January 29, 2009

By E-mail, Fax, and Overnight Delivery
Lisa Jackson, Administrator
U.S. Environmental Protection Agency
Arial Rios Building, Room 3000
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Re: *Petition for Reconsideration of "Revisions to the Definition of Solid Waste," 73 Fed. Reg. 64,668 (Oct. 30, 2008,) and Request for Stay*

Dear Ms. Jackson:

This is a petition under Resource Conservation and Recovery Act ("RCRA") section 7004(a), 42 U.S.C. § 6974(a), submitted by Sierra Club, 85 Second Street, 2d Floor, San Francisco, CA 94105 (415-977-5500). By this petition, Sierra Club respectfully requests that you reconsider and repeal the final Revisions to the Definition of Solid Waste ("DSW Rule" or "Rule"), 73 Fed. Reg. 64,668 (Oct. 30, 2008), and that you stay implementation of the Rule as soon as possible. This petition explains in part the reasons for Sierra Club's Petition for Review of the DSW Rule, filed yesterday in the U.S. Court of Appeals for the District of Columbia Circuit. For your convenience, we also enclose a copy of the Petition for Review, which we served yesterday by First Class Mail.

As we explain below, there is no basis, in law or policy, for the promulgation of the DSW Rule. The Environmental Protection Agency ("EPA") admitted in the record that "there would be a push to get the rule finalized before any administration change, so that might make it harder to address technically difficult issues." U.S. EPA, Office of Solid Waste, *Summary of EPA Meeting with Duratherm, Aug. 7, 2007* (2008) (EPA-HQ-RCRA-2002-0031-0591). The rush to publish produced a vague and unenforceable rule that arbitrarily and capriciously ignores the significant adverse impacts to health and the environment that will be caused by the Rule's removal of fundamental RCRA protections. Petitioner's grounds for reconsideration and repeal are set forth below.

A. The DSW Rule Substantially Increases Threats to Public Health and the Environment without Producing Compensatory Benefits.

In 1976, Congress passed RCRA to ensure that any company that generated, transported, stored, treated, disposed or recycled hazardous waste could do so only under strict "cradle-to-grave" regulations that prevent hazardous chemicals from escaping into the environment. *Resource Conservation and Recovery Act of 1976,* P.L. 94-580, 90

Stat. 2795 (codified as amended at 42 U.S.C. §§ 6901-6992). One of RCRA's primary objectives is to promote the protection of health and the environment and to conserve resources by adopting *preventative* measures "requiring that hazardous waste be properly managed in the first instance thereby reducing the need for corrective action at a future date." 42 U.S.C. § 6902(a)(5).

In direct contravention of this objective, EPA promulgated the DSW Rule on October 30, 2008. The Rule exempted 1.5 million tons (over 3 billion pounds) of hazardous waste from stringent regulation under RCRA, relieving companies handling the most dangerous substances regulated by EPA from complying with requirements intended to protect human health and the environment. The Rule is an impermissible abdication of the agency's statutory mandate to prevent spills, midnight dumping, and poor management practices that contaminate air, soil, and water, especially in the minority and low-income neighborhoods disproportionately affected by pollution. By EPA's own analysis the winners are those who wish to "recycle" hazardous waste without the burden of safeguards that have proven effective in reducing harm. The losers are those communities near more than 5,000 chemical companies, pharmaceutical manufacturers, and industrial waste facilities that handle hazardous waste or through which the billions of pounds of deregulated hazardous materials will be transported.

1. EPA's record demonstrates that hazardous waste recycling has caused substantial harm to health and the environment and that the DSW Rule increases the likelihood of greater future harm.

A centerpiece of EPA's rulemaking record is its *Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials*, (Jan.11, 2007) ("2007 Environmental Assessment"), (EPA-HQ-RCRA-2002-0031-0355, EPA-HQ-RCRA-2002-0031-0355.1, EPA-HQ-RCRA-2002-0031-0355.2, EPA-HQ-RCRA-2002-0031-0355.3). The 2007 Environmental Assessment identifies 208 cases of damage at facilities that recycle hazardous waste or that store hazardous waste prior to recycling. In 2008, EPA supplemented this list with an addendum, which adds 10 damage cases as well as further analysis of the 2007 data. U.S. EPA, Office of Solid Waste, *Addendum: An Assessment of Environmental Problems Associated with Recycling Hazardous Secondary Materials* (July 14, 2008) ("2008 Addendum") (EPA-HQ-RCRA-2002-0031-0601, EPA-HQ-RCRA-2002-0031-0601.1, EPA-HQ-RCRA-2002-0031-0601.2 and EPA-HQ-RCRA-2002-0031-0601.3).

Although these 218 cases present compelling evidence of damage to health and the environment from mismanagement of hazardous wastes at recycling operations, EPA admits that these studies are far from exhaustive. In fact, EPA stated:

> It should be noted that because of time and resource limitations, the search for potentially relevant damage cases was not exhaustive. For example, we did not systematically survey all state environmental agencies for relevant cases, nor did we search paper files in EPA Regional Offices. Because of these limitations, we believe that the cases we have identified and

> described in the 2007 environmental problems study in effect represent the cases that were relatively easy to find, and that *there are likely to be a significant number of additional relevant cases that we did not identify*.

Id. at 4 (emphasis added). In fact, an appendix to the 2007 Environmental Assessment contains over 600 additional potential damage cases that EPA did not research in its rush to finalize the Rule. *See, 2007 Environmental Assessment, Appendix 3: Additional Sites Considered But Not Included in the Damage Case Analysis* (EPA-HQ-RCRA-2002-0031-0355.3). Together EPA's two environmental assessments total nearly 500 pages, documenting sites contaminated by hazardous waste recycling operations in 38 states, which required well over $200 million in remedial response costs. *2007 Environmental Assessment* at 13; *2008 Addendum, Appendix 1: Additional Damage Cases from Recycling of Hazardous Secondary Materials* (presenting ten new damage cases, including the College Grove Battery Chip site, where cleanup costs reached $7.25 million).

EPA's environmental assessments unequivocally demonstrate that recycling of hazardous materials, if not carried out under a stringent regulatory system, is highly dangerous to human health and the environment. The primary lesson to be derived from these assessments is how few hazardous waste recycling facilities *operating under RCRA permits* were on the damage case lists. Only nine of the 218 cases (four percent) involved damage that occurred at recycling facilities operating under RCRA Part B permits, because RCRA-permitted facilities are subject to more stringent facility-specific requirements and greater agency oversight and enforcement. *2007 Environmental Assessment* at 12. By contrast, a large majority of the damage cases occurred at facilities that were already exempted from RCRA's strict oversight under various exemptions set forth in 40 C.F.R. § 261.4.[1] EPA's own studies thus demonstrate that exempting billions more pounds of hazardous waste at thousands of facilities from Part B permitting requirements will increase the risk of harm to health and the environment.

The 2007 Environmental Assessment also presents unequivocal evidence that off-site recycling is inherently more dangerous than recycling conducted on-site. Of the 208 damage cases reviewed in the document, 91 percent were engaged in off-site recycling operations, and only six percent of the damage cases involved wholly on-site recycling. *2007 Environmental Assessment* at 9. That evidence should have stopped EPA in its tracks when it contemplated relaxing regulatory restrictions applicable to off-site hazardous waste recyclers. Indeed, the 2007 Environmental Assessment offered clear proof that even the regulations applicable at that time were not stringent enough. Yet 95 percent of the facilities that EPA is deregulating under the DSW Rule involve off-site recycling. U.S. EPA, *Regulatory Impact Analysis: USEPA's 2008 Final Rule*

[1] EPA stated : "The Agency is interested in these type of damage cases because they may indicate … whether such damages may be more or less prevalent for materials that are explicitly exempted or excluded from RCRA regulatory controls." *2007 Environmental Assessment* at 4.

Amendments to the Industrial Recycling Exclusions of the RCRA Definition Of Solid Waste 8 (2008) ("Regulatory Impact Analysis") (EPA-HQ-RCRA-2002-0031-0602).

Appendix 3 to the 2008 Addendum reveals the extent of damage occurring at transfer facilities that receive, store, and consolidate hazardous waste from generators, but that do not themselves recycle the waste. According to that study, almost 25 percent of the damage cases involved such transfer facilities or "middlemen." *2008 Addendum* at 9. Despite the extensive record of mismanagement by these middlemen, the DSW Rule arbitrarily relieves these facilities from RCRA requirements.

In sum, the voluminous evidence of damage contained in the rulemaking record indicates that: (1) facilities operating without RCRA permits, whether they do so illegally or because of prior exemptions, are far more likely to cause damage; (2) off-site hazardous waste recycling facilities constitute the great majority of the damage cases; and (3) transfer facilities, or "middlemen," represent another significant percentage of the contaminated sites. In the face of this evidence, the DSW Rule frees facilities falling within all of the above categories to operate without RCRA permits. Based on the administrative record, we can only expect the list of damage cases to grow substantially, if EPA does not repeal the Rule.

2. The DSW Rule does not account for the instability of recycling markets, and current financial conditions increase the risk of hazardous waste abandonment.

EPA acknowledges that abandonment of hazardous waste prior to recycling accounted for a third of the damage cases (69 out of 208) identified in their 2007 Environmental Assessment. 73 Fed. Reg. at 64,678. EPA cited economic pressures as the most common reason for abandonment of waste. Yet, the DSW Rule ignores the even greater threat of abandonment of hazardous materials engendered by the recent collapse of domestic and international recycling markets. The Rule requires generators to make only "reasonable efforts," once every three years, to determine the legitimacy and the financial viability of middlemen and recycling facilities to which they send their waste. 73 Fed. Reg. at 64,689; 40 C.F.R. § 261.4(a)(24)(v)(B). By contrast, the prior regulatory regime prohibited "fly-by-night" operations and allowed only companies with RCRA Part B permits that met strict storage and handling requirements, as well as financial standards, to recycle hazardous waste. The ostensible purpose of the reasonable efforts contemplated under the Rule is in part to avoid the transfer of wastes to unstable companies. But a three-year timeframe makes no sense during the current economic crisis, which already has caused the collapse of numerous recycling operations. Under today's volatile conditions, the DSW Rule does not reflect the reality of the market and will increase the risk that hazardous materials collected by middlemen or recyclers will be abandoned when customers disappear.

3. EPA concedes that the DSW Rule will not substantially increase hazardous waste recycling.

EPA readily admits that despite the huge volume of hazardous waste deregulated by the DSW Rule, gains in the amount of actual hazardous waste recycled will be negligible. *Regulatory Impact Analysis* at 10. The Regulatory Impact Analysis reveals that the Rule will induce only 23,000 tons per year in additional hazardous waste recycling. *Id*. This tonnage amounts to only a 1.1 percent increase above the 2005 baseline of 2.045 million tons per year. *Id*. What these figures show is that a substantial amount of hazardous waste recycling was occurring despite the more stringent RCRA regulation in place before promulgation of the DSW Rule and that the DSW Rule will not materially increase this amount. Thus the record is clear that the significant increase in risks of harm to human health and the environment caused by the exemption of generators, middlemen, and recyclers from management requirements will *not* be accompanied by meaningful gains in resource conservation or recovery.

4. The economic benefits of the DSW Rule are small and accrue solely to deregulated industries.

According to EPA's Regulatory Impact Analysis, even the benefit to deregulated industries will hardly be worth the risk. EPA estimates the economic benefit to be approximately $95 million per year, spread over as many as 5,600 companies. *Id*. at 8. Each facility thus can expect average reduced costs of less than $17,000 annually—a tiny fraction of the revenue that flows through many of these multi-million dollar companies. The Regulatory Impact Analysis also found that changing the assumptions about how state regulators and companies are likely to react to the Rule could lower the economic benefits to as little as $19 million per year. *Id.* at 13. Furthermore both the $19 million and the $95 million estimates ignore the costs of increased health and environmental damage that are likely to result from this Rule. Lastly, the majority of these cost savings (82 percent) accrue from deregulating the baseline recycling. *Id*. at 9. EPA estimates that only $16.7 million per year (18 percent of the annual impact) will be generated by the switch from disposal to recycling. *Id*.

While companies that produce hazardous waste will trim a few thousand dollars off their annual costs because of this new loophole, another industry could face dramatic cutbacks and job losses. Hazardous waste recyclers are trained, licensed, and insured to transport, store, and dispose of hazardous waste according to RCRA guidelines and under strict oversight from regulators to ensure the public is not exposed to dangerous materials. If licensed professionals are no longer required to handle the waste, a large number of good jobs could be lost. So some business costs will be reduced under the DSW Rule, but only for certain companies, only by a tiny fraction of their overall operating costs, and at the expense of other American companies whose records of safe waste management do not warrant this radical and arbitrary shift.

B. The DSW Rule Is Unlawful and Should Be Repealed.

The DSW Rule is unlawful under the Administrative Procedure Act. We focus on two legal defects in this petition for reconsideration. First, EPA's adoption of the Rule was arbitrary and capricious and otherwise not in accordance with law because several terms essential to the Rule are so vague as to deny regulators, regulated entities, and the public an intelligible standard for compliance and enforcement efforts. Second, without support in the administrative record, EPA arbitrarily and capriciously concluded that the DSW Rule carried no potential for adverse environmental impacts, including for the low-income and minority communities disproportionately located near facilities deregulated by the Rule. For both of these reasons, and others that we will develop fully in briefing the Sierra Club's Petition for Review, the DSW Rule should be reconsidered and repealed.

1. EPA's failure to define "contained" and "significant release" in the DSW Rule is arbitrary and capricious, an abuse of discretion, and not in accordance with law.

A fatal flaw of the DSW Rule is the vagueness of its key terms. Every provision of the Rule that excludes hazardous secondary materials destined for recycling from the definition of solid waste rests on the premise that those materials will be "contained."[2] *See* 40 C.F.R. § 261.2(a)(2)(ii) (hazardous secondary materials managed by generator in non-land based unit are not solid waste if contained); 40 C.F.R. § 261.4(a)(23)(i) (hazardous secondary materials managed and reclaimed within the United States or its territories and managed in land-based units are not solid waste if contained); 40 C.F.R. § 261.4(a)(24)(v)(A) (hazardous secondary material generators must contain materials prior to transfer to qualify for transfer exclusion), (a)(24)(vi)(D) (reclaimers and intermediate facilities must contain materials to qualify for transfer exclusion). Despite its centrality, however, "contained" is not defined in the DSW Rule. As a result, there is no intelligible standard that establishes compliance with the Rule. Even though EPA admitted that "[m]ismanagement of recyclable materials prior to their reclamation or reuse was the most common cause of contamination" at sites with environmental damage, *2007 Environmental Assessment* at 8, the Rule provides no objective measure that enables companies to determine whether or not they are free to manage recyclable materials without RCRA permits.[3]

Both state environmental agencies and regulated industries have voiced their concern over the Rule's failure to define containment. Comments submitted by the Association of State and Territorial Solid Waste Management Officials ("ASTSWMO")

[2] "Hazardous secondary materials" is the term that EPA uses to distinguish hazardous materials destined for "legitimate recycling" from hazardous materials that constitute hazardous waste. 40 C.F.R. § 260.10.

[3] The lack of specific containment requirements, particularly for storage on land, stands in sharp contrast to the RCRA Part B specific requirements for storage and monitoring of units containing waste. 40 C.F.R. Part 264, Subparts F, I, J, K, L and N.

indicate that several states wanted to have the Rule provide a definition of "contained" and to have this definition "prevent/prohibit ANY release to land, water or air." ASTSWMO, Comment Letter to EPA re Proposed Rule, Supplemental Revisions to the Definition of Solid Waste, June 25, 2007, EPA-HQ-RCRA-2002-0031-0543 at 13 (emphasis in original). Numerous individual states echoed this view. *See, e.g.*, Colorado Department of Public Health and Environment, Comments on the EPA's Proposed Revision to the Definition of Solid Waste, June 25, 2007, EPA-HQ-RCRA-2002-0031-0539.1 at 8 (assailing the ambiguous and unenforceable nature of "contained" in the proposed DSW Rule). Similarly, industry commenters asked that baseline design criteria for storage be included in the Rule. *See* General Electric, RCRA Corrective Action Project Electronic Submittal, June 25, 2007, EPA-HQ-RCRA-2002-0031-0525.1 at 8; Safety-Kleen, Comment letter to EPA, June 25, 2007, EPA-HQ-RCRA-2002-0031-0507 at 8, and Horsehead Corporation, Comments by Horsehead Corporation on the Proposed Revisions to the Definition of Solid Waste, June 25, 2007, EPA-HQ-RCRA-2002-0031-0551.1 at 2.

Although EPA purported to clarify the meaning of "contained" in the preamble to the DSW Rule, the agency only compounded the problem in doing so. There, "contained" is said to mean "placed in a unit that controls the movement of the material out of the unit into the environment." 73 Fed. Reg. at 64,748. But EPA set no standards for what counts as "control," so there are no objective means to determine when hazardous materials have been "contained." The preamble also provides that a "significant release" of hazardous secondary materials from a "containment unit" to the environment transforms the hazardous secondary materials, both the materials released and those still in the containment unit, into hazardous waste. 73 Fed. Reg. at 64,681. But the preamble does not provide any criteria for what counts as a "significant release," and the body of the Rule does not even mention the phrase, much less offer an intelligible measure by which to interpret it. Without any basis for determining when hazardous materials are contained or when there is a significant release of them to the environment, generators and recyclers will never be certain about their compliance, and state inspectors will have no basis for making individual enforcement determinations. A rule that is so vague that it fails to constrain regulatory decision-making, is arbitrary and capricious, an abuse of agency discretion, and otherwise a violation of law. *Atlas Copco, Inc. v. Environmental Protection Agency*, 642 F.2d 458, 465 (D.C. Cir. 1979) ("We are well aware of the judicial disdain traditionally accorded standardless regulations."); *South Terminal Corp. v. EPA*, 504 F.2d 646, 670 (1st Cir. 1974) ("The prospective applicant for a permit is utterly without guidance as to what he must prove, and how. And the standard is so vague that it invites arbitrary and unequal application.").

2. EPA's conclusion that the DSW Rule would have no environmental impact is unsupported by the administrative record.

EPA claims that "no net impact is expected" from the DSW Rule. 73 Fed. Reg. at 64,757. That prediction necessarily rests on three unsupported and unsupportable assumptions. EPA assumes that: (1) an undefined "containment" standard will be as environmentally protective as detailed permit requirements, such as those set forth in

RCRA Part B; (2) a self-regulatory regime will be as effective in preventing damage as agency oversight and enforcement proceedings; and (3) the threat of liability under RCRA or CERCLA will be enough to deter improper management of hazardous secondary materials, even though that threat was insufficient under the more rigorous regime that the Rule replaced. Because EPA offers no record evidence in defense of these assumptions, which defy common sense and years of experience, EPA's adoption of the Rule was arbitrary and unlawful. *See NRDC v. Herrington*, 768 F.2d 1355, 1421 (D.C. Cir. 1985) (noting that agencies are "obliged to produce substantial evidence for major assumptions in a rulemaking").

EPA purports to justify its conclusion that the deregulation of 3 billion pounds of hazardous secondary materials poses no environmental threat on "its assessment of potential countervailing risks" and its determination "that the conditions [of the Rule] address those risks." 73 Fed. Reg. at 64,757. By its own admission, however, EPA used "a relatively low level-of-effort '*screening*' risk analysis approach" to evaluate the Rule's potential impacts. *Regulatory Impact Analysis* at 122. The "screening" that EPA used was not a statistical or engineering model; it was merely a tallying of the potential risks in one column, and an assessment of which elements of the DSW Rule were supposed to address those risks in another column. So long as some provision of the DSW Rule potentially addressed an environmental risk in any manner, EPA concluded that there was no actual risk of environmental harm. Such a simplistic analysis cannot withstand the weight of the evidence in the rulemaking record, which included hundreds of damage cases, of which 23% percent were serious enough to be listed on the National Priority List. *2007 Environmental Assessment* at 11 (reporting that 51 of the 218 damage cases appear on the NPL list). Given EPA's broad and unprecedented relaxation of environmental controls and its shift of enforcement to the regulated industries themselves, the agency must offer a reasonable explanation why such damage would not occur again and at greater frequency under the Rule.

To make matters worse, EPA relies on this finding of "no net impact" to avoid conducting the analysis required under Executive Order 12,898. 73 Fed. Reg. 64,757. Under this Order, each Federal agency must make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minorities and low-income populations. *Exec. Order No. 12,898*, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Fed. Reg. 7,629 (Feb. 16, 1994). EPA states that its goals under Executive Order 12,898 are "to ensure that no segment of the population, regardless of race, color, national origin, income, or net worth bears disproportionately high and adverse human health an environmental impacts as a result of EPA's policies, programs and activities." 73 Fed. Reg. at 64,756. But EPA conducts no environmental justice analysis whatsoever, arguing that there can be "no disproportionate impacts to minorities or low income communities" when there is no net environmental impact on anyone at all. *Id*. at 64,757.

The evidence in the record flatly contradicts EPA's conclusion. As we explained above, EPA's 2007 Environmental Assessment indicates that environmental damage at facilities recycling hazardous secondary materials is likely to *increase* as a result of the Rule. The 2007 Environmental Assessment identified more than 100 Superfund sites, 51 of which were listed on the National Priorities List. *2007 Environmental Assessment* at 10-11. These industrial facilities and Superfund sites are located disproportionately in low-income and minority neighborhoods. Robert B. Bullard, PhD *et al., Toxic Wastes and Race at Twenty, 1987-2007, A Report Prepared for the United Church of Christ Justice and Witness Ministries* (2007), http://www.ejrc.cau.edu/TWART%20Final.pdf.). It therefore is inevitable that deregulation of such facilities, many of which are still operating at those sites, will have an adverse impact on precisely the communities that the Executive Order was designed to protect. It is incumbent upon EPA to determine the nature and extent of this adverse impact and to ensure that the Rule will not impose it disproportionately on any segment of the population. Because the EPA failed to do so, it violated Executive Order 12,898, and its adoption of the Rule is unlawful.

C. Conclusion

For the foregoing reasons, and others noted in comments on the DSW Rule, EPA should convene a proceeding for reconsideration of the Rule and stay its implementation as soon as possible. Should you wish to receive any supplemental materials, please let us know.

Respectfully,

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