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# **Superfund Recycling Equity Act of 1999: Factors To Consider In A CERCLA Enforcement Case**

Office of Enforcement and Compliance Assurance Office of Site Remediation Enforcement

#### Introduction

The Superfund Recycling Equity Act (SREA), Section 127 of CERCLA, 42 U.S.C. § 9627, exempts certain persons who "arranged for recycling of recyclable materials" from liability under Sections 107 (a)(3) and 107(a)(4). Owners and operators of CERCLA sites are ineligible for the exemption, as are arrangers and transporters of non-recyclable materials, or arrangers and transporters of recyclable material that fail to meet the criteria necessary for the exemption. SREA outlines the criteria necessary for a party to be eligible for the recycling exemption including the definition of a recyclable material, the factors needed to qualify as a recycling transaction, and the types of transactions and materials that are not exempt under the statute.

Since the passage of SREA, some site-specific transactions have raised questions and issues regarding what enforcement posture (e.g., whether to issue an information request letter or general or special notice letters, or how to develop settlement offers) the Agency may determine, in light of SREA, to be appropriate in evaluating a party's activities. This guidance addresses some of the key factors the Agency may consider, and has been developed in the exercise of the Agency's enforcement discretion.

SREA places the burden of proof on private parties seeking to establish their eligibility for the recycling exemption from CERCLA liability. Under subsections (c), (d) and (e) of Section 127, the party seeking the exemption from liability must "demonstrate by a preponderance of the evidence" that certain criteria are met. In addition, as a general matter a party seeking to take advantage of a statutory exemption has the burden of establishing

eligibility. <sup>1</sup> Furthermore, this burden encompasses a number of limitations on the protection afforded by Section 127. For example, Section 127(b)(2), the polychlorinated biphenyls (PCBs) exclusion from the exemption, states that "recyclable material" does not include any item of material that contained PCBs at a concentration exceeding 50 ppm, or any new standard promulgated pursuant to applicable Federal laws. Section 127(b)(2) serves to modify the requirements to qualify for the exemption outlined in subsection 127(c)-(e), as it restricts the scope of otherwise eligible recyclable material transactions to items of material that do not exceed 50 ppm concentration of PCBs.

This guidance addresses a number of issues. Section 1.0 addresses general considerations. Section 2.0 addresses the overall definition of "recyclable material," as it pertains to scrap metal, batteries, and PCBs. Section 3.0 focuses primarily on scrap metal issues. Section 4.0 focuses on battery transactions. Section 5.0 focuses on transactions involving PCB-containing materials. In addition, this guidance contains two appendices. Appendix A provides technical information on some of the materials covered in this guidance. Appendix B provides a summary of judicial opinions dealing with the exemption.

#### 1.0 General factors to consider regarding SREA

When evaluating the appropriate enforcement posture to take with respect to a party that may be eligible for the SREA exemption, Regions should consider relevant information provided by that private party and others, including but not limited to:

- the specific facts at a given site, including how the material at the site was actually recycled;
- how and when any hazardous substances that are included in the recycled material came to be associated with it;
- if applicable, the size of the shipping containers and the nature of any hazardous substances in the containers that hold or constitute the recycled material;
- the nature of the transaction, including prices paid;
- the extent of contamination at the site and impact of the recycled materials at the site based on their relative toxicity, mobility and persistence<sup>2</sup>;

<sup>&</sup>lt;sup>1</sup> See, <u>United States v. First City Nat. Bank of Houston</u>, 386 U.S. 361 (1967), cited in <u>Ekotek Site PRP Committee v. Self</u>, 881 F.Supp.1516, 1524 (D. Utah 1995)(finding burden of proving applicability of CERCLA's petroleum exclusion to be on defendants to establish their right to the exemption); <u>SEC v. Ralston Purina Co.</u>, 346 U.S. 119, 126 (1953) (party claiming the benefits of an exception to a broadly remedial statutory or regulatory scheme has the burden of proof to show that it meets the terms of the exception). *See also*, <u>E.E.O.C. v. Chicago Club</u>, 86 F.3d 1423, 1430 (7th Cir. 1996)(separate provisos or exceptions curtail or restrict the operation of a statute in a case to which it would otherwise apply).

<sup>&</sup>lt;sup>2</sup> Regions should consider the hazardous substances that are part of the recycled material (<u>e.g.,</u> lead oxide paste attached to a battery; PCBs in the plastic insulation on a metal wire).

- compliance by the party and the consuming facility with applicable standards regarding the storage, transport, and management, or other activities associated with the recyclable material; and,
- satisfaction of all other requirements in CERCLA Section 127.<sup>3</sup>

Effective consideration of the above factors will be facilitated significantly if the parties produce adequate, credible information to support their eligibility for a recycling exemption (including information establishing that a transaction involves recyclable material). The level of information will be determined on a site-by-site basis. In evaluating the factors, it may be useful to consider interpretations the Agency has taken in its administration of other federal environmental programs, such as the Resource Conservation and Recovery Act (RCRA) and the Toxic Substance Control Act (TSCA).

Finally, while SREA is an exemption, the exemption is not automatic, as the party must demonstrate that it qualifies for the exemption. In some instances, parties may prefer the protection afforded by a CERCLA settlement. For instance, they may conclude that the risk of failing to prove the applicability of the exemption is high enough to make a settlement preferable. In such cases, the Regions are encouraged to explore settlement with such parties, and may use this guidance as a tool for determining factors to consider in crafting an appropriate settlement.

#### 1.1 Structure of recycling exemption

CERCLA Section 127(b) provides that the liability exemption applies only to the recycling of certain materials: scrap paper, scrap plastic, scrap glass, scrap textiles, scrap rubber (other than whole tires), scrap metal, and spent lead-acid, nickel-cadmium and other batteries, as well as minor amounts of material incident to or adhering to the scrap material as result of its normal and customary use prior to becoming scrap. Therefore, the arranger or transporter must show that its scrap material qualifies as a "recyclable material" (e.g., this includes making sure the scrap material meets the definition above, including whether the scrap material had more than minor amounts of material incident to or adhering to it as a result of its normal and customary use prior to becoming scrap). Furthermore, the arranger or transporter must then show that its transaction(s) involving the recyclable material was an "arrangement for recycling"

<sup>&</sup>lt;sup>3</sup> See <u>e.g.</u>, the criteria set forth in Section 127(c) that also must be met for transactions covered under subsections (d) and (e), as well as the exclusions under Section 127(f) that apply to all recycling transactions. These criteria and additional requirements address what is necessary to qualify for the exemption depending on whether the relevant transaction occurred on or before February 27, 2000 (90 days from the enactment of SREA). For example, for transactions occurring after that date, the party must have exercised reasonable care to determine whether a consuming facility is in compliance with all applicable environmental laws. 42 U.S.C. § 127(c)(5). The "reasonable care" analysis requires consideration of the applicable provisions of other statutes and regulations, such as the Resource Conservation and Recovery Act (RCRA) or the Toxic Substance Control Act (TSCA), and related regulations. Such an evaluation of other applicable environmental laws may apply to the arranger or transporter, depending on whether the transaction under consideration was pre- or post-enactment. See also, 42 U.S.C. § 127(f)(1)(A)(iii), (C).

by providing evidence that all criteria in Section 127(c) were met at the time of the transaction.<sup>4</sup> If the recyclable material is a scrap metal or spent battery or both, Sections 127(d) and (e) outline specific criteria for the recycling of these materials that must be met in addition to the criteria of Section 127(c). However, if any of the exclusions set forth in Section 127(f) are met, then the exemption will not apply.<sup>5</sup>

# 2.0 Definition of "recyclable materials"

CERCLA Section 127(b) contains an overall definition of the "recyclable material" covered by the SREA recycling exemption. Other subsections contain further, more specific clarifications of this overall definition.

#### CERCLA Section 127(b) states:

"For purposes of this section, the term 'recyclable material' means scrap paper, scrap plastic, scrap glass, scrap textiles, scrap rubber (other than whole tires), scrap metal, or spent lead-acid, spent nickel-cadmium, and other spent batteries, as well as minor amounts of material incident to or adhering to the scrap material as a result of its normal and customary use prior to becoming scrap."

Sections 3.0 and 4.0 of this document discuss the scrap metal and whole battery exemptions in greater detail.

In addition, the overall definition found in Section 127(b) contains two exclusions. The first one addresses certain types of containers. The relevant language excludes, "shipping containers of a capacity from 30 liters to 3,000 liters, whether intact or not, having any hazardous substance (but not metal bits and pieces or hazardous substance that form an integral part of the container) contained in or adhering thereto." The second one excludes "any item of material that contained polychlorinated biphenyls at a concentration in excess of 50 parts per million or any new standard promulgated pursuant to applicable Federal laws." Section 5.0 discusses the PCB exclusion in greater detail.

# 2.1 Transactions involving "minor amounts of material"

<sup>&</sup>lt;sup>4</sup> "Time of the recycling transaction" <u>may not</u> be limited to the time when the parties entered into a contract. It <u>may</u> include the time when the recyclable material is delivered to the recycling process. There may be situations where the parties enter into a relationship in which one party supplies the other with recyclable materials over a period of time, in which case, "time of transaction" may mean several points in time when the person arranges for recycling of recyclable material.

<sup>&</sup>lt;sup>5</sup> Section 127(f) outlines five circumstances in which the arranger or transporter would be ineligible for the exemption.

SREA does not disqualify as "recyclable material," materials that may contain "minor amounts of material incident to or adhering to the scrap material as a result of its normal and customary use prior to becoming scrap." The statute does not define the phrase "minor amounts." When evaluating the appropriate enforcement posture to take, Regions should determine on a case-by-case basis whether "minor amounts," or more than "minor amounts," of material were present by considering the volume and/or weight of the recyclable material composition as compared to the total volume or weight of metal. For example, when the purported recyclable material is metal, such as wire, it is relevant whether the wire is:

- bare metal<sup>6</sup>; or
- metal with only residual (post-stripping) amounts of insulation or coating remaining on the metal<sup>7</sup>; or
- metal with a minor amount of insulation or coating fully intact<sup>8</sup>.

# 3.0 Transactions involving scrap metal

In addition to the overall definition of recyclable material provided in Section 127(b), Section 127(d)(3) provides that the term "scrap metal" means:

"bits and pieces of metal parts (<u>e.g.</u>, bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (<u>e.g.</u>, radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled, except for scrap metals that the Administrator excludes from this definition."

This definition of scrap metal is the same as the RCRA regulatory definition of scrap metal set forth in 40 C.F.R. Section 261.1(c)(6).9

 $<sup>^{6}</sup>$  For example, metal that did not meet the manufacturer's specifications.

<sup>&</sup>lt;sup>7</sup> For example, an arranger or transporter sends metal with insulating material to a stripping/chopping company to separate the insulating or coating material from the metal and the metal with residual amounts of insulation or coating remaining was sent to a recycling facility to be recycled. The residual material was once an essential part of the scrap during its normal and customary use prior to becoming scrap and therefore may be considered "minor amounts."

<sup>&</sup>lt;sup>8</sup> For example, an arranger or transporter sends metal with insulation or coating which cannot be mechanically removed because of the relative weight of the insulation or coating as compared to the metal itself. The insulation or coating was once an essential part of the scrap during its normal and customary use prior to becoming scrap and therefore may be considered "minor amounts."

<sup>&</sup>lt;sup>9</sup> Agency interpretation and regulatory actions involving scrap metal taken pursuant to RCRA may provide some guidance in determining which enforcement posture to take in CERCLA cases involving scrap metal issues. For example, in the preamble to the final rule where EPA promulgated 40 C.F.R. Section 261.1(c)(6), EPA stated

When evaluating the appropriate enforcement posture to take in CERCLA cases involving SREA's scrap metal provisions, Regions should determine whether RCRA and its implementing regulations have addressed similar or related scrap metal recycling issues, and whether the RCRA regulatory approach to the material involved at the site would be appropriate for CERCLA purposes.

# 3.1 Transactions that may involve "bits and pieces of metal parts"

When evaluating the appropriate enforcement posture to take in CERCLA cases involving bits and pieces of metal parts, Regions should consider the size of the metal involved in the transaction, whether the metal was attached to or combined with other materials, and whether the metal was in a solid or liquid form and whether it was melted prior to being recycled.

CERCLA Section 127(d)(3) defines scrap metal to include "bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire)." Transactions involving "bits and pieces of metal parts" could involve metal parts in different sizes such as metal blocks, metal shavings, grindings, and floor sweepings. The size of the metal may be important. For example, material that is powdery or dust-like may not fall within the definition of "scrap metal" as a bit or a piece of metal.

The nature of the metal is also important. Mercury, for example, is a liquid metal that typically is different from solid metal in content, physical form and manageability. In its liquid state, mercury normally would not represent "bits and pieces of metal parts . . . or metal pieces that may be combined together with bolts or soldering."

# 3.2 Transactions involving scrap automobiles

Scrap metal under Section 127(d)(3) may include "metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars)." Regions should consider whether the fluids were removed from the vehicle or device prior to the transaction, whether the material is only composed of metal (e.g., does the material also contain plastic or other synthetic components), and whether there are "minor amounts" or greater than minor amounts of other substances adhering to it (e.g., PCBs, fluid, oil, etc.).

# 3.3 Transactions involving scrap metal that has been melted

that the definition of scrap excludes, <u>inter alia</u>, "residues generated from smelting and refining operations (i.e., drosses, slags, and sludges)." 50 Fed. Reg. 624 (Jan. 4, 1985). However, EPA's interpretations and regulatory actions taken pursuant to RCRA may not always be applicable. RCRA and CERCLA are different statutes with different purposes, a distinction that may be relevant in determining the appropriate approach to take under CERCLA. CERCLA is a remedial statute, that creates liability for past acts of disposal of hazardous substances. RCRA is a regulatory statute that addresses cradle to grave management of hazardous waste.

When evaluating the appropriate enforcement posture to take, Regions should consider whether the metal involved in the transaction was melted prior to the recycling transaction. CERCLA Section 127(d)(1)(C) provides that an arranger must demonstrate that it did not melt the scrap metal prior to the recycling transaction. To the extent material such as dross is melted prior to the recycling transaction, it may be covered by the exclusion in Section 127(d)(1)(C) and may be outside the scope of the recycling exemption.

On the other hand, solder baths (when cooled) are solidified bits and pieces of metal that generally are different in physical form and content from process residues such as sludges, slags, and drosses. To the extent solidified solder baths are not melted prior to the recycling transaction, they may not be covered by the exclusion in Section 127(d)(1)(C) and thus eligible for the exemption. The exemption of the exemption of the exemption of the exemption.

# 3.4 Transactions involving other scrap lead-bearing material

# A. Lead-bearing components removed from whole spent batteries

#### 1. plates/grids

When evaluating the appropriate enforcement posture to take in CERCLA cases involving battery parts, Regions should consider whether the material involves part of a spent battery and whether that part represents a valuable component that has been recovered prior to the recycling transaction.

The overall definition of "recyclable material" in CERCLA Section 127(b) includes spent batteries and scrap metal. CERCLA Section 127(e) addresses battery recycling in particular and excludes from the exemption a person who recovers the valuable components (e.g., lead plates) of a battery prior to it being recycled. These provisions suggest that Congress intended that arrangements involving whole batteries may qualify for the exemption, while arrangements involving battery parts may not qualify, either as batteries, or as scrap metal.

Limiting the exemption to whole batteries encourages the sound practice of selling whole batteries to a properly equipped recycling facility and discourages the cracking of batteries by smaller dealers on their own property. Improper handling (e.g., of the battery casing and acid)

<sup>&</sup>lt;sup>10</sup> In a preamble to a RCRA rule, EPA reiterates its earlier interpretation from a 1993 letter which states that spent solder baths, in general, meet the definition of scrap metal contained in 40 C.F.R. Section 261.1(c)(6). *See* 62 Fed. Reg. 26013 (May 12, 1997). Letter from Jeffery D. Denit to Jeffrey T. Miller, Lead Industries Association, Inc. (September 20, 1993).

<sup>11</sup> This exclusion may not apply to melting that occurs during a manufacturer's production process.

can cause serious environmental hazard. Sulfuric acid, battery case material and lead compounds are the main sources of air emissions generated from battery breaking.<sup>12</sup>

# 2. battery mud/paste and battery acids

When evaluating the appropriate enforcement posture to take in CERCLA cases involving battery parts, Regions should consider whether the material is in a solid or liquid form, whether the material is composed of only metal (e.g., does the material also contain plastic or other synthetic components), and if the material is scrap metal, whether there are only "minor amounts" of other substances adhering to it (see discussion in 2.1 above).

Typically, where a whole battery has been broken or cracked open to drain and/or remove the acid, the drained spent battery still contains materials such as battery mud/paste, sulfuric acid and the battery grid. Alone, the sulfuric acid and battery mud/paste would not be covered by the definitions of recyclable material or scrap metal under SREA as they are not "bits and pieces of metal." In addition, broken batteries are not necessarily candidates for the recycling exemption, as discussed above in Section 3.4.<sup>14</sup>

# B. Reject materials (e.g., off-specification commercial products)

Sometimes a metal plate/grid (e.g., a battery component) fails to meet the manufacturer's specifications and becomes "reject" material that does not become part of a whole battery and does not have any other substances (e.g., lead oxide paste) adhering to it. In such cases, Regions should consider how the material was used and how it may have been recycled (e.g., were the battery plates removed from the reject battery prior to being sent to a recycling facility).<sup>15</sup>

#### 4.0 Transactions involving whole batteries

EPA Office of Compliance Sector Notebook Project. "Profile of the Nonferrous Metals Industry." U.S. Environmental Protection Agency, Office of Compliance, Office of Enforcement and Compliance Assurance. September 1995, at page 37. Experience has also shown that sulfuric acid and lead compounds drained and/or removed from a spent battery can cause soil and groundwater contamination.

This is consistent with the preamble to a RCRA rule, in which the Agency has stated "..liquid metal wastes (<u>i.e.</u>, liquid mercury), or metal-containing wastes with a significant liquid component, such as spent batteries" are not scrap metal as defined by RCRA. *See* 50 Fed. Reg. 624 (January 4, 1985).

<sup>&</sup>lt;sup>14</sup> See also footnote 3 (providing a discussion on additional exclusions of Section 127(f)).

There may be situations where the arranger or transporter sent reject battery plates covered with battery paste; in such cases the party may not qualify for the SREA exemption.

Section 127(e) states, "transactions involving spent lead-acid batteries, spent nickel-cadmium batteries, or other spent batteries shall be deemed to be arranging for recycling if the person who arranged for the transaction (by selling recyclable material or otherwise arranging for the recycling of recyclable material) can demonstrate by preponderance of the evidence that at the time of the transaction-

- "(1) the person met the criteria in subsection (c), but did not recover the valuable components of such batteries; and
- "(2)(A) with respect to transactions involving lead acid-batteries, the person was in compliance with applicable Federal environmental regulations or standards and, any amendments thereto, regarding the storage, transport, management, or other activities associated with the recycling of spent lead-acid batteries;
- "(B) with respect to transactions involving nickel-cadmium batteries, Federal environmental regulations or standards are in effect regarding the storage, transport, management, or other activities associated with the recycling of spent nickel-cadmium batteries, and the person was in compliance with applicable regulations or standards or any amendments thereto; or
- "(C) with respect to transactions involving other spent batteries, Federal environmental regulations or standards are in effect regarding the storage, transport, management, or other activities associated with the recycling of such batteries, and the person was in compliance with applicable regulations or standards or any amendments thereto."

# 4.1 Transactions involving recovery of valuable components of batteries

CERCLA Section 127(e)(1) limits the recycling exemption to parties that "did not recover the valuable components" of batteries prior to the recycling transaction. One example of recovering "valuable components" may involve battery cracking. Batteries are sometimes cracked in order to retrieve the metal plates inside; the plates can then be sold. Battery plates are often covered with significant amounts of battery paste which contains lead.

When evaluating the appropriate enforcement posture to take, Regions should consider whether any component of a battery has been removed prior to the recycling transaction and whether that component has any commercial value. If those factors are present, valuable components may have been recovered for purposes of Section 127(e)(1) and the arranger or transporter may not be eligible for the SREA exemption.

#### 4.2 Transactions involving lead-acid batteries

CERCLA Section 127(e)(2)(A) addresses lead-acid batteries. One condition of the recycling exemption with respect to transactions involving lead-acid batteries is "compliance with applicable Federal environmental regulations or standards and, any amendments thereto, regarding the storage, transport, management, or other activities associated with the recycling of spent lead-acid batteries."

The Agency first promulgated regulations under RCRA generally dealing with hazardous waste in 1980.<sup>16</sup> However, in such regulations, EPA deferred Subtitle C regulation of wastes which are beneficially used or reused, or legitimately recycled or reclaimed, or accumulated, stored, or treated prior to beneficial use or reuse. Therefore, there were no Federal regulations applicable to the recycling of batteries at that time. In 1985, the Agency added the first RCRA regulations pertaining specifically to batteries. One provision exempted from regulation all spent batteries, including lead-acid and nickel-cadmium batteries, that were returned to a battery manufacturer for regeneration.<sup>17</sup> Another provision of the 1985 rule-making, specifically addressed the reclamation<sup>18</sup> of spent lead-acid batteries.<sup>19</sup> *See* C.F.R. Section 266.80.

In 1995, the Agency promulgated regulations providing streamlined management standards for certain "universal wastes." The universal waste standards provide an alternative regulatory framework under RCRA. These management standards generally prohibit universal waste handlers from treating or disposing of universal waste, and establish requirements, during transportation and at temporary transfer facilities, for various activities such as storage, tracking, labeling, and release response. One category of universal wastes includes a number of different types of batteries, including lead-acid batteries. *See* 40 C.F.R. Part 273. Parties that handle lead-acid batteries have the choice of following either 40 C.F.R. Section 266.80 or 40 C.F.R. Part 273.

<sup>&</sup>lt;sup>16</sup> On May 19, 1980, EPA promulgated regulations for generators, transporters, and Treatment, Storage, and Disposal Facilities (TSDFs) of hazardous wastes, including lead and cadmium-containing wastes.

This provision was codified at 40 C.F.R. Section 261.6(a)(3)(ii). *See* 50 Fed Reg. 614 (January 4, 1985). The Universal Waste Rule, promulgated in 1995, removed this exemption and added management provisions at 40 C.F.R. Section 273.13(a) and Section 273.33(a). *See* 60 Fed. Reg. 25492 (May 11, 1995).

<sup>&</sup>lt;sup>18</sup> A material is "recycled" if it is used, reused, or reclaimed. A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. *See* C.F.R. 261.1(4) and (7).

On January 4, 1985, EPA promulgated regulations to govern hazardous wastes which are recycled., including special streamlined standards for lead-acid battery reclamation. This regulation went into affect July 5, 1985. This provision was originally codified in 40 C.F.R. 261.6(a)(2)(v), but has since been redesignated as Section 261.6(a)(2)(iv).

<sup>&</sup>lt;sup>20</sup> The Universal Waste Rule, codified at 40 C.F.R. Part 273, became effective on May 11, 1995.

<sup>&</sup>lt;sup>21</sup> Treatment, disposal and recycling of universal wastes at destination facilities is covered by 40 C.F.R. Part 273 Subpart E, which generally subjects such facilities to all RCRA subtitle C requirements (except for recyclers who do not store universal waste and instead are subject to 40 C.F.R. Section 261.6(c)(2)).

Under Section 3006 of RCRA, 42 U.S.C. § 6926, individual States can be authorized by EPA to administer their own equivalent hazardous waste programs in lieu of the Federal program.<sup>22</sup> Therefore, the Federal requirements applicable to the recycling of batteries in a particular State may be the authorized State regulations.

As a range of Federal regulations regarding batteries exists, there may be other Federal regulations or standards that may apply regarding the storage, transport, management, or other activities associated with the recycling of spent lead-acid batteries.<sup>23</sup>

Thus, when evaluating the appropriate enforcement posture to take in CERCLA cases involving lead-acid batteries, Regions should consider whether the transaction involving a lead-acid battery occurred on or before July 5, 1985, between July 6, 1985 and May 11, 1995, or after May 11, 1995, to determine which federal regulations, if any, may have been applicable. The Region also should consider whether the transaction occurred in a state that was authorized to administer the federal RCRA program in lieu of EPA. Finally, the Region should consider whether the party conducting the transaction was in compliance with regulations that were applicable at the time.

# 4.3 Transactions involving nickel-cadmium and other spent batteries

CERCLA Section 127(e)(2)(B) addresses nickel-cadmium batteries. One condition of the recycling exemption for nickel-cadmium batteries is the existence of "regulations or standards [that] are in effect regarding the storage, transport, management, or other activities associated with the recycling of spent nickel-cadmium batteries," as well as compliance with those "regulations or standards or any amendments thereto." CERCLA Section 127(e)(2)(C) contains identical provisions for "other spent batteries."

As discussed above, prior to the universal waste rule, there were two types of used batteries that were addressed by RCRA regulations: lead-acid batteries being reclaimed and batteries (of any type) returned to the manufacturer for regeneration. *See* Section 4.2. After May 11, 1995, however, the streamlined universal waste management standards provided an

Under the Mercury-containing Rechargeable Battery Act of 1996, the federal universal waste regulations apply to the collection, storage and transportation of certain batteries unless a state receives approval for identical state regulations.

The other Federal regulations or standards that may apply regarding the storage, transport, management, or other activities associated with spent batteries include the following: 1) 23 C.F.R. Section 751.7 (Department of Transportation; Federal Highway Administration); 2) 25 C.F.R. Section 226.34 (Department of the Interior; Bureau of Indian Affairs); 3) 29 C.F.R. Section 1910.106 (Department of Labor; Occupational Safety and Health); 4) 36 C.F.R. Sections 6.4, 6.5, 6.9, and 9.36 (Department of Interior; National Park Service); and 5) 49 C.F.R. Sections 172.101, 172.102, 173.159, 173.185, 173.189, 174.102, 175.10(ii), and 177.839 (Department of Transportation; Research and Special Administration).

alternative regulatory scheme for certain handlers of certain types of batteries, including nickel-cadmium and other spent batteries.<sup>24</sup>

As with lead-acid batteries, a range of Federal regulations regarding batteries exists, and there may be other Federal regulations or standards that may apply regarding the storage, transport, management, or other activities associated with the recycling of these types of batteries.<sup>25</sup>

Thus, when evaluating the appropriate enforcement posture to take in CERCLA cases involving nickel-cadmium batteries and other spent batteries, Regions should consider whether the transaction involving a nickel-cadmium or other spent battery occurred on or before July 5, 1985, between July 6, 1985 and May 11, 1995, or after May 11, 1995. If the transaction involves "other spent batteries," the Region should consider whether the batteries fall within the definition of 40 C.F.R. Section 273.9. The Region also should consider whether the transaction occurred in a state that was authorized to administer the federal RCRA program in lieu of EPA. Finally, the Region should consider whether the party conducting the transaction was in compliance with the regulations that were applicable at the time.

# 5.0 Transactions involving PCB-containing materials

CERCLA Section 127(b)(2) states that the term "recyclable material" shall not include "any item of material that contained polychlorinated biphenyls (PCBs) at a concentration in excess of 50 parts per million or any new standard promulgated pursuant to applicable Federal laws."

PCBs are the only hazardous substance specifically addressed in Section 127.<sup>26</sup> In addition, the PCB exclusion is not tied to "the time of the transaction," as is the case for other scrap material addressed in Section 127(c), (d) and (e). Furthermore, the term "item" is not defined in SREA or elsewhere in CERCLA.<sup>27</sup>

<sup>&</sup>lt;sup>24</sup> 40 C.F.R. Section 273.9 includes a definition of "battery" for purposes of the universal waste rule that includes an "intact, unbroken battery from which the electrolyte has been removed." The electrolyte is the medium for movement of ions within the cell. This definition <u>may</u> be broad enough to cover a whole reject battery (<u>i.e.</u>, an off-specification commercial chemical product that has either not been used or does not meet the manufacturer's product specifications).

<sup>&</sup>lt;sup>25</sup> See footnote 23.

<sup>&</sup>lt;sup>26</sup> The inclusion of a specific provision addressing PCBs supports recognition by Congress of the risks to human health and the environment posed by PCB contamination, as well as the often high cost of remediating PCB contamination.

<sup>&</sup>lt;sup>27</sup> Regulations promulgated under TSCA may provide guidance in defining an "item". Under TSCA regulations, PCB items fall into four categories: 1) PCB Articles (have had direct contact with PCBs) and include PCB transformers, PCB capacitors, PCB Hydraulic Machines, PCB-contaminated electrical equipment, and other

# 5.1 General factors to consider for PCB-containing material

When evaluating the appropriate enforcement posture to take in CERCLA cases involving transactions that may involve PCBs, Regions should consider: the type of material associated with the PCBs at the site (e.g., transformers);<sup>28</sup> the concentration of PCBs in the material at the time of the transaction, as well as before the transaction; and, the number of items with PCB concentrations in excess of 50 ppm.

# **5.2** Determining PCB concentrations

When evaluating the appropriate enforcement posture to take in CERCLA cases involving transactions that may involve PCBs, Regions should consider whether there is any evidence pertaining to the PCB concentrations of the items of material sent to be recycled and whether each item is known to have contained PCBs greater or less than 50 ppm at some previous point in time. In the absence of credible evidence demonstrating that an item did not exceed 50 ppm, Regions as a matter of enforcement discretion may presume that a party sent non-exempt hazardous materials (>50 ppm PCBs) if PCB contamination is present at the site.

The concentration of PCBs in an item may be demonstrated by such methods as sampling data that may have been collected to comply with TSCA disposal regulations, service records, manufacturing labels, or known specifications for similar items built or used in the same period.<sup>29</sup>

Pursuant to current regulations under TSCA, owners seeking to dispose of equipment (which includes sending PCB equipment for recycling) must dispose of the equipment based on its actual concentration at the time of disposal. TSCA regulations provide that actual concentration of PCBs can be determined by analytical testing or by assuming a worst case scenario (i.e., the equipment is \$500 ppm). 40 C.F.R. Section 761.50.<sup>30</sup> If gathered, sampling

PCB articles; 2) PCB Containers (have had direct contact with PCBs); 3) PCB Article Containers (have had no direct contact with PCBs); and 4) PCB equipment (has had no direct contact with PCBs). *See* 40 C.F.R. Section 761.3. For purposes of SREA, however, an "item" is not necessarily limited to the TSCA definition.

<sup>&</sup>lt;sup>28</sup> An example of an item for which it may be appropriate to broadly apply the exclusion is a transformer. Even if a transformer has been drained and filled with new fluid at a concentration # 50 ppm, it is possible that the transformer may contain parts (such as a core or coil) that are made of porous materials (such as wood or fabric) that may retain concentrations > 50 ppm. Thus, although sampling of the oil may reflect PCB concentration # 50 ppm, the inner core of the transformer (e.g., porous material) could still contain a PCB concentration > 50 ppm.

<sup>&</sup>lt;sup>29</sup> See Appendix A at p. 23 (question on how PCB concentration is typically measured when sampled).

<sup>&</sup>lt;sup>30</sup> Sampling procedures in the PCB disposal regulations can be found in 40 C.F.R. Section 761, Subparts P, R.

data could be the best evidence to demonstrate that an item did not contain in excess of 50 ppm PCBs. These TSCA PCB regulations apply to transactions occurring after July 2, 1979.<sup>31</sup>

# 5.3 Amount of scrap material containing PCB concentrations in excess of 50 ppm

Section 127(b) of SREA excludes "any item of material that contained polychlorinated biphenyls at a concentration in excess of 50 parts per million" from qualifying for the exemption. Where a transaction involves a shipment that contains both items contaminated with PCBs in excess of 50 ppm and less than 50 ppm, the exemption under SREA may not be applicable. However, in those situations where a party cannot adequately demonstrate the concentration levels of *all* the items of material sent to the site, Regions as a matter of enforcement discretion may consider an appropriate share of liability at the site based on at least partial eligibility under SREA.<sup>32</sup>

# 5.4 Summary

This document provides guidance to EPA Regions concerning how the Agency intends to exercise its enforcement discretion when evaluating the appropriate enforcement posture to take under SREA. The guidance is designed to implement national guidance on these issues. Some of the statutory provisions described in this document may contain legally binding requirements. However, this document does not substitute for those provisions, nor is it a regulation itself. Thus, it cannot impose legally binding requirements on EPA, States, or the regulated community, and may not apply to a particular situation based upon the circumstances. Any decisions regarding a particular settlement or other enforcement decision will be made based on the statute and applicable regulations, and EPA decision makers retain the discretion to adopt approaches on a case-by-case basis that differ from this guidance where appropriate.

<sup>&</sup>lt;sup>31</sup> As noted in Section 3.0 with regard to RCRA, TSCA may provide some guidance for evaluating the appropriate enforcement posture to take under SREA in cases involving PCB-containing materials. For example, in some cases dilution may be allowed under TSCA. *See* 40 C.F.R. Section 761.30(a)(2)(v)(transformers may be drained of PCBs and refilled with non-PCB dielectric fluid; although residual PCBs are expected to remain in the transformer and contaminate the non-PCB dielectric fluid used to refill it, it is considered authorized dilution). While such dilution may be authorized as a regulatory matter under TSCA, it may not be appropriate at a Superfund site for purposes of Section 127.

Thus, for example, if credible evidence provided by a party demonstrates that only three transformers out of a truckload of 15 transformers may have exceeded 50 ppm PCBs, the Region may consider reducing that party's share of liability to account for the fact that most of the items sent to the site were exempt under SREA (assuming the other elements in Section 127 are met).

# APPENDIX A TECHNICAL BACKGROUND INFORMATION FOR VARIOUS SCRAP MATERIALS (QUESTION AND ANSWER FORMAT)

#### Q: What is insulated wire and cable?

**Ans:** When wire is covered with coating or insulation it is usually referred to as insulated wire. The insulation is typically coating of dielectric or essentially nonconducting material which serves the purpose of preventing the transmission of electricity. The insulating material can be any material that is a poor conductor of heat or electricity and is used to suppress the flow of heat or electricity. In ordinary electric wiring, plastics are commonly used as insulating sheathing (cover or encasing) for the wire itself. Very fine wire, such as that used for the winding of coils and transformers, may be insulated with a thin coat of enamel.<sup>33</sup>

The insulation of wires inside electric equipment may be made of mica<sup>34</sup> or glass fibers with a plastic binder. Polyethylene and polystyrene are used in high-frequency applications (e.g., telecommunications). Other materials used as insulating material include nylon, silicone rubber, epoxy polyesters, polyurethane, and neoprene.<sup>35</sup> Asbestos is another material used in insulation for hot water piping.<sup>36</sup> The specific choice of an insulating material is usually determined by its application.

Cable is composed of one or more stranded conductors (composed of a group of wires or of any combination of groups of wires). Cable which is covered by insulation and sometimes a protective sheath is used for transmitting electric power or the impulses of an electric communications system.<sup>37</sup> Transmission cables have aluminum as the conducting metal. Utilities use insulated aluminum power cable as outside distribution cable but primarily use insulated copper wire for inside distribution. Building, communication, electronics and automotive markets normally use copper as the conducting metal.

#### Q: What methods are used to separate insulation (e.g., plastic) from metal?

**Ans:** Normally, for the metal to be recycled, the metal is separated from the insulation. The various techniques used for stripping insulation from wire and cable include mechanical

In industry, enamel is a coating often used primarily for the protection of a surface against corrosion or abrasion. Industry enamel is usually applied to cast iron or sheet that has previously been stamped into shape. The enamel is composed of raw materials such as borax, silica, fluorspar, and feldspar that are mixed and melted by heat. *Microsoft Encarta Encyclopedia 2000* <a href="http://encarta.com">http://encarta.com</a>. [Accessed August 11, 2000]

<sup>&</sup>lt;sup>34</sup> Mineral that crystallizes in thin, somewhat flexible, translucent or colored, easily separated layers and resistant to heat. *Webster New World Dictionary, Third College Edition.* 1988.

<sup>&</sup>lt;sup>35</sup> "Insulation," *Microsoft Encarta Encyclopedia 2000* <a href="http://www.encarta.msn.com">http://www.encarta.msn.com</a>>. [Accessed April 26, 2000]

<sup>&</sup>lt;sup>36</sup> *Id*.

<sup>&</sup>lt;sup>37</sup> "Cable," *Microsoft Encarta Encyclopedia 2000* <a href="http://www.encarta.msn.com.">.[Accessed April 26, 2000]

stripping, thermal stripping (high temperature or low temperature), chemical stripping,<sup>38</sup> or a mechanical chopping/grinding process. According to the Bureau of International Recycling, the predominant way of recovering the metal from cable scrap is automated cable chopping.<sup>39</sup>

Once the insulation is removed, the metal is either sent to a scrap metal recycling facility or recycled on-site, and the insulation is either disposed of or recycled as well. Polyvinyl Chloride (PVC) can be recycled into pellets or directly reused for insulation of electric cable, insulation tape, carpet lining, flooring and footwear, etc.<sup>40</sup>

# Q: How are lead-acid batteries used and what are the components that make up a lead-acid battery?

**Ans:** Manufacturing of lead-acid batteries is the predominant end use for lead in the U.S. Lead-acid batteries are secondary, wet cell batteries, which means they can be recharged for many uses and they contain liquid. They are the most widely used rechargeable battery in the world. Most spent lead-acid batteries, in particular automobile batteries, are recycled. It is estimated that approximately 80 to 95 percent of all spent automobile lead-acid batteries generated in the U.S. are recycled. are recycled.

Spent lead-acid batteries are the principal source of feed materials for secondary lead smelters. At present, most smelters purchase whole batteries rather than buying pre-separated lead-bearing components.<sup>43</sup> The lead bearing components include plates, groups, and lead oxide paste. Within each cell of a battery, several individual lead grids (plates) are combined to form a single unit (group) that is held together by a lead-oxide paste. Once these plates or groups are removed from a battery, they are considered to be hazardous material by the U.S. Department of

One example of chemical stripping involves the use of a hot bath to melt the plastic (<u>e.g.</u>, PVC) away from the scrap copper wire. The high temperatures decompose plastic insulation into carbon, which separates out as a granular black material, and also enhances the dissolution of lead from the plastic insulation and copper from the metal wire. SSPC Issues Technology Update on Chemical Stripping <a href="http://www.sspc.org">http://www.sspc.org</a>. [Accessed April 24, 2001]

<sup>&</sup>lt;sup>39</sup> Plastic Coated Cable Scrap. *Bureau of International Recycling* <a href="http://www.bir.org/cable">http://www.bir.org/cable</a>>. [Accessed August 18, 2000]

<sup>&</sup>lt;sup>40</sup> *Id*.

Hawker Energy's <a href="http://www.hepi.com/basics/pb.htm">http://www.hepi.com/basics/pb.htm</a>. [Accessed December 23, 2001]

<sup>&</sup>lt;sup>42</sup> Smith, Bucklin and Associates, Inc., "Battery Council International National Recycling Rate Study." December 1996.

<sup>&</sup>lt;sup>43</sup> Midwest Research Institute. "Background Document for Secondary Lead Smelters Association Request for a Solid Waste variance." Prepared for the U.S. EPA, Office of Solid Waste (August 26, 1988).

Transportation and, therefore, are subject to its hazardous material requirements.<sup>44</sup> As a result of these restrictions and other factors, only 10 percent of the batteries recycled are opened by independent battery breakers prior to being recycled.<sup>45</sup>

The typical lead-acid automobile battery weighs approximately 36 pounds and consists of about 14 pounds of battery paste, 8 pounds of battery grid, 2 pounds of casing, 2 pounds of separators, and 10 pounds of sulfuric acid. Highlight 2 presents a typical grid and paste content. The content of the content

**Highlight 2: Typical grid and paste analyses** 

Components	Grid (%)	Paste (%)
Lead metal	89	1
Lead oxide	1	30
Lead sulfate	1	45
Antimony	1.6	0.3
Tin	0.2	<0.1
Arsenic	0.2	< 0.1
Moisture	6	20
Silica	-	2
Carbon	-	2
Organics	1	1
Total	100	100

# Q: What are the methods used to recover the lead-bearing components of a whole battery?

**Ans:** The most prevalent method used by smelting facilities to recover the lead-bearing components of a whole battery is to saw off the top with a large, slow-speed saw. Another method is to crush the entire battery in a crusher. Before beginning the breaking operation, a facility would first receive a bulk shipment of discarded batteries from its customers. Following the breaking operation, the various components of the batteries are separated. The acid is

<sup>&</sup>lt;sup>44</sup> Midwest Research Institute. "Background Document for Secondary Lead Smelters Association Request for a Solid Waste variance." Prepared for the U.S. EPA, Office of Solid Waste (August 26, 1988).

<sup>&</sup>lt;sup>45</sup> Id

<sup>&</sup>lt;sup>46</sup> Queneau, Paul et al. June 27–29, 2000. "Recycling Metals from Industrial Waste." Sponsored by Office of Special Programs and Continuing Education, Colorado School of Mines.

<sup>&</sup>lt;sup>47</sup> Id.

allowed to drain from the opened case and is collected for disposal or resale. The plates and groups are removed from the cases, mechanically or manually, and transported to storage. All lead-bearing components, such as terminal posts and lead oxide (paste), are stored with the plates and groups. The lead-bearing components from the batteries comprise the major portion of the materials charged into the lead recovery furnace.<sup>48</sup>

#### **Q:** What is solder?

**Ans:** Solder is any of several metallic alloys that melt at comparatively low temperatures and are used for the patching or joining of metal parts or surfaces. Solder is classified into several groups of metal alloys<sup>49</sup> (e.g., lead, nickel, silver, steel, tin, etc.).<sup>50</sup> Solders are commonly classified as soft and hard solders, depending upon their melting points and strengths.<sup>51</sup> Solders are supplied in wire, bar, or premixed-paste form, depending on the application.<sup>52</sup>

### Q: What process is used for soldering metal?

**Ans:** In joining two pieces of metal with solder, the metal surfaces to be joined are first cleaned mechanically and then coated with a flux, usually of rosin or borax, that cleans them chemically and assists the solder in making a bond. The surfaces are then heated, either with a hot metal tool called a soldering iron or soldering copper or with some form of alcohol or gas blowtorch. The metal surfaces are heated to the melting point of the solder, the solder is applied and it is allowed to run freely, solidifying as the surfaces cool. In the form of soldering known as sweating<sup>53</sup>, the metal pieces to be joined are first coated individually with solder and then clamped together and heated to form the finished joint.<sup>54</sup>

<sup>&</sup>lt;sup>48</sup> Midwest Research Institute. "Background Document for Secondary Lead Smelters Association Request for a Solid Waste variance." Prepared for the U.S. EPA, Office of Solid Waste (August 26, 1988).

<sup>&</sup>lt;sup>49</sup> Alloy refers to a mixture of two or more metals usually to convey certain properties to the **base metal** (the main metal of the alloy). Examples of alloys include stainless steel (steel, chromium and nickel), brass (copper and zinc), and bronze (copper and tin). Alloy metals are usually added to base metals to convey different properties such as corrosion resistance, hardening, and malleability.

<sup>&</sup>lt;sup>50</sup> Roy A. Lindberg and Norman R. Braton. "Welding and Other Joining Processes." (1976).

<sup>&</sup>lt;sup>51</sup> "Solder," *Microsoft Encarta Encyclopedia 2000* <a href="http://www.encarta.msn.com">http://www.encarta.msn.com</a>>. [Accessed May 1, 2000]

<sup>52 &</sup>quot;Soldering," Britannica <a href="http://www.britannica.com">http://www.britannica.com</a>. [Accessed June 1, 2000]

<sup>&</sup>lt;sup>53</sup> Sweating is a term of art in SREA. It relates to soldering as a way to unite or extract metal parts by heating at the point of contact.

<sup>&</sup>lt;sup>54</sup> "Solder," *Microsoft Encarta Encyclopedia 2000* <a href="http://www.encarta.msn.com">http://www.encarta.msn.com</a>>. [Accessed June 1, 2000]

# Q: What is the difference between solder baths, solder skimmings, and solder dross?

Ans: Solder baths are solidified tin/lead metal used in wave soldering in printed wire and electronics production. Solder dross (or sometimes referred to as dross or solder skimmings) is the material that forms on the surface of the solderbath.<sup>55</sup> Physically, dross is a grey, heavy metallic sludge which floats on top of the solderbath and sets into breakable heavy lumps when it cools.<sup>56</sup> Solder dross, a process residue, is different from scrap metal in physical form and content.<sup>57</sup>

# Q: What is the difference between dross and agglomerated dross?

**Ans:** Dross is a by-product from the melting, processing, and fabrication of metal. It's a metallic sludge which floats on top of the solderbath and sets into breakable (disperable) heavy lumps when it cools. When the dross is manually or mechanically altered (sintered or melted) it becomes agglomerated dross. Agglomerated drosses are solid chucks of metal in a physical state that does not allow them to be easily crushed, split or crumbled.

# Q: How is liquid mercury used in industry?

**Ans:** Mercury is a metallic element that is a mobile liquid, silvery-white in color that shines.<sup>58</sup> Electrical products such as dry-cell batteries, fluorescent light bulbs, switches, and other control equipment account for 50% of mercury used. Mercury is also used in paint manufacture (12%) and dental preparations (3%). Lesser quantities are used in industrial catalyst manufacture (2%), pesticides manufacture (1%), general laboratory use (1%), and pharmaceuticals (0.1%).<sup>59</sup>

#### Q: How are used automobiles typically recycled?

**Ans:** Vehicle salvage facilities, also known as "dismantlers," usually are the first places that receive vehicles after their useful life. The nature of operations generally depends on the size

<sup>&</sup>lt;sup>55</sup> In the preamble to a RCRA rule, the Agency stated that the definition of scrap metal does not include "residues generated from smelting and refining operations (i.e., drosses, slags, and sludges)." *See* 50 Fed. Reg. 624 (January 4, 1985).

<sup>&</sup>lt;sup>56</sup> Strauss, Rudolf, *SMT Soldering Handbook*, Linacre House, Oxford, (2<sup>nd</sup> Edition, 1998).

<sup>&</sup>lt;sup>57</sup> In the preamble to a RCRA rule, the Agency stated that the definition of scrap metal does not include residues generated from smelting and refining operations (<u>e.g.</u>, drosses, slags, and sludges). *See* 50 Fed. Reg. 624 (January 4, 1985).

<sup>&</sup>lt;sup>58</sup> "Mercury," Mallinckrodt Chemicals. Material Safety Data Sheet <a href="http://www.mallchem.com/msds/ml599.htm">http://www.mallchem.com/msds/ml599.htm</a>. [Accessed January 24, 2002]

Technical Fact Sheet on Mercury. U.S. EPA, Office of Water <a href="http://www.epa.gov/OGWDW/dwh/t-ioc/mercury.html">http://www.epa.gov/OGWDW/dwh/t-ioc/mercury.html</a>. [Accessed August 10, 2000]

and location of the facility. Vehicles are typically dismantled upon arrival, parts are segregated, cleaned, and stored. Remaining hulks are generally sold to scrap dealers. Once the vehicle is brought to the site, fluids may be drained and the tires, gas tank, radiator, engine and seats may be removed. The dismantler may separate and clean parts. Such cleaning may include steam cleaning of the engine and transmission as well as the use of solvents to remove oil and grease and other residues. Usable parts are then inventoried and stored for resale. The remaining car and/or truck bodies are stored onsite for future sale of the sheet metal and glass. Stripped vehicles and parts that have no resale value are typically crushed and sold to a steel scrapper. Some operations may convert used vehicles and parts into steel scrap as a secondary operation. This is accomplished by incineration, shearing (bale shearer), shredding, or baling.

# Q: How are vehicles shredded and separated?

**Ans:** Vehicle shredders generally perform two primary tasks; shredding and separation. The shredding process chops the vehicle hulks received from the salvage facilities into small pieces no bigger than a fist. Once shredded, the pieces are separated according to the materials from which they are made. Most of the vehicle's iron and steel is removed magnetically. While the shredded material passes under a powerful magnet, these metals stick to the magnet, while all the other materials continue on to other separation processes. The materials remaining after magnetic separation then are further separated through a variety of processes. For example, materials may be washed in water; the heavy pieces sink to the bottom of the bath, while light objects, such as plastics, float. The materials that sink are separated into various metals (e.g., copper or aluminum), glass, and heavy rubber and plastic materials.<sup>62</sup>

Iron and steel, aluminum, and other metals may represent 75 percent of the vehicle weight that is typically recycled.<sup>63</sup> The materials that remain are the plastics, rubber, and glass (sometimes called "fluff" or automotive shredder residue).<sup>64</sup>

# Q: What are the potential pollutant sources from activities that commonly take place at automobile salvage yards?

<sup>&</sup>lt;sup>60</sup> In a final notice for the National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for Industrial Activities, EPA states that in urban areas, the remaining hulks are sold to scrap dealers due to limited space. In rural areas, remaining hulks are sold to scrap dealers less frequently. *See* 60 Fed. Reg. 189 (September 29, 1995).

<sup>&</sup>lt;sup>61</sup> See 60 Fed. Reg. 189 (September 29, 1995).

<sup>62 &</sup>quot;Salvage Facilities and Vehicle Shredders," <http://www.environmentaldefense.org/programs/PPA/vlc/shredders.html>[Accessed November 28, 2001]

<sup>&</sup>lt;sup>63</sup> *Id*.

<sup>&</sup>lt;sup>64</sup> *Id*.

**Ans:** Below is a table identifying the common pollutant sources. <sup>65</sup>

Salvage Yard Activity	Pollutant Source	Pollutants
Vehicle Dismantling	Oil, anti-freeze, gasoline, diesel fuel, hydraulic fluids	Oil and grease, ethylene glycol, heavy metals
Used Parts Storage	Batteries, chrome bumpers, wheel balance weights, tires, rims, filters, radiators, catalytic converters, engine blocks, hub caps, doors, drive-ins, galvanized metals, mufflers	Sulfuric acid, galvanized metals, heavy metals, petroleum hydrocarbons, suspended solids
Outdoor Vehicle and Equipment Storage	Leaking engines, chipping/corroding bumpers, chipping paint, galvanized metal	Oil and grease, arsenic, organics, heavy metals, TSS
Vehicle and Equipment Maintenance	Parts cleaning, disposal of rags, oil filters, batteries, hydraulic fluids, transmission fluids, radiator fluids, degreasers	Chlorinated solvents, oil and grease, heavy metals, acid/alkaline wastes, arsenic, organics, ethylene glycol
Vehicle, Equipment, and Parts Washing Areas	Washing and steam cleaning waters	Oil and grease, detergents, heavy metals, chlorinated solvents, phosphorus, salts, suspended solids
Liquid Storage in Above Ground Storage Tanks	External corrosion and structural failure, installation problems, spills and overfills due to operator error	Fuel, oil and grease, heavy metals, materials being stored
Illicit Connection to Storm Sewer	Process wastewater, sanitary water, floor drain, vehicle washwaters, radiator flushing wastewater, leaking underground storage tanks	Oil and grease, heavy metals, chlorinated solvents, fuel, ethylene glycol, detergents, phosphorus, suspended solids

# Q: How is PCB concentration measured?

Ans: Under TSCA regulations there are two basic ways of measuring PCB concentration. For example, when PCB oil is tested, the sampling results are measured in parts per million (ppm). When a transformer shell is surface wiped to determine PCB concentration, the sampling results are measured in micrograms per 100 centimeters squared ( $\mu g/100 \text{ cm}^2$ ). While these measurements are not scientifically equivalent, as one measures volume, the other surface area, TSCA regulations provide an equivalency between bulk PCB concentrations and PCB contaminated surface measurements, so that they are effectively regulated in the same way. 40 C.F.R. Section 761.1(b)(3). Provisions that apply to PCBs at concentrations of < 50 ppm apply also to contaminated surfaces at PCB concentrations of #10 $\mu g/100 \text{ cm}^2$ . Provisions that apply to

<sup>&</sup>lt;sup>65</sup> See 60 Fed. Reg. 189 (September 29, 1995).

PCBs at concentrations of \$50 to <500 ppm apply also to contaminated surfaces at PCB concentrations of >10 $\mu$ g/100 cm² to < 100  $\mu$ g/100 cm². Provisions that apply to PCB concentrations of \$500 ppm apply also to contaminated surfaces at PCB concentrations of \$100  $\mu$ g/100 cm².

PCB concentrations can also be established from a permanent label, mark or other documentation from a manufacturer, service records or other documentation indicating the PCB concentration of all fluids used to service the equipment since date of manufacture, or testing (as described above). *See* 40 C.F.R. Section 761.2 - 761.3. While TSCA only allows these concentration assumptions while the equipment is in use, and not at the time of disposal, such evidence may nevertheless be considered in evaluating the applicability of SREA. For example, the Defense Reutilization and Marketing Service (DRMS) currently considers PCB transformers of <2 ppm to be non-hazardous items and sells transformers containing <2 ppm. Department of Defense (DoD) activities could identify such transformers by manufacturer plates but may not provide sampling data. Thus, there may not be sampling data to prove that the item did not contain PCBs > 50 ppm, but the Defense Reutilization and Marketing Office (DRMO) would refer to its policy and certification procedures for evidence the item was non-hazardous and make such representation to EPA for purposes of satisfying CERCLA Section 127(b)(2). EPA would then consider all the evidence regarding the item and transaction to determine SREA's impact on liability.

# ${\bf APPENDIX\;B} \\ ({\bf SUMMARY\;OF\;JUDICIAL\;OPINIONS\;DEALING\;WITH\;THE\;EXEMPTION})$

# **Case Law Pertaining to SREA**

# I. Cases pertaining to government actions

1). <u>United States v. Mountain Metal Co.</u>, 137 F. Supp. 2d 1267 (N.D. Ala. 2001). (ILCO CERCLA liability Trial and Settlements)

Judge Clemon rendered his opinion in this matter on April 5, 2001, finding the defendant Jowers Battery liable under Section 107(a)(3) of CERCLA for sending spent lead-acid batteries to the ILCO Site, and finding the Defendant Madewell and Madewell and consolidation Defendant Lion Metals not liable under Section 107(a)(3) of CERCLA for sending only batteries plates to the ILCO Site.

With respect to Jowers Battery, the Court followed the existing case law holding that Jowers did not sell a useful product to ILCO. The Court focused specifically on the fact that the batteries had to be broken open and the lead plates recovered. This process was found to amount to a treatment of a hazardous substance as defined by CERCLA. In contrast, the Court held that Madewell and Lion Metals sold useful products that did not have to be broken open by ILCO, thereby avoiding creation of the waste problem batteries generally created, citing to <a href="Douglass County Neb. v. Gould">Douglass County Neb. v. Gould</a>, 871 F. Supp 1242 (D. Neb. 1994) and <a href="RSR Corp. v. Avanti Dev. Inc.">RSR Corp. v. Avanti Dev. Inc.</a>, 58F. Supp 1037 (S.D. Ind. 1999).

With respect to Madewell and Lion Metals, the Court found that, "while the batteries themselves were no longer useful for their original intended purposes, the lead plates were in a form that allowed ILCO to place them directly in the furnace for smelting. As such they constituted a 'complete useful product,' [Douglass cite omitted] or raw material for processing rather than disposal." The Court responded to U.S. arguments that the lead plates still required treatment, as they contained sulfuric acid, by stating that, "while the testimony at trial indicated that a certain level of residual acid sometimes remained on the plates by necessity, [cite omitted] selling a useful product, albeit hazardous substances 'to serve a particular purpose' does not alone create arranger liability [citing to <u>Douglass County and AM Int'l Inc. v. Int'l Forging Equipment Corp.</u> 982 F. 2d 989 (6<sup>th</sup> Cir. 1993)].

The Court also discussed SREA liability, and found that though SREA's provisions had retroactive effect, the United States had a pending judicial action pursuant to CERCLA Section 127(i) and therefore, SREA did not apply. SREA did apply, however, to exempt the defendants from the action filed by the private plaintiffs, who were the settlors under the RD/RA Consent Decree for the ILCO Site. With regard to lead plates, the Court held that the recycling of lead plates is a defense to arranger liability under CERCLA, as lead plates are not excluded from the definition of "scrap metal" as a "recyclable material" under SREA. The Court found that both Lion Metals and Madewell met the exemption requirements under SREA, and were not excluded in that the plaintiffs were unable to show that either defendant had an objectively reasonable basis to believe that ILCO was not in compliance with environmental laws at the time they sold their lead plates to ILCO. The Court also found Jowers to be exempt under SREA, and not

subject to the exclusion for the same reasons as it found neither Madewell nor Lion Metals to be excluded. Finally, the Court ruled that the attorneys fees provisions under SREA did not apply because, "there was no notice to the plaintiffs of the fee-shifting provision before the commencement of this action."

# 2). United States v. Atlas Lederer Co., 97 F. Supp.2d 830 (S.D. Ohio 2000).

The United States brought an action against a property owner and a number of generators to recover response costs for cleanup and the defendants asserted contribution claims against another PRP, Livingston. On Livingston's motion for summary judgment, the Court held that SREA did not preclude third party contribution claims in action filed before the adoption of SREA. Contribution claims constitute part of the same "pending judicial action" brought by the United States, so Livingston's argument regarding the inapplicability of 127(i) to the crossclaims and third-party claims for contribution was rejected.

While Defendant Livingston admitted that the terms of SREA specifically state that the law shall not affect "any pending judicial action initiated by the U.S. prior to" the enactment of the exemption, (conceding that it is deprived of the literal application of SREA for the claim asserted by the U.S.), it argued that SREA should be applicable to the cross-claims and third-party contribution claims because they were not initiated by the U.S.. Livingston relied in part on the legislative statement read into the Congressional Record by Senator Lott to demonstrate Congress' intent that "any third party action or joinder of defendants, brought by a private party shall be considered a private party action, regardless of whether or not the original lawsuit was brought by the United States." 145 Cong. Rec. S14985-03 (daily ed. Nov. 19, 1999). The Court, however, found this argument unpersuasive. The Court found no "true" legislative history to support Livingston's interpretation of the provision.

Thus, the Court rejected Livingston's argument, holding that the plain language of SREA did not preclude the contribution claims in this lawsuit. The Court found that the present litigation, as a whole, constitutes a "judicial action," initiated by the U.S., and although the cross-claims and counterclaims are "claims," they are not "actions" as contemplated by the statute. The Court found that Livingston's argument failed to recognize the distinction between "actions" and "claims;" there is only one action, but there can be numerous claims, and therefore SREA was not applicable to the present lawsuit since it was commenced before passage of the exemption. Furthermore, the Court could not agree with Livingston's assertion that SREA merely constitutes codification of existing case law on the useful product defense. Livingston had argued for the Court to consider this case law in order to apply the "spirit and intent" of the law and the exemption to the contribution claims against Livingston notwithstanding Section 127(i).

[Note that there were four decisions, in which the Southern District of Ohio consistently held that the United States' pending claims, as well as private party cross- and third-party claims for contribution raised in the United States' action, are preserved. These decisions were issued on February 16, 2000 (97 F. Supp. 2d 830, (S.D. Ohio 2000)) (where the Court denied a

contribution defendant Livingston's motion for summary judgment); on February 22, 2000 (where the Court denied a motion for partial summary judgment filed by another defendant); February 21, 2001 (which distinguished <u>DTSCA</u> [described below] and rejected adherence to Lott statement because it "muddied" the plain meaning of Section 127(i), particularly in light of Daschle's having distanced himself from such statement); and March 12, 2001 (where the Court denied Livingston's motion to certify the question for immediate appeal). Note also that these decisions are not yet appealable.]

# II. Cases pertaining to contribution claims

#### 1). Gould, Inc. v. A & M Battery & Tire Serv., 232 F.3d 162 (3d Cir. 2000).

The Third Circuit held that: 1) SREA applies retroactively to judicial actions for CERCLA contribution initiated by private parties before November 29, 1999, if the actions were still pending on that date; 2) the definition of spent batteries means the entire battery, including non-recyclable components therein, such as rubber casings. Therefore, the Court vacated a district court grant of summary judgment in favor of a battery recycler who sought contribution costs from PRPs in connection with contamination at a battery recycling site.

The battery recycler entered into a consent agreement with EPA under CERCLA for the contamination. The recycler then initiated a contribution action against several PRPs, and the district court held the PRPs liable for a portion of the recycler's costs. After the PRPs filed their notices of appeal, however, Congress passed SREA. The Act states that it has no effect on any concluded judicial or administrative action or any pending judicial action initiated by the United States before November 29, 1999. The Court held that the Act may be applied retroactively in a judicial action initiated by a private party that is still pending as of November 29, 1999 because the Act is silent with respect to actions initiated by private parties. Contrary to the recycler's argument, the Court found that a private judicial action that was initiated following a related federal administrative action, in this case, the consent agreement, should not be deemed as having been initiated by the United States. Additionally, the it found Act does not violate the Fifth Amendment's due process guarantee for lacking a rational basis. It reasoned that the distinction between privately and federally initiated judicial actions is rationally related to preserving public finances. Finally, the Court based its finding (that SREA applied retroactively to pending private actions) on SREA's implication or negative inference. In addition, the Court found that Lott's "legislative history," inserted into the record by unanimous consent, supported a common sense construction of the Act that applies it retroactively to private judicial actions. The Court, therefore, remanded the case to determine whether the PRPs satisfy the Act's requirements for exemption from liability.

#### 2). Morton Int'l, Inc. v. A.E. Staley Mfg. Co., 106 F. Supp.2d 737 (D.N.J. 2000).

The district court ruled that SREA can be applied retroactively in pending CERCLA private party actions for contribution. Accordingly, the Court granted a company's motion to amend its defense to encompass the provision. The Court found that Congress provided for the retroactivity of SREA in a manner that was "sufficiently express and unambiguous" and, therefore, a recycler may make a defense under the law.

In so ruling, the Court cited <u>United States v. Atlas Lederer Co.,</u> 97 F. Supp. 2d 830 (S.D. Ohio 2000). and Department of Toxic Substances Control v. Interstate Non-Ferrous Corp., 99 F. Supp. 2d 1123, (E.D. Cal. 2000), two other recent cases that address whether the recycling law applies retroactively in CERCLA actions. The Court also cited the U.S. Supreme Court decision in Landgraf v. USI Film Products, 511 U.S. 244 (1994), in which the high Court said that statutes should not be applied retroactively unless Congress has expressly commanded or implied them to be. The Court, in assessing statements from Sens. Trent Lott, Blanche Lincoln, and Thomas Daschle, as well as the Act's plain meaning, concluded the congressional intent of SREA was for the law to be applied retroactively. In statements to Congress in 1999, Sen. Lott asserted that "Section 127 under CERCLA clarifies liability for recycling transactions and provides relief from liability for both retroactive and prospective transactions." Sen. Lincoln, in her statements to Congress, stated that she "first introduced the bill (Section 127) to relieve legitimate recyclers of scrap metal from unintended Superfund liability. The bill was developed in conjunction with the recycling industry, the environmental community and the administration and the Act is both retroactive and prospective." The Court interpreted this legislative history as expressing an intent by Congress to apply SREA retroactively. "Section 127 should be applied retrospectively here. The language, purpose, and legislative history of Section 127 support that determination. This determination, however, is not dispositive as a finding for any party. The Court rejected plaintiffs' argument that even if Section 127 were applicable, the defense would be futile because, it argued, mercury in liquid or sludge form is not "recyclable material." Rather, the Court left that issue for disposition in trial. The defendants seeking to add the Section 127 defense must still prove by a preponderance of the evidence that they meet all requirements set forth in this amendment," the Court said.

#### 3). RSR Corp. v. Avanti Dev., Inc., 2000 WL 1449859 (S.D. Ind. 2000).

On June 13, 2000, the Court declined to decide whether SREA applied to a preenactment contribution action [as the Court had previously decided that the PRP's connection with the site was too attenuated to impose arranger liability; the Court did not reach whether SREA would then exempt the party], but suggested that retroactive imposition of Section 127(j)'s fee-shifting provision would result in manifest injustice. The Court noted that the Supreme Court had held in <a href="Key Tronic Corp. v. United States">Key Tronic Corp. v. United States</a>, 511 U.S. 809 (1994) that attorney and expert fees were not recoverable in a CERCLA contribution case, and that Section 127 changed that rule for cases covered by SREA. The Court suggested that change might result in manifest injustice, if it were applied retroactively. The Court reasoned that the plaintiffs made their decision about who to sue at a time when CERCLA did not allow a prevailing party in a contribution action to obtain costs and fees from its opponent. Further, the Court noted that to burden such a plaintiff's decision now with the imposition of attorney and expert fees of any

defendant that prevails under Section 127 is inconsistent with the "familiar considerations of fair notice, reasonable reliance, and settled expectations" identified in <u>Key Tronic Corp. v. United States</u>, 511 U.S. 809 (1994). [The case settled shortly after the Court issued its June 2000 Order, so there were no other decisions in the case addressing SREA.]

# 4). <u>Department of Toxic Substances Control v. Interstate Non-Ferrous Corp.</u>, 99 F. Supp.2d 1123 (E.D. Cal. 2000).

The Court held that SREA applies to non-federal CERCLA enforcement actions pending at the time of its enactment. Therefore, the SREA exemption applies to a state environmental agency's CERCLA Sections 107(a) and 113(g) actions against several scrap metal recyclers. In enacting SREA, Congress did not explicitly mention every class of pending case to which Section 127 liability exemption applies. Nevertheless, SREA's structure, express language, purpose, and legislative history militate in favor of retrospectivity as to all pending actions brought by any party except the United States.

The Court held that Congressional intent that SREA apply retrospectively to pending cases initiated by parties other than the United States could be gleaned from: [1] the headings used in SREA indicating that Congress intended to clarify, not change, the law; [2] SREA's stated purpose, which was to exempt eligible recyclers from liability; [3] language throughout SREA, which fixes different requirements based on when the transaction occurred; [4] and, inter alia, the statement of Senator Lott, a chief co-sponsor of SREA, which was not "legislative history," but was to be accorded substantial weight. The Court, however, did not find SREA to be retroactive, meaning that it did not find that SREA attaches new legal consequences to prior acts, because: [1] no new liability was created, and the State of California's "rights" were not impaired (it would have cleaned up the site whether or not it thought it could recover costs from the parties it sued); and because [2] SREA clarified existing law, it did not change it.

Nevertheless, the retrospective application of the exemption to pending actions does not result in an automatic exemption because any party seeking to avoid liability under Section 127 must prove by a preponderance of the evidence all of the exemption requirements. In addition, the exemption does not apply retroactively to actions resolved before the passage of SREA.