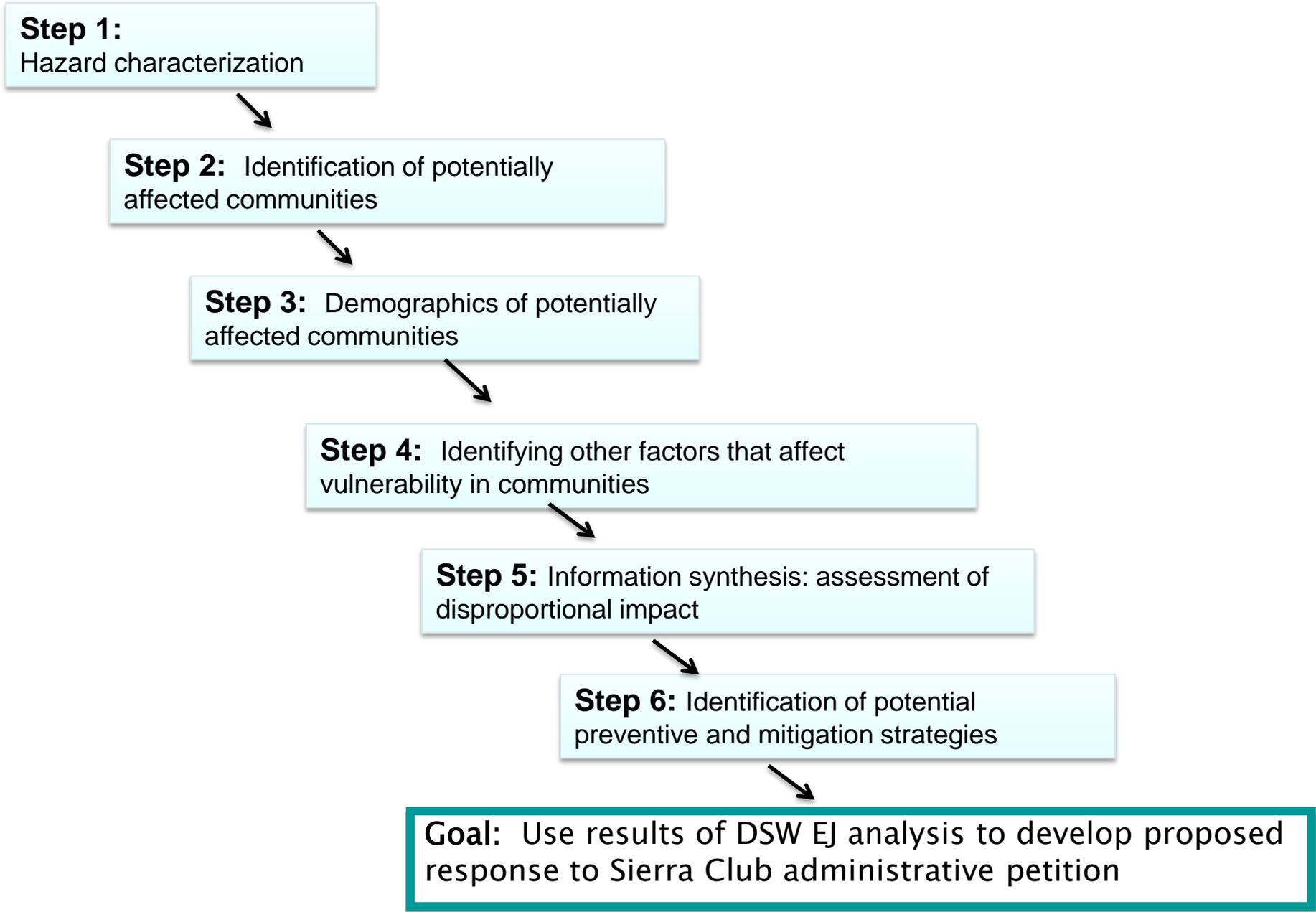
Purpose of Draft DSW Environmental Justice Methodology

- The draft DSW Environmental Justice Methodology is a suggested plan for conducting the DSW Environmental Justice Analysis.
- The draft Methodology is a draft for public discussion.
- EPA is soliciting public input so we can make improvements before actually conducting the analysis.
- We thought it important to provide enough detail that the public can fully understand the approach and thus can provide substantive and meaningful input.

Purpose of Draft DSW Environmental Justice Methodology (continued)

- The DSW EJ analysis will serve as a pilot project for EPA's EJ Executive Steering Committee's rulemaking workgroup.
 - Many of the issues discussed in the methodology are unique to the DSW rule.
 - However, any public comments or information obtained on broader Environmental Justice issues will be shared with the rulemaking workgroup.

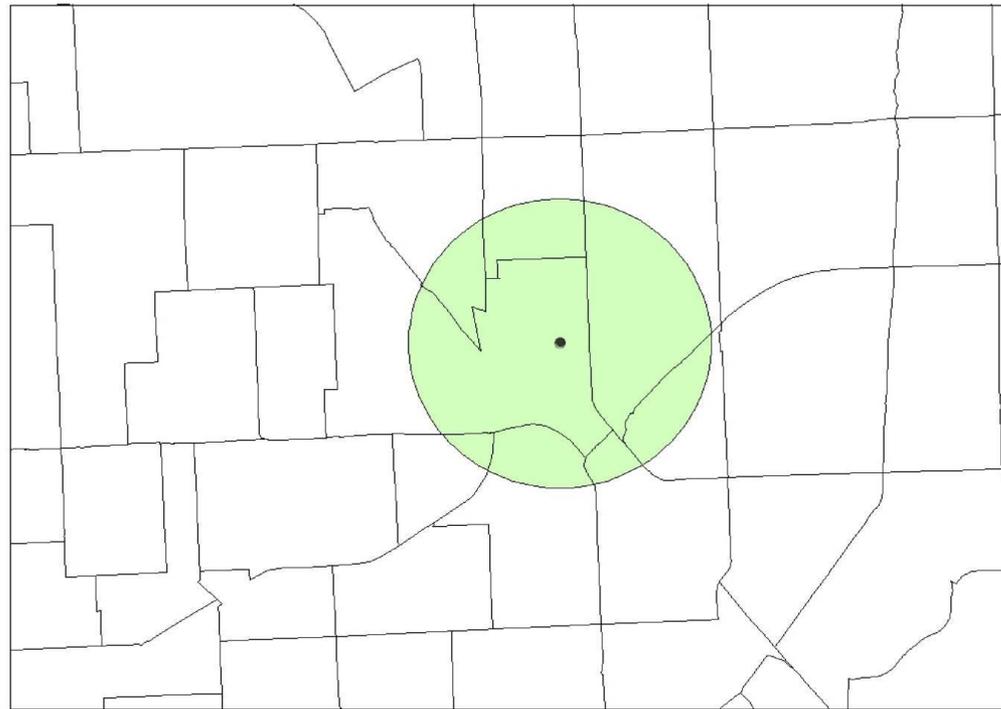
Draft DSW EJ Methodology Overview



Draft DSW EJ Methodology Overview (cont'd)

- The first two steps – characterizing possible hazards and identifying potentially affected communities – will be discussed in more detail later in the briefing.
- Step 3 (demographics) 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 Overview (continued)

- The demographics of the communities surrounding the facilities, including the percent people of color and income levels, would then be compared to the characteristics of non-affected areas (i.e., communities that are not likely to have facilities that participate in the DSW rule).
- The analysis would also identify important vulnerability factors that may increase the risk to public health (step 4).
 - Examples include the presence of other pollution sources, and any information on public health of the surrounding population.
- Finally, this information would be synthesized to make an overall assessment of impact and to help identify potential preventative and mitigation strategies (steps 5 and 6).

Key Questions for Public Discussion

- While the core of the draft DSW Environmental Justice methodology is relatively straightforward, there are several questions specific to the DSW rule that EPA is particularly interested in receiving feedback on:
 - Hazard characterization – What sources are best for characterizing potential hazards from recycling under the DSW rule?
 - Quantifying potential impacts? – Should EPA attempt to quantify potential impacts that could occur from these hazards?
 - How to identify potentially affected communities: How best to model which communities are most likely to be impacted by the DSW rule?
 - Supplementary analysis: How best to address other hazardous waste recycling exclusions (besides the 2008 DSW rule), many of which appear to be associated with the recycling damage cases?

Question 1: Hazard Characterization – Data Sources

- When EPA promulgated the 2008 DSW rule, the Agency included a study of environmental problems associated with hazardous materials recycling.
- Of the approximately 800 potential damage cases examined by EPA, the study identifies 208 cases in which environmental damages occurred from recycling and that occurred after RCRA and Superfund were in effect.
 - The remaining cases either didn't fit the scope of the study (e.g. were not related to recycling or occurred before the implementation of RCRA) or lacked enough information to make a determination.

Question 1: Hazard Characterization – Data Sources (continued)

- Based on the environmental problems study, the most likely hazards to public health and the environment from hazardous materials recycling are:
 - (1) soil and/or groundwater contamination (77% of the recycling damage cases),
 - (2) abandoned materials (33%),
 - (3) sediment and/or surface water contamination (17%),
 - (4) air releases (11%), and
 - (5) fires or industrial accidents (5%).

Question 1: Hazard Characterization – Data Sources (continued)

- Potential damage cases were identified from a variety of sources, including national EPA databases maintained for the Superfund, RCRA, and enforcement programs, and state agency data bases.
- However, EPA recognizes that there are likely additional cases of environmental damage that have not been identified.
 - EPA would be interested in any other sources of data regarding demonstrated problems with hazardous secondary materials recycling, including any facilities that claimed to be conducting such recycling, but were sham operations.

Question 2: Quantifying Potential Impacts?

- EPA is also interested in stakeholder feedback on the merits of a quantitative analysis of potential impacts from hazardous secondary material recycling.
 - a *qualitative* analysis would be a systematic examination of the DSW rule conditions as compared to hazardous waste regulations, including an evaluation of their enforceability and compliance rates.
 - a *quantitative* analysis would try to predict the number of people that might be affected by environmental damages at facilities under the DSW rule.
- Including a quantitative approach would provide more concrete information, but would also require more time, and the outcome would depend greatly on data availability and assumptions made.

Question 3: Identifying Potentially Affected Communities

- EPA has identified 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.

Question 3: Identifying potentially affected communities (continued)

- For the third category, EPA proposes to use the recycling damage cases as a surrogate for the types of facilities that might begin to reclaim hazardous secondary materials under the DSW rule.
 - While the facilities involved in the damage cases are themselves unlikely to qualify for the DSW rule, the types of facilities they represent would have likely been subject to the same zoning restrictions and other siting considerations as a new DSW facility would be.
 - However, focusing on just facilities with environmental problems could skew the dataset, so these facilities could be supplemented with recyclers who have no reported environmental problems.
 - Are there other sources of information for the location and size of potential new facilities?

Question 4: Supplementary Analysis

- In addition to the primary EJ analysis of the DSW rule, EPA also plans to conduct a supplementary analysis of the other hazardous waste recycling exclusions.
 - There are dozens of other hazardous waste recycling exclusions that have been in place for years, some of which are also associated with the recycling damage cases.
 - Examples include: scrap metal, “empty” drums, lead acid batteries, and used oil.
- EPA is interested in any information stakeholders may have about problems they have experienced with the existing hazardous waste recycling regulations (beyond the DSW rule).



Plan for DSW EJ Analysis

- EPA will revise the Methodology based on public input (including three roundtable meetings and written comments).
- EPA will then conduct the analysis following the revised Methodology.
- Once the draft DSW EJ Analysis is complete, EPA will again engage the public to get input and will conduct a peer review.
- The Analysis will be revised based on public input and peer review comments.
- The revised Analysis will then be used as part of the information assessed in developing EPA's response to the Sierra Club petition. The response will be published for public comment, and then finalized after incorporating and responding to public comments.



End of Introduction



Facilitated Discussion: Draft Methodology Overview

- **Hazards:** what are they and how likely?
- **Locations:** where will the activity take place?
- **Community Characteristics**
 - **Demographics:** low-income and minority communities
 - **Vulnerability:** e.g., other pollution sources, public health information
- **Analyze impacts:** What does it all tell us?
- **Identify solutions:** What actions can be taken?



Discussion Questions

- What elements of the draft methodology should be kept?
- What would you like to see changed?
- Specific questions
 - Best data sources for identifying hazards?
 - Quantifying potential impacts?
 - Best data sources for modeling community locations?
 - Analysis of other types of recycling problems?



Discussion (continued)

What else can EPA do to ensure that communities have a strong voice in the development of the DSW Environmental Justice Analysis?

Wrap-Up

- Continue discussing and suggesting improvements for the methodology.
 - Third public roundtable February 25 teleconference.
- Submit written comments to [regulations.gov](http://www.regulations.gov) Docket ID EPA-HQ-RCRA-2009-0315 by March 15.
- Join the DSW e-mail list to get informational updates or visit <http://www.epa.gov/epawaste/hazard/dsw/ej.htm>
- For more information, contact: Tracy Atagi, atagi.tracy@epa.gov, 703-308-8672.

EPA wants to hear public concerns and suggestions!