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**40 CFR Parts 260, 261, and 270
Revisions to the Definition of Solid
Waste; Final Rule**

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Parts 260, 261, and 270**

[EPA-HQ-RCRA-2002-0031; FRL-8728-9]

RIN 2050-AG31

Revisions to the Definition of Solid Waste**AGENCY:** Environmental Protection Agency.**ACTION:** Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is publishing a final rule that revises the definition of solid waste to exclude certain hazardous secondary materials from regulation under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The purpose of this final rule is to encourage safe, environmentally sound recycling and resource conservation and to respond to several court decisions concerning the definition of solid waste.

DATES: This final rule is effective on December 29, 2008.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-RCRA-2002-0031. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the OSWER Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the OSWER Docket is 202-566-0270.

FOR FURTHER INFORMATION CONTACT: For more detailed information on specific aspects of this rulemaking, contact Marilyn Goode, Office of Solid Waste, Hazardous Waste Identification Division, MC 5304P, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, (703) 308-8800 (goode.marilyn@epa.gov) or Tracy Atagi, Office of Solid Waste, Hazardous Waste Identification Division, MC 5304P, Environmental Protection Agency, 1200 Pennsylvania

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SUPPLEMENTARY INFORMATION:**A. Does This Action Apply to Me?**

Entities potentially affected by today's action include approximately 5,600 facilities in 280 industries in 21 economic sectors that generate or recycle hazardous secondary materials that are currently regulated as RCRA Subtitle C hazardous wastes (e.g., secondary materials, such as industrial co-products, by-products, residues, and unreacted feedstocks). Approximately 60% of these affected facilities are classified in NAICS code economic sectors 31, 32, and 33 (manufacturing). The remaining economic sectors, which have more than ten affected industries each, are in NAICS codes 48 (transportation), 42 (wholesale trade), and 56 (administrative support, waste management and remediation). About 1.5 million tons per year of hazardous secondary materials generated and handled by these entities may be affected, of which the most common types are metal-bearing hazardous secondary materials (e.g., sludges and spent catalysts) for commodity metals recovery and organic chemical liquid hazardous secondary materials for recovery as solvents. Today's action is expected to result in regulatory and materials recovery cost savings to these industries of approximately \$95 million per year. Taking into account impact estimation uncertainty factors, today's action could result in cost savings ranging from \$19 million to \$333 million per year to these industries in any future year. More detailed information on the potentially affected entities, industries, and industrial materials, as well as the economic impacts of this rule (with impact uncertainty factors), is presented in section XXI.A of this preamble and in the "Regulatory Impact Analysis" available in the docket for this final rule.

B. Why Is EPA Taking This Action?

There are two primary purposes of this action. One purpose is to respond to a series of seven decisions by the U.S. Court of Appeals for the DC Circuit (1987 to 2000), which, taken together, have provided EPA with additional direction regarding the proper formulation of the RCRA regulatory definition of solid wastes for purposes of Subtitle C. A second purpose is to clarify the RCRA concept of "legitimate recycling," which is a key component of EPA's approach to recycling hazardous secondary materials.

This action is not intended to bring new wastes into the RCRA hazardous waste regulatory system and it does not do so. By removing unnecessary controls over certain hazardous secondary materials, and by providing more explicit and consistent factors for determining the legitimacy of recycling practices, EPA expects that today's action will encourage and expand the safe, beneficial recycling of additional hazardous secondary materials. Today's action is consistent with EPA's longstanding policy of encouraging the recovery, recycling, and reuse of valuable resources as an alternative to disposal (i.e., landfilling and incineration), while at the same time maintaining protection of human health and the environment. It also is consistent with the resource conservation goal of the Congress in enacting the RCRA statute (as evidenced by the statute's name), and with EPA's vision of how the RCRA program could evolve over the long term to promote economic sustainability and more efficient use of resources. EPA's long-term vision of the future of the RCRA waste management program is discussed in the document "Beyond RCRA: Prospects for Waste and Materials Management in the Year 2020," which is available on EPA's Web site at: <http://www.epa.gov/epaoswer/osw/vision.htm>.

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I. Statutory Authority

These regulations are promulgated under the authority of sections 2002, 3001, 3002, 3003, 3004, 3007, 3010, and 3017 of the Solid Waste Disposal Act of 1970, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. 6912, 6921, 6922, 6923, 6924, 6927, 6930, and 6938. These statutes, combined, are commonly referred to as "RCRA."

II. Which Revisions to the Regulations Is EPA Finalizing?

In today's rule, EPA is revising the definition of solid waste to exclude from regulation under Subtitle C of RCRA (42 U.S.C. 6921 through 6939(e)) certain hazardous secondary materials which are being reclaimed. We have defined hazardous secondary materials as those which would be classified as hazardous wastes if discarded. We are also promulgating regulatory factors for determining when recycling is legitimate. The Agency first proposed changes reflecting the court decisions on the definition of solid waste rules on October 28, 2003 (68 FR 61558). We then published a supplemental proposal on March 26, 2007 (72 FR 14172).

Today's preamble is organized as follows: This section of the preamble (Section II) describes the three principal regulatory revisions that are finalized in this rule: (1) An exclusion for certain hazardous secondary materials legitimately reclaimed under the control of the generator within the United States or its territories; (2) a conditional exclusion for hazardous secondary materials that are transferred for the purpose of legitimate reclamation; and (3) a case-by-case non-waste determination procedure. Section II also discusses EPA's treatment of legitimacy in the final rule. Section III describes the history of these revisions, including relevant court cases and the original proposal (October 28, 2003, 68 FR 61558). Section III also describes the Agency's independent analyses of successful recycling practices, environmental problems associated with recycling of hazardous secondary materials, and potential effects of market forces on the management of such materials, and provides an overview of the March 26, 2007,

supplemental proposal (72 FR 14172). Section IV explains the ways in which the March 2007 supplemental proposal differs from today's rule. Section V discusses how this rule is related to the concept of "discard," and section VI indicates the effective date of the rule. Sections VII–X contain detailed descriptions of all regulatory provisions promulgated today. Sections XI–XIV describe the effect of this rule on other exclusions, permitted and interim status facilities, Superfund, and imports/exports. Sections XV–XIX contain a discussion of all major public comments received on the March 26, 2007, supplemental proposal, along with the Agency's responses to these comments. Section XX describes how this rule will be administered and enforced in the states, and section XXI describes the administrative requirements for this rulemaking.

Below is a summary of the principal regulatory revisions promulgated today.

A. Exclusion for Hazardous Secondary Materials That Are Legitimately Reclaimed Under the Control of the Generator in Non-Land-Based Units

This provision—40 CFR 261.2(a)(2)(ii)—would exclude certain hazardous secondary materials (i.e., listed sludges, listed by-products, and spent materials) that are generated and legitimately reclaimed within the United States or its territories under the control of the generator, when such materials are handled only in non-land-based units (e.g., tanks, containers, or containment buildings). This provision applies to hazardous secondary materials that are not spent lead-acid batteries or listed wastes K171 or K172, or otherwise subject to the specific management conditions under 40 CFR 261.4(a). Under this provision, the hazardous secondary materials must be contained in such units and are subject to the speculative accumulation requirements of 40 CFR 261.1(c)(8), as well as the provisions for legitimate recycling at 40 CFR 260.43. In addition, under 40 CFR 260.42, the generator (and the reclaimer, if the generator and reclaimer are located at different facilities) must send a notification prior to operating under the exclusion and by March 1 of each even numbered year thereafter to the EPA Regional Administrator or, in an authorized state, to the state director.

Hazardous secondary materials would be considered "under the control of the generator" under the following circumstances:

(1) They are generated and then reclaimed at the generating facility; or

(2) They are generated and reclaimed at different facilities, if the generator certifies that the hazardous secondary materials are sent either to a facility controlled by the generator or to a facility under common control with the generator, and that either the generator or the reclaimer has acknowledged responsibility for the safe management of the hazardous secondary materials; or

(3) They are generated and reclaimed pursuant to a written agreement between a tolling contractor and toll manufacturer, if the tolling contractor certifies that it has entered into a tolling contract with a toll manufacturer and that the tolling contractor retains ownership of, and responsibility for, the hazardous secondary materials generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process.

This exclusion does not include the recycling of hazardous secondary materials that are inherently waste-like under 40 CFR 261.2(d), hazardous secondary materials that are used in a manner constituting disposal or used to produce products that are applied to or placed on the land (40 CFR 261.2(c)(1)), or hazardous secondary materials burned to recover energy or used to produce a fuel or otherwise contained in fuels (40 CFR 261.2(c)(2)).

B. Exclusion for Hazardous Secondary Materials That Are Legitimately Reclaimed Under the Control of the Generator in Land-Based Units

This provision—40 CFR 261.4(a)(23)—contains requirements that are identical to those that apply to hazardous secondary materials generated and legitimately reclaimed under the control of the generator within the United States or its territories and are handled in non-land-based units in 40 CFR 261.2(a)(2)(ii), described above. Land-based units are defined in 40 CFR 260.10 as an area where hazardous secondary materials are placed in or on the land before recycling, but this definition does not include land-based production units. Examples of land-based units are surface impoundments and piles. This provision applies to hazardous secondary materials that are not spent lead-acid batteries or listed wastes K171 or K172, or otherwise subject to the specific management conditions under 40 CFR 261.4(a).

C. Exclusion for Hazardous Secondary Materials That Are Transferred for the Purpose of Legitimate Reclamation

This conditional exclusion—40 CFR 261.4(a)(24), hereinafter referred to as

the “transfer-based exclusion”—applies to hazardous secondary materials (i.e., spent materials, listed sludges, and listed by-products) that are generated and subsequently transferred to a different person or company for the purpose of reclamation. As long as the conditions and restrictions to the exclusion are satisfied, the hazardous secondary materials would not be subject to Subtitle C regulation.

Hazardous secondary material generators, reclaimers, and intermediate facilities (i.e., other facilities storing hazardous secondary materials for more than 10 days) must all submit a notification prior to operating under the exclusion and by March 1 of each even numbered year thereafter to the EPA Regional Administrator or, in an authorized state, to the state director (see 40 CFR 260.42). In addition, hazardous secondary materials managed at such facilities may not be speculatively accumulated as defined in § 262.1(c)(8) (see 40 CFR 261.4(a)(24)(i)) and must be legitimately recycled as specified in § 260.43 (see 40 CFR 261.4(a)(24)(iv)).

Conditions applicable to generators of hazardous secondary materials are found at 40 CFR 261.4(a)(24)(v) and include containment of such materials, reasonable efforts to ensure that the intermediate facility or reclaimer intends to manage or recycle the hazardous secondary material properly and legitimately, and retention of records of off-site shipments for three years. Conditions applicable to intermediate facilities and reclaimers of hazardous secondary materials are found at 40 CFR 261.4(a)(24)(vi) and include containment of such materials, transmittal of confirmations of receipt to generators, maintenance of records for hazardous secondary materials received and sent off-site, financial assurance, and (for reclaimers) proper management of residuals. In addition, if any of the hazardous secondary materials excluded under 40 CFR 261.4(a)(24) are generated and then exported to another country for reclamation, the exporter must notify and obtain consent from the receiving country, and file an annual report. This requirement is codified in 40 CFR 261.4(a)(25).

Like the previously discussed exclusion for hazardous secondary materials reclaimed under the control of the generator, this exclusion would not apply to hazardous secondary materials that are inherently waste-like under 40 CFR 261.2(d), hazardous secondary materials that are used in a manner constituting disposal or used to produce products that are applied to or placed on the land (40 CFR 261.2(c)(1)), or

hazardous secondary materials burned to recover energy or used to produce a fuel or are otherwise contained in fuels (40 CFR 261.2(c)(2)).

D. Codification of Legitimacy

Under the RCRA Subtitle C definition of solid waste, certain hazardous secondary materials, if recycled, are not solid wastes and, therefore, are not subject to RCRA’s “cradle to grave” management system. The basic idea behind this principle is that recycling of these materials often closely resembles industrial manufacturing rather than waste management. However, due to economic incentives for managing hazardous secondary materials outside the RCRA regulatory system, there is a potential for some handlers to claim that they are recycling the hazardous secondary materials when, in fact, they are conducting waste treatment and/or disposal. To guard against this, EPA has long articulated the need to distinguish between “legitimate” (i.e., true) recycling and “sham” recycling, beginning with the preamble to the 1985 regulations that discussed the definition of solid waste (50 FR 638, January 4, 1985) and continuing through today’s final rule.

In the October 28, 2003, proposed rule (68 FR 61581–61588) on the definition of solid waste, we proposed codifying four criteria (called “factors” in today’s rule) to determine when recycling of hazardous secondary materials is legitimate. In the March 26, 2007, supplemental proposal in section XI of the preamble (72 FR 14197), we refined our original proposal in response to public comments. In today’s final rule, we are codifying the factors to be used in determining whether recycling under the provisions finalized in this rule is legitimate, applying the structure basically as proposed in March 2007 (proposed at 40 CFR 261.2(g)). The legitimacy provision is finalized in 40 CFR 260.43.

E. Non-Waste Determinations

Today’s rule establishes a non-waste determination process that provides persons with an administrative process for receiving a formal determination that their hazardous secondary materials are not discarded and, therefore, not solid wastes when legitimately reclaimed. This process is voluntary and is available in addition to the two self-implementing exclusions included in today’s rule. There are two types of non-waste determinations: (1) A determination for hazardous secondary materials reclaimed in a continuous industrial process; and (2) a determination for hazardous secondary

materials indistinguishable in all relevant aspects from a product or intermediate.

For hazardous secondary materials reclaimed in a continuous industrial process, the non-waste determination will be based on the following four criteria: (1) The extent that the management of the hazardous secondary material is part of the continuous primary production process; (2) whether the capacity of the production process would use the hazardous secondary material in a reasonable time frame; (3) whether the hazardous constituents in the hazardous secondary material are reclaimed rather than discarded to the air, water, or land at significantly higher levels from either a statistical or from a health and environmental risk perspective than would otherwise be released by the production process; and (4) other relevant factors that demonstrate the hazardous secondary material is not discarded.

For hazardous secondary materials which are indistinguishable in all relevant aspects from a product or intermediate, the non-waste determination will be based on the following five criteria: (1) Whether market participants treat the hazardous secondary material as a product or intermediate rather than a waste; (2) whether the chemical and physical identity of the hazardous secondary material is comparable to commercial products or intermediates; (3) whether the capacity of the market would use the hazardous secondary material in a reasonable time frame; (4) whether the hazardous constituents in the hazardous secondary material are reclaimed rather than discarded to the air, water, or land at significantly higher levels from either a statistical or from a health and environmental risk perspective than would otherwise be released by the production process; and (5) other relevant factors that demonstrate the hazardous secondary material is not discarded.

The process for the non-waste determination is the same as that for the solid waste variances found in 40 CFR 260.30.

III. What Is the History of These Rules?

A. Background

RCRA gives EPA the authority to regulate hazardous wastes (see, e.g., RCRA sections 3001–3004). The original statutory designation of the subtitle for the hazardous waste program was Subtitle C and the national hazardous waste program is referred to as the RCRA Subtitle C program. Subtitle C is codified at 42 U.S.C. 6921 through

6939e. "Subtitle C" regulations are found at 40 CFR Parts 260 through 279. "Hazardous wastes" are the subset of solid wastes that present threats to human health and the environment (*see* RCRA section 1004(5)). EPA also may address solid and hazardous wastes under its endangerment authorities in section 7003. (Similar authorities are available for citizen suits under section 7002.)

Materials that are not solid wastes are not subject to regulation as hazardous wastes under RCRA Subtitle C. Thus, the definition of "solid waste" plays a key role in defining the scope of EPA's authorities under Subtitle C of RCRA. The statute defines "solid waste" as "* * * any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and *other discarded material* * * * resulting from industrial, commercial, mining, and agricultural operations, and from community activities * * *" (RCRA Section 1004 (27) (emphasis added)).

Since 1980, EPA has interpreted "solid waste" under its Subtitle C regulations to encompass both materials that are destined for final, permanent treatment and placement in disposal units, as well as certain materials that are destined for recycling (45 FR 33090-95, May 19, 1980; 50 FR 604-656, Jan. 4, 1985 (*see in particular* pages 616-618)). EPA has offered three arguments in support of this approach:

- The statute and the legislative history suggest that Congress expected EPA to regulate as solid and hazardous wastes certain materials that are destined for recycling (*see* 45 FR 33091, citing numerous sections of the statute and *U.S. Brewers' Association v. EPA*, 600 F. 2d 974 (DC Cir. 1979); 48 FR 14502-04, April 3, 1983; and 50 FR 616-618).

- Hazardous secondary materials stored or transported prior to recycling have the potential to present the same types of threats to human health and the environment as hazardous wastes stored or transported prior to disposal. In fact, EPA found that recycling operations have accounted for a number of significant damage incidents. For example, hazardous secondary materials destined for recycling were involved in one-third of the first 60 filings under RCRA's imminent and substantial endangerment authority, and in 20 of the initial sites listed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (48 FR 14474, April 4, 1983). Congress also cited some damage cases which involve recycling (H.R. Rep. 94-1491, 94th Cong., 2d Sess., at

17, 18, 22). More recent data (i.e., information on damage incidents occurring after 1982) included in the rulemaking docket for today's final rule corroborate the fact that recycling operations can result in significant damage incidents.

- Excluding all hazardous secondary materials destined for recycling would allow materials to move in and out of the hazardous waste management system depending on what any person handling the hazardous secondary material intended to do with them. This seems inconsistent with the mandate to track hazardous wastes and control them from "cradle to grave."

Hence, EPA has interpreted the statute to confer jurisdiction over at least certain hazardous secondary materials destined for recycling. The Agency has therefore developed in part 261 of 40 CFR a definition of "solid waste" for Subtitle C regulatory purposes. (**Note:** This definition is narrower than the definition of "solid waste" for RCRA endangerment and information-gathering authorities. (*See* 40 CFR 261.1(b)). Also *Connecticut Coastal Fishermen's Association v. Remington Arms Co.*, 989 F.2d 1305, 1315 (2d Cir. 1993) holds that EPA's use of a narrower and more specific definition of solid waste for Subtitle C purposes is a reasonable interpretation of the statute. *See also Military Toxics Project v. EPA*, 146 F.3d 948 (DC Cir. 1998).)

EPA has always asserted that hazardous secondary materials are not excluded from its jurisdiction simply because someone claims that they will be recycled. EPA has consistently considered hazardous secondary materials destined for "sham recycling" to be discarded and, hence, to be solid wastes for Subtitle C purposes (*see* 45 FR 33093, May 19, 1980; 50 FR 638-39, Jan. 4, 1985). The U.S. Court of Appeals for the DC Circuit has agreed that materials undergoing sham recycling are discarded and, consequently, are solid wastes under RCRA (*see American Petroleum Institute v. EPA*, 216 F.3d 50, 58-59 (DC Cir. 2000)).

B. A Series of DC Circuit Court Decisions on the Definition of Solid Waste

Trade associations representing mining and oil refining interests challenged EPA's 1985 regulatory definition of solid waste. In 1987, the DC Circuit held that EPA exceeded its authority "in seeking to bring materials that are not discarded or otherwise disposed of within the compass of 'waste'" (*American Mining Congress v.*

EPA ("AMCI"), 824 F.2d 1177, 1178 (DC Cir. 1987)).

The Court held that certain of the materials EPA was seeking to regulate were not "discarded materials" under RCRA section 1004(27). The Court also held that Congress used the term "discarded" in its ordinary sense, to mean "disposed of" or "abandoned" (824 F.2d at 1188-89). The Court further held that the term "discarded materials" could not include materials "* * * destined for beneficial reuse or recycling in a continuous process by the generating industry itself (because they are not yet part of the waste disposal problem)" (824 F.2d at 1190). The Court held that Congress had directly spoken to this issue, so that EPA's definition was not entitled to deference under *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837 (1984) (824 F.2d at 1183, 1189-90, 1193).

At the same time, the Court did *not* hold that recycled materials could not be discarded. The Court mentioned at least two examples of recycled materials that EPA properly considered within its statutory jurisdiction, noting that used oil can be considered a solid waste (824 F.3d at 1187 (fn 14)). Also, the Court suggested that materials disposed of and recycled as part of a waste management program are within EPA's jurisdiction (824 F. 2d at 1179).

Subsequent decisions by the DC Circuit also indicate that some materials destined for recycling are "discarded" and therefore within EPA's jurisdiction. In particular, the Court held that emission control dust from steelmaking operations listed as hazardous waste "K061" is a solid waste, even when sent to a metals reclamation facility, at least where that is the treatment method required under EPA's land disposal restrictions program (*American Petroleum Institute v. EPA ("API I")*, 906 F.2d 729 (DC Cir. 1990)). In addition, the Court held that it is reasonable for EPA to consider as discarded (and solid wastes) listed wastes managed in units that are in part wastewater treatment units, especially where it is not clear that the industry actually reuses the materials (*AMC II*, 907 F. 2d 1179 (DC Cir. 1990)).

It also is worth noting that two other Circuits also have held that EPA has authority over at least some materials destined for reclamation rather than final discard. The U.S. Court of Appeals for the 11th Circuit found that "[i]t is unnecessary to read into the term 'discarded' a congressional intent that the waste in question must finally and forever be discarded" (*U.S. v. ILCO*, 996 F.2d 1126, 1132 (11th Cir. 1993) (finding that used lead batteries sent to

a reclaimer have been “discarded once” by the entity that sent the battery to the reclaimer). In addition, the Fourth Circuit found that slag held on the ground untouched for six months before sale for use as road bed could be a solid waste (*Owen Electric Steel Co. v. EPA*, 37 F.3d 146, 150 (4th Cir. 1994)).

In 1998, EPA promulgated a rule in which EPA claimed Subtitle C jurisdiction over hazardous secondary materials recycled by reclamation within the mineral processing industry, the “LDR Phase IV rule” (63 FR 28556, May 26, 1998). In that rule, EPA promulgated a conditional exclusion for all types of mineral processing hazardous secondary materials destined for reclamation. EPA imposed a condition prohibiting land-based storage prior to reclamation because it considered hazardous secondary materials from the mineral processing industry that were stored on the land to be part of the waste disposal problem (63 FR 28581). The conditional exclusion decreased regulation over spent materials stored prior to reclamation, but increased regulation over by-products and sludges that exhibit a hazardous characteristic, and that are stored prior to reclamation. EPA noted that the statute does not authorize it to regulate “materials that are destined for immediate reuse in another phase of the industry’s ongoing production process.” EPA, however, took the position that materials that are removed from a production process for storage are not “immediately reused,” and therefore are “discarded” (63 FR 28580).

The mining industry challenged the rule, and the DC Circuit vacated the provisions that expanded jurisdiction over characteristic by-products and sludges destined for reclamation (*Association of Battery Recyclers v. EPA* (“*ABR*”), 208 F.3d 1047 (DC Cir. 2000)). The Court held that it had already resolved the issue presented in *ABR* in its opinion in *AMC I*, where it found that “* * * Congress unambiguously expressed its intent that ‘solid waste’ (and therefore EPA’s regulatory authority) be limited to materials that are ‘discarded’ by virtue of being disposed of, abandoned, or thrown away” (208 F.2d at 1051). It repeated that materials reused within an ongoing industrial process are neither disposed of nor abandoned (208 F.3d at 1051–52). It explained that the intervening *API I* and *AMC II* decisions had not narrowed the holding in *AMC I* (208 F.3d at 1054–1056).

Notably, the Court did *not* hold that storage before reclamation automatically makes materials “discarded.” Rather, it

held that “* * * at least some of the secondary material EPA seeks to regulate as solid waste (in the mineral processing rule) is destined for reuse as part of a continuous industrial process and thus is not abandoned or thrown away” (208 F.3d at 1056).

In its most recent opinion dealing with the definition of solid waste, *Safe Food and Fertilizer v. EPA* (“*Safe Food*”), 350 F.3d 1263 (DC Cir. 2003), the Court upheld an EPA rule that excludes from the definition of solid waste hazardous secondary materials used to make zinc fertilizers, and the fertilizers themselves, so long as the recycled materials meet certain handling, storage and reporting conditions and the resulting fertilizers have concentration levels for lead, arsenic, mercury, cadmium, chromium, and dioxins that fall below specified thresholds (Final Rule, “Zinc Fertilizers Made From Recycled Hazardous Secondary Materials” (“*Fertilizer Rule*”), 67 FR 48393, July 24, 2002). EPA determined that if these conditions are met, the hazardous secondary materials used to make the fertilizer have not been discarded. The conditions apply to a number of recycled materials not produced in the fertilizer production industry, including certain zinc-bearing hazardous secondary materials, such as brass foundry dusts.

EPA’s reasoning was that market participants, consistent with the EPA-required conditions in the rule, would treat the exempted materials more like valuable products than like negatively-valued wastes and, thus, would manage them in ways inconsistent with discard. In addition, the fertilizers derived from these recycled feedstocks are chemically indistinguishable from analogous commercial products made from raw materials (350 F.3d at 1269). The Court upheld the rule based on EPA’s explanation that market participants manage materials in ways inconsistent with discard, and the fact that the levels of contaminants in the recycled fertilizers were “identical” to the fertilizers made with virgin raw materials. The Court held that this interpretation of “discard” was reasonable and consistent with the statutory purpose. The Court noted that the identity principle was defensible because the differences in health and environmental risks between the two types of fertilizers are so slight as to be substantively meaningless.

However, the Court specifically stated that it “need not consider whether a material could be classified as a non-discard exclusively on the basis of the market-participation theory” (350 F.3d at 1269). The Court only determined

that the combination of market participants’ treatment of the materials, EPA required management standards, and the “identity principle” are a reasonable set of tools to establish that the recycled hazardous secondary materials and fertilizers are not discarded.

C. October 2003 Proposal To Revise the Definition of Solid Waste

Prompted by concerns articulated in various Court opinions decided up to that point, in October 2003, EPA proposed a rule that material generated and reclaimed in a continuous process within the same industry is not discarded for purposes of Subtitle C, provided the recycling process is legitimate (68 FR 61558, October 28, 2003). “Same industry” was defined as industries sharing the same 4-digit North American Industry Classification System (NAICS) code.

In the same notice, EPA also solicited comment on several different alternatives to the proposed exclusion. The first alternative was whether to exclude from the definition of solid waste those hazardous secondary materials that are generated and reclaimed in a continuous process on-site (as defined in 40 CFR 260.10), even if different industries were involved. This exclusion would be based on the premise that materials recycled on-site in a continuous process are unlikely to be discarded because they would be closely managed and monitored by a single entity that is intimately familiar with both the generation and reclamation of the hazardous secondary material. In addition, no off-site transport of the hazardous secondary material (with its attendant risks) would occur, and there would be few questions about potential liability in the event of mismanagement or mishap.

The second alternative was an exclusion for certain situations within the chemical manufacturing industry that might present unique recycling situations. Specifically, within the chemical manufacturing industry, the first manufacturer contracts out production of certain chemicals to another manufacturer (referred to as batch or tolling operations). The second manufacturer may generate hazardous secondary materials that could be returned to the first chemical manufacturer for reclamation.

The third alternative would have provided a broader conditional exclusion from the RCRA hazardous waste regulations for essentially all hazardous secondary materials that are legitimately recycled by reclamation. The purpose of this broader exclusion

would have been to encourage reclamation by lowering costs of recycling, while still protecting human health and the environment. The Agency suggested that additional requirements or conditions might be appropriate to protect human health and the environment for this broader exclusion, compared to the same-industry exclusion that we proposed. Examples of such additional conditions could include recordkeeping and reporting requirements, along with safeguards on storage or handling.

In response to the October 2003 proposal, a number of commenters criticized the Agency specifically for not having conducted a study of the potential impacts of the proposed regulatory changes. These commenters expressed the general concern that deregulating hazardous secondary materials that are reclaimed in the manner proposed could result in mismanagement of these materials and, thus, could create new cases of environmental damage that would require remedial action under federal or state authorities. Some of the commenters further cited a number of examples of environmental damage that were attributed to hazardous secondary material recycling, including a number of sites listed on the Superfund National Priorities List (NPL).

However, other commenters to the October 2003 proposal expressed the view that the great majority of these cases of recycling-related environmental problems occurred before RCRA, CERCLA, or other environmental programs were established in the early 1980s. These commenters further argued that these environmental programs—most notably, RCRA's hazardous waste regulations and the liability provisions of CERCLA—have created strong incentives for proper management of recyclable hazardous secondary materials and recycling residuals. Several commenters further noted that, because of these developments, industrial recycling practices have changed substantially since the early 1980s and present day generators and recyclers are much better environmental stewards than in the pre-RCRA/CERCLA era. Thus, they argued, cases of “historical” recycling-related environmental damage are not particularly relevant or instructive with regard to modifying the current RCRA hazardous waste regulations for hazardous secondary materials recycling.

D. Recycling Studies

In light of these comments on the October 2003 proposal, and in

deliberating on how to proceed with this rulemaking effort, the Agency decided that additional information on hazardous secondary material recycling would benefit the regulatory decision-making process, and would provide stakeholders with a clearer picture of the hazardous secondary material recycling industry in this country. Accordingly, the Agency examined three basic issues that we believed were of particular importance to informing this rulemaking effort:

- How do responsible generators and recyclers of hazardous secondary materials ensure that recycling is done in an environmentally safe manner?
- To what extent have hazardous secondary material recycling practices resulted in environmental problems in recent years, and why?
- Are there certain economic forces or incentives specific to hazardous secondary material recycling that can explain why environmental problems can sometimes originate from such recycling activities?

Reports documenting these studies have been available for comment in the docket for this rulemaking, under the following titles:

- *An Assessment of Good Current Practices for Recycling of Hazardous Secondary Materials* (EPA-HQ-RCRA-2002-0031-0354) (“successful recycling study”).
- *An Assessment of Environmental Problems Associated With Recycling of Hazardous Secondary Materials* (EPA-HQ-RCRA-2002-0031-0355) (“environmental problems study”).
- *A Study of Potential Effects of Market Forces on the Management of Hazardous Secondary Materials Intended for Recycling* (EPA-HQ-RCRA-2002-0031-0358) (“market forces study”).

The results of these three studies have informed and supported EPA's decision making in today's final rule.

The successful recycling study has provided information to the Agency that has helped us determine what types of controls would be appropriate for hazardous secondary materials sent for reclamation to determine that they are handled as commodities rather than wastes. EPA found that responsible recycling practices used by generators and recyclers to manage hazardous secondary materials fall into two general categories. The first category includes the audit activities and inquiries performed by a generator of a hazardous secondary material to determine whether the entity to which it is sending such material is equipped to responsibly manage it without the risk of releases or

other environmental damage. These recycling and waste audits of other companies' facilities form a backbone of many of the transactions in the hazardous secondary materials market. The second category of responsible recycling practices consists of the control practices that ensure responsible management of any given shipment of hazardous secondary material, such as the contracts under which the transaction takes place and the tracking systems in place that can inform a generator that its hazardous secondary material has been properly managed.

As discussed later in today's preamble, these findings helped inform EPA's decision to require that a hazardous secondary material generator conduct reasonable efforts to ensure its materials are properly and legitimately recycled, and to require certain recordkeeping requirements.

The goal of the environmental problems study was to identify and characterize environmental problems that have been attributed to some types of hazardous secondary material recycling activity that are relevant for the purpose of this rulemaking effort. To address commenters' concerns that historic damages are irrelevant to current practices, EPA only included cases where damages occurred after 1982 (post-RCRA and -CERCLA implementation). The study identifies 208 cases in which environmental damages of some kind occurred from some type of recycling activity and that otherwise fit the scope of the study. The Agency believes that the occurrence of certain types of environmental problems associated with current recycling practices shows that discard has occurred. In particular, instances where materials were abandoned (e.g., in warehouses) and which required removal overseen by a government agency and expenditure of public funds clearly demonstrate that the hazardous secondary material was discarded. Of the 208 damage cases, 69 cases (33%) involve abandoned materials. The relatively high incidence of abandoned materials likely reflects the fact that bankruptcies or other types of business failures were associated with 138 (66%) of the cases.

In addition, the pattern of environmental damages that resulted from the mismanagement of recyclable materials (including contamination of soils, groundwater, surface water and air) is a strong indication that the hazardous secondary materials were generally not managed as valuable commodities and were discarded. Of the 208 damage cases, 81 cases (40%) primarily resulted from the

mismanagement of recyclable hazardous secondary materials. Mismanagement of recycling residuals was the primary cause in 71 cases (34%). Often, in the case of mismanagement of recycling residues, reclamation processes generated residuals in which the toxic components of the recycled materials were separated from the non-toxic components, and these portions of the hazardous secondary material were then mismanaged and discarded. Examples of this include a number of drum reconditioning facilities, where large numbers of used drums were cleaned out to remove small amounts of remaining product such as solvent, and these wastes were then improperly stored or disposed.

As discussed later in today's preamble, these findings helped inform EPA's decision to require that the hazardous secondary material be contained in the unit and managed in a manner that is at least as protective as an analogous raw material (where there is an analogous material), that the recycling residuals be properly managed, and that the reclamation facility and any intermediate facilities have financial assurance. In addition, the relatively small proportion of cases of damages from on-site recycling (13 of the 208 cases (6%)) lends support for EPA's decision to include fewer limitations on the exclusion for hazardous secondary materials recycled under the control of the generator.

The market forces study uses accepted economic theory to describe how various market incentives can influence a firm's decision-making process when the recycling of hazardous secondary materials is involved. This study helps explain some of the possible fundamental economic drivers of both the successful and unsuccessful recycling practices, which, in turn, helped the Agency to design the exclusions being finalized today.

As pointed out by some commenters to the October 2003 proposed rule, the economic forces shaping the behavior of firms that recycle hazardous secondary materials are often different from those at play in manufacturing processes using virgin materials. The market forces study uses economic theory to provide information on how certain characteristics can influence three different recycling models to encourage or discourage an optimal outcome. The three recycling models examined are: (1) Commercial recycling, where the primary business of the firms is recycling hazardous secondary materials that are accepted for recycling from off-site industrial sources (which usually pay a fee); (2) industrial intra-company

recycling, where firms generate hazardous secondary materials as by-products of their main production processes and recycle the hazardous secondary materials for sale or for their own reuse in production; and (3) industrial inter-company recycling, where firms whose primary business is not recycling, but either use or recycle hazardous secondary materials obtained from other firms, with the objective of reducing the cost of their production inputs. The report looks at how the outcome from each model is potentially affected by three market characteristics: (1) Value of the recycled product, (2) price stability of recycling output or inputs, and (3) net worth of the firm.

While an individual firm's decision-making process is based on many factors and attempting to extrapolate a firm's likely behavior from a few factors could be an over-simplification, when used in conjunction with other pieces of information, the economic theory can be quite illuminating. For example, according to the market forces study, the industrial intra- and inter-company recyclers have more flexibility in adjusting to unstable recycling markets (e.g., during price fluctuations, these companies can more easily switch from recycling to disposal or from recycled inputs to virgin inputs). Therefore, they would be expected to be less likely to have environmental problems from over-accumulated materials. On the other hand, certain specific types of commercial recycling, where the product has low value, the prices are unstable, and/or the firm has a low net worth, could be more susceptible to environmental problems from the over-accumulation of hazardous secondary materials, especially when compared to recycling by a well-capitalized firm that yields a product with high value. In both cases, these predicted outcomes appear to be supported by the results of the environmental problems study, which show the majority of problems occur at off-site commercial recyclers.

However, as shown by the successful recycling study, generators who might otherwise bear a large liability from poorly managed recycling at other companies have addressed this issue by carefully examining the recyclers to which they send their hazardous secondary materials to ensure that they are technically and financially capable of performing the recycling. In addition, we have seen that successful recyclers (both commercial and industrial) have often taken advantage of mechanisms, such as long-term contracts to help stabilize price fluctuations, allowing recyclers to plan their operations better.

Further discussion of the recycling studies, including the methodology and limitations of the studies, can be found in the March 2007 supplemental proposal (72 FR 14178-83), and the studies themselves can be found in the docket for today's rulemaking.

E. March 2007 Supplemental Proposal To Revise the Definition of Solid Waste

To provide public notice on the recycling studies discussed above, in March 2007, EPA published a supplemental proposal (72 FR 14172, March 26, 2007). In addition, based on the comments received on the October 2003 proposal, EPA also decided to restructure our approach to revising the definition of solid waste to more directly consider whether particular materials are not considered "discarded" and thus are not solid and hazardous wastes subject to regulation under Subtitle C of RCRA. We agreed with the many commenters on the October 2003 proposal who said that whether materials are recycled within the same NAICS code is not an appropriate indication of whether they are discarded. NAICS designations are designed to be consistent only with product lines, so that the effect of our October 2003 proposal would be that hazardous secondary materials generated and reclaimed under the control of the generator would not be excluded, even though the generator has not abandoned the material and has every opportunity and incentive to maintain oversight of, and responsibility for, the material that is reclaimed (see ABR, 208 F.2d at 1051 (noting that discard has not taken place where the producer saves and reuses secondary materials)).

Instead, in March 2007, EPA proposed two exclusions for hazardous secondary materials recycled under the control of the generator (one exclusion would apply to hazardous secondary materials managed in non-land-based units, whereas the other exclusion would apply to hazardous secondary materials managed in land-based units) and an additional exclusion for hazardous secondary materials transferred to another party for reclamation.

For the exclusions for hazardous secondary materials reclaimed under the control of the generator, EPA described three circumstances under which we believe that discard does not take place and where the potential for environmental releases is low to non-existent. The three situations involve legitimate recycling of hazardous secondary materials that are generated and reclaimed at the generating facility, at a different facility within the same

company, or through a tolling arrangement. Under all three circumstances, the hazardous secondary materials must be generated and reclaimed within the United States or its territories. Because the hazardous secondary material generator in these situations still finds value in the hazardous secondary materials, has retained control over them, and intends to use them, EPA proposed to exclude these materials from being a solid waste and, thus, from regulation under Subtitle C of RCRA if the recycling is legitimate and if the hazardous secondary materials are not speculatively accumulated.

In those cases, however, where generators of hazardous secondary materials do not reclaim the materials themselves, it often may be a sound business decision to ship the hazardous secondary materials to a commercial facility or another manufacturer for reclamation in order to avoid the costs of disposing of the material. In such situations, the generator has relinquished control of the hazardous secondary materials and the entity receiving such materials may not have the same incentives to manage the hazardous secondary materials as a useful product, especially if they are paid a fee for managing the hazardous secondary materials.

Accordingly, for the exclusion for hazardous secondary materials transferred to another party for reclamation, the Agency proposed conditions that, when met, would indicate that these hazardous secondary materials are not discarded. One of the conditions would require the generator to make reasonable efforts to determine that its hazardous secondary materials will be properly and legitimately recycled (thus demonstrating the hazardous secondary material is not being discarded). Another condition would require the reclamation facility to have adequate financial assurance (thus demonstrating that the hazardous secondary material will not be abandoned). In addition, EPA proposed that both the generator and reclaimer would need to maintain shipping records (to demonstrate that the hazardous secondary material was sent for reclamation and was received by the reclaimer), and the reclaimer would be subject to additional storage and residual management standards (to address the instances of discard observed at off-site reclamation facilities in the damage cases).

In addition, in March 2007, EPA's supplemental proposal included a case-by-case petition process to allow applicants to demonstrate that their

hazardous secondary materials are not discarded and therefore are not solid wastes.

Finally, in EPA's March 2007 supplemental proposal, EPA proposed a definition of legitimate recycling that restructured the legitimacy factors originally proposed in October 2003. The proposed legitimacy factors would be used to determine whether the recycling of hazardous secondary materials is legitimate.

IV. How Do the Provisions in the Final Rule Compare to Those Proposed on March 26, 2007?

EPA is finalizing the exclusions largely as proposed in March 2007, with some revisions and clarifications. The following is a brief overview of the revisions to the proposal, with references to additional preamble discussions for more detail.

For the exclusion for hazardous secondary materials that are legitimately reclaimed under the control of the generator, we are clarifying the scope of the exclusion, including addressing issues with defining "on-site," "same company," and "tolling arrangement." We have also added additional data elements to the notification requirement, clarified that the hazardous secondary materials must be contained when managed in non-land-based units, as well as in land-based units, because hazardous secondary materials that are released to the environment and not immediately recovered are discarded, and added a reference to the new legitimacy provision in § 260.43. We have also revised the definition of land-based unit to be "an area where hazardous secondary materials are placed in or on the land before recycling," while also clarifying that the definition does not include production units. For further discussion of the generator-controlled exclusion, see section VII of this preamble.

For the exclusion for hazardous secondary materials that are transferred for the purpose of reclamation, we are clarifying that hazardous secondary materials held at a transfer facility for less than 10 days will be considered to be in transport. We are also allowing the use of intermediate facilities that store hazardous secondary materials for more than 10 days, provided the facilities comply with the same conditions applicable to reclamation facilities. In addition, the hazardous secondary material generator must select the reclamation facility (or facilities) that can be used and must perform reasonable efforts on both the intermediate facility and reclamation

facility (or facilities), and the intermediate facility must send the hazardous secondary material to the reclamation facility that the generator selected. For the reasonable efforts condition, we have included specific questions in the regulatory language, and are requiring both documentation and certification. We are also clarifying how the financial assurance condition applies to reclamation and intermediate facilities excluded under the transfer-based exclusion, including tailored regulatory language for financial assurance specific to these types of facilities. We have also added a reference to the new legitimacy provision in § 260.43. For further discussion, see section VIII of this preamble.

Regarding legitimacy, we are adding legitimacy as a condition of the exclusions and the non-waste determinations in this rule, but are not finalizing the language proposed in § 261.2(g) for all recycling. The new legitimacy provision can be found at § 260.43. For further discussion, see section IX of this preamble.

Finally, for the non-waste determination process, we have limited the categories for non-waste determinations to materials reclaimed in a continuous industrial process and materials indistinguishable from products and we have revised the criteria to make them more consistent across the two categories of non-waste determinations. Furthermore, we are not finalizing the non-waste determination for materials reclaimed under the control of the generator via a tolling arrangement or similar contractual arrangement. For further discussion, see sections X and XIX of this preamble.

V. How Does the Concept of Discard Relate to the Final Rule?

In the March 2007 supplemental proposal, EPA explained how the concept of "discard" is the central organizing idea behind the revisions to the definition of solid waste being finalized today (72 FR 14178). Basing the revisions on "discard" reflects the fundamental logic of the RCRA statute. As stated in RCRA Section 1004(27), "solid waste" is defined as "* * * any garbage, refuse, sludge from a waste treatment plant, or air pollution control facility and other discarded material * * * resulting from industrial, commercial, mining and agricultural activities. * * *" Therefore, in the context of this final rule, a key issue is the circumstances under which a hazardous secondary material that is recycled by reclamation is or is not discarded.

The March 2007 supplemental proposal represented a shift from the approach taken in the October 2003 proposal, which proposed to exclude from the definition of solid waste any hazardous secondary material generated and reclaimed in a continuous process within the same industry, provided the reclamation was legitimate. "Same industry" was defined as industries sharing the same 4-digit NAICS code. The basis for that proposed exclusion was the holding in *American Mining Congress v. EPA* ("AMC I"), 824 F.2d 1177 (DC Cir. 1987) that materials destined for beneficial reuse in a continuous process by the generating industry are not discarded (68 FR 61563, 61564–61567).

Commenters critical of the October 2003 proposal argued, among other things, that EPA failed to present a reasoned analysis of the indicia of discard (72 FR 14184–14185). In evaluating these comments, EPA determined that the effect of our October 2003 proposal would be that some hazardous secondary materials generated and reclaimed under the control of the generator would not be excluded, even though the generator had not abandoned the material and had every opportunity and incentive to maintain oversight of, and responsibility for, the hazardous secondary material being reclaimed. Under these circumstances, we determined in March 2007 that discard has generally not occurred (72 FR 14185). Therefore, in the March 2007 supplemental proposal, EPA decided to examine the concept of discard, which is the driving principle behind the court's holdings on the definition of solid waste, rather than trying to fit materials into specific fact patterns addressed by the court (*see* 72 FR 14175).

EPA continues to believe that the concept of discard is the most important organizing principle governing the determinations we have made in today's final rule. In the series of decisions discussed above relating to the RCRA definition of solid waste, the Court of Appeals for the DC Circuit has consistently cited a plain language definition of discard, as meaning "disposing, abandoning or throwing away." Today's final rule is consistent with that definition. Below is a discussion of each provision of the final rule with an explanation of how it relates to discard. Further discussion of the concept of discard and its relationship to specific provisions and ways of implementing this rule is found in sections V.A through V.D, below.

The Agency also incorporates in this preamble to the final rule all

determinations in the March 2007 supplemental proposal, except to the extent they are inconsistent with the determinations in this preamble, regarding the conditions for the solid waste exclusions. In addition, EPA notes that it did not reopen the specific details of the speculative accumulation regulation regarding the time periods under which materials are to be recycled, since these periods have been part of the Agency's regulations for many years and are familiar to persons who are affected by the regulations.

A. Discard and the Generator-Controlled Exclusions

In the March 2007 supplemental proposal, EPA determined that if the generator maintains control over the recycled hazardous secondary material, the material is legitimately recycled under the standards established in the proposal, and the material is not speculatively accumulated within the meaning of EPA's regulations, then the hazardous secondary material is not discarded. This is because the hazardous secondary material is being treated as a valuable commodity rather than as a waste. By maintaining control over, and potential liability for, the recycling process, the generator ensures that the hazardous secondary materials are not discarded (*see* ABR 208 F.3d 1051 ("Rather than throwing these materials [destined for recycling] away, the producer saves them; rather than abandoning them, the producer reuses them.")) (72 FR 14178).

EPA continues to believe that when a generator legitimately recycles hazardous secondary material under its control, the generator has not abandoned the material and has every opportunity and incentive to maintain oversight of, and responsibility for, the hazardous secondary material that is reclaimed.

In determining when recycling occurs "under the control" of the generator, EPA looked at three scenarios: Recycling performed on-site, recycling performed within the same company, and recycling performed under certain specific tolling arrangements.

In the March 2007 supplemental proposal, EPA noted that, of the 208 recycling cases that caused environmental damage, only 13 (approximately 6%) occurred as a result of on-site recycling. We also agreed with commenters on the October 2003 proposal who asserted that "generators who recycle materials on-site (even if the reclamation takes place in a different NAICS code) are likely to be familiar with the material and more

likely to maintain responsibility for the materials" (72 FR 14185).

EPA also determined that this rationale applies to legitimate reclamation taking place within the same company. In the case of same-company recycling, both the generating facility and the reclamation facility (if they are different) would be familiar with the hazardous secondary materials and the company would be ultimately liable for any mismanagement of the hazardous secondary materials. Under these circumstances, the incentive to avoid such mismanagement would be so strong that mismanagement also would be unlikely.

In the case of certain tolling operations, EPA determined in the March 2007 supplemental proposal that a certain specific type of tolling arrangement provides equivalent assurance that recycling is performed "under the control of the generator" and does not constitute discard. Under this type of arrangement, one company (the tolling contractor) contracts with a second company (the toll manufacturer) to produce a specialty chemical from specified unused materials identified in the tolling contract. The toll manufacturer produces the chemical and the production process generates a hazardous secondary material (such as a spent solvent) which is routinely reclaimed at the tolling contractor's facility. The typical toll manufacturing contract contains detailed specifications about the product to be manufactured, including management of any hazardous secondary materials that are produced and returned to the tolling contractor for reclamation. Under this scenario, the hazardous secondary material continues to be managed as a valuable product, so discard has not occurred. Moreover, because the contract specifies that the tolling contractor retains ownership of, and responsibility for, the hazardous secondary materials, there is a strong incentive to avoid any mismanagement or release. In essence, the tolling contractor has outsourced a step in its manufacturing process, but continues to take responsibility and maintain control of the process as a whole, including both the unused materials going into the process and the product and hazardous secondary materials resulting from the process.

For all three of these generator-controlled exclusions—reclamation performed on-site, within the same company, and via certain tolling arrangements—EPA continues to find that the facility owner still finds value in the hazardous secondary materials, has retained control over them, and intends to reclaim them. Therefore, EPA

is finalizing an exclusion for these materials, with certain restrictions discussed below.

In the March 2007 supplemental proposal, EPA also noted that management in a land-based unit does not automatically indicate a hazardous secondary material is being discarded. As long as the hazardous secondary material is contained and is destined for recycling under the control of the generator, it would still meet the terms of the exclusion. However, if the hazardous secondary material is not managed as a valuable product and, as a result, a significant release to the environment from the unit occurs and is not immediately recovered, the hazardous secondary material in the land-based unit would be considered discarded (72 FR 14186). Thus, EPA proposed that the hazardous secondary material must be contained in the land-based unit in order for the exclusion to be applicable.

However, in making this finding that hazardous secondary materials managed in a land-based unit must be contained in order to retain the exclusion, EPA did not intend to imply that hazardous secondary materials managed in non-land-based units do not need to be contained. Hazardous secondary materials released to the environment are not destined for recycling and are clearly discarded whether they originated from a land-based unit or not. Because non-land-based units do not involve direct contact with the land, in the March 2007 supplemental proposal, EPA did not include an explicit "contained" restriction for these units. However, as commenters noted, it is still possible for non-land-based units to leak or otherwise release significant amounts of hazardous secondary materials to the environment, even if they are not in direct contact with the land, resulting in those materials being discarded. Thus, for today's final rule, EPA is requiring that hazardous secondary materials must be contained (whether it is managed in land-based units or non-land-based units) in order to identify the hazardous secondary materials that are not being discarded and, therefore, are not solid wastes.

Another restriction on the generator-controlled exclusions is the prohibition against speculative accumulation. As noted in the March 2007 supplemental proposal, restrictions on speculative accumulation (40 CFR 261.1(c)(8)) have been an important element of the RCRA hazardous waste recycling regulations since they were promulgated on January 4, 1985. Historically, hazardous secondary materials excluded from the definition of solid waste generally

become wastes when they are speculatively accumulated, because, at that point, they are considered to be unlikely to be recycled and therefore discarded. According to this regulatory provision, a hazardous secondary material is accumulated speculatively if the person accumulating it cannot show that the material is potentially recyclable; further, the person accumulating the hazardous secondary material must show that during a calendar year (beginning January 1) the amount of such material that is recycled, or transferred to a different site for recycling, must equal at least 75% by weight or volume of the amount of that material at the beginning of the period. As noted in the March 2007 supplemental proposal, this provision already applies to hazardous secondary materials that are not otherwise considered to be wastes when recycled, such as materials used as ingredients or commercial product substitutes, materials that are recycled in a closed-loop production process, or unlisted sludges and by-products being reclaimed (72 FR 14188). Given that a significant portion of the damage cases stemmed from over-accumulation of hazardous secondary materials, EPA continues to believe that a restriction on speculative accumulation is needed to determine that the hazardous secondary material is being recycled and is not discarded.

In addition, as with all recycling exclusions under RCRA, the excluded hazardous secondary materials must be recycled legitimately. As discussed in section IX of this preamble, EPA has long articulated the need to distinguish between "legitimate" (i.e., true) recycling and "sham" recycling, beginning with the preamble to the 1985 regulations that established the definition of solid waste (50 FR 638, January 4, 1985) and continuing with the October 2003 proposed codification of criteria for identifying legitimate recycling. Because there can be a significant economic incentive to manage hazardous secondary materials outside the RCRA regulatory system, there is a potential for some handlers to claim that they are recycling, when, in fact, they are conducting waste treatment and/or disposal in the guise of recycling. While the legitimacy construct applies to both excluded recycling and the recycling of regulated hazardous wastes, hazardous secondary materials that are not legitimately recycled (i.e., that are being treated and/or disposed in the guise of recycling) are discarded materials and, therefore, are solid wastes.

A final restriction on the generator-controlled exclusion from the definition of solid waste is that the hazardous secondary material must be generated and recycled within the United States.¹ Because hazardous secondary materials that are exported for recycling pass out of the regulatory control of the federal government, making it difficult to determine if these activities are "under the control of the generator" and because, as noted in the March 2007 supplemental proposal, we do not have sufficient information about most recycling activities outside of the United States to decide whether discard is likely or unlikely (72 FR 14187), EPA continues to find that this restriction is needed to properly define when the hazardous secondary material is not being discarded.

B. Discard and the Transfer-Based Exclusion

As EPA noted in the March 2007 supplemental proposal, in cases where generators of hazardous secondary materials do not reclaim the materials themselves, it often may be a sound business decision to ship the hazardous secondary materials to be reclaimed to a commercial facility or another manufacturer in order to avoid the costs of disposing of the material.

In such situations, EPA determined that the generator has relinquished control of the hazardous secondary materials and the entity receiving such materials may not have the same incentives to manage them as a useful product (72 FR 14178). This is evidenced by the results of the environmental problems study, found in the docket of today's final rule. Of the 208 damage cases EPA identified for the March 2007 supplemental proposal, 195 (about 94%) were from off-site third-party recyclers, with clear instances of discard resulting in risk to human health and the environment, including cases of large-scale soil and ground water contamination with remediation costs in some instances in the tens of millions of dollars.

In addition, the market forces study in the docket for today's rulemaking supports the conclusion that the pattern of discard at off-site, third party reclaimers is a result of inherent differences between commercial

¹ As discussed in section VII.C., persons taking advantage of the generator-controlled option must also notify the regulatory authority. This notification requirement is needed to enable credible evaluation of the status of hazardous secondary materials under RCRA and to ensure the terms of the exclusions are being met by generators and reclaimers. These types of notification requirements in this rule are being promulgated under the authority of RCRA section 3007.

recycling and normal manufacturing. As opposed to manufacturing, where the cost of raw materials or intermediates (or inputs) is greater than zero and revenue is generated primarily from the sale of the output, hazardous secondary materials recycling can involve generating revenue primarily from receipt of the hazardous secondary materials (72 FR 14182). Recyclers of hazardous secondary materials in this situation may thus respond differently from traditional manufacturers to economic forces and incentives, accumulating more inputs (hazardous secondary materials) than can be processed (reclaimed). In addition, commercial recyclers appear to have less flexibility than in-house recyclers (e.g., during price fluctuations, in-house recyclers can more easily switch from recycling to disposal or from recycled inputs to virgin inputs, which commercial recyclers cannot) (72 FR 14183).

After reviewing public comments on the recycling studies (see section XV.D. of today's preamble), EPA continues to believe that conditions are needed under the transfer-based exclusion for the Agency to determine that these hazardous secondary materials are not discarded.²

One key condition that reflects the basic premise underlying the exclusion is the condition that the hazardous secondary material generator perform and document reasonable efforts to ensure that its hazardous secondary material will be properly and legitimately recycled. As EPA explained in the March 2007 supplemental proposal, in order to demonstrate that hazardous secondary materials will not be discarded, generators who transfer their hazardous secondary materials to a third party must have a reasonable understanding of who will be reclaiming the materials and how they will be managed and reclaimed and a reasonable assurance that the recycling practice is safe and legitimate (72 FR 14194). In order for a generator to determine whether its hazardous secondary materials are not solid wastes because they are not discarded, the generator must make a reasonable effort

to ensure that the reclaimer intends to legitimately recycle the material and not discard it, and that the reclaimer (and any intermediate facility) will properly manage the material.

EPA continues to find that the reasonable efforts condition is critical in determining when hazardous secondary materials sent to another party for reclamation are not discarded. According to the successful recycling study found in the docket for today's rulemaking, generators of hazardous secondary materials frequently perform audit activities and inquiries to determine whether the entity to which they are sending hazardous secondary materials is equipped to responsibly and legitimately reclaim and manage those materials without the risk of releases or other environmental damage. These recycling and waste audits of other companies' facilities form a backbone of many of the transactions in the hazardous secondary materials markets. As noted in the March 2007 supplemental proposal, EPA's successful recycling study quotes one large recycling and disposal vendor as stating that of its new customers, 60% of the large customers and 30–50% of the smaller customers now perform audits on them (72 FR 14191). Thus, although these practices are not universal, they do indicate that there are currently many generators who recognize the risk of third-party recyclers discarding their hazardous secondary materials and who take responsibility to ensure that this discard does not occur. By codifying the reasonable efforts condition of the transfer-based exclusion, EPA believes that hazardous secondary materials generated by companies who take this type of responsibility are not being discarded.

EPA has developed a reasonable efforts condition that is objective and is based on the types of information that are typically gathered in environmental audits currently performed by generators. However, one piece of information that is not included under the reasonable efforts provision being finalized today is the financial health of the reclamation facility. While EPA agrees with comments received that state that evaluating the financial health of a company can be a useful exercise, and encourages companies to do so, it is not an activity that lends itself to an objective standard that would be workable in a solid waste identification regulation.

However, the financial health of a reclamation facility can still be a crucial consideration in determining whether discard is taking place. According to the

successful recycling study, an examination of a company's finances is an important part of many environmental audits. In addition, the environmental problems study showed that bankruptcies or other types of business failures were associated with 138 (66%) of the damage cases, and the market forces study identified a low net worth of a firm as a strong indication of a sub-optimal outcome of recycling.

To address the issue of the correlation of financial health with the absence of discard, EPA proposed in the March 2007 supplemental proposal to require that reclamation facilities obtain financial assurance. The financial assurance requirements are designed to help EPA determine that the hazardous secondary material generator is not discarding the hazardous secondary material by sending it to a reclamation facility that is financially unsound.

In addition, by obtaining financial assurance, the owner/operator of the reclamation facility (or intermediate facility) is making a direct demonstration that it will not abandon the hazardous secondary material. Discard through abandonment was a major cause of damages identified in the environmental problems study. Of the 208 damage cases, 69 (33%) cases involved abandoned materials. By obtaining financial assurance, a reclaimer (or intermediate facility) is demonstrating that even if events beyond its control make its operations uneconomical, the hazardous secondary material will not be abandoned.

Another major cause of damages identified in the environmental problems study was mismanagement of recyclable materials, constituting the primary cause of damage in 81 (40%) of the 208 cases. Accordingly, in the March 2007 supplemental proposal, EPA proposed a condition for reclaimers that they must manage the hazardous secondary materials in at least as protective a manner as they would an analogous raw material, and in such a way that the hazardous secondary materials would not be released into the environment (72 FR 14195). After reviewing the comments, EPA continues to find that such a condition is needed for the Agency to determine that the hazardous secondary materials are not discarded.

The third major source of damages identified in the environmental problems study was mismanagement of residuals generated from the reclamation activity, constituting the primary cause of damage in 71 (34%) of the 208 cases. As discussed in the March 2007 supplemental proposal, EPA found that in many cases, the

² These are conditions beyond the prohibition on speculative accumulation, the requirement that the hazardous secondary material be contained, and the requirement that the materials be legitimately recycled, as described in section VII.C., which would also apply to the transfer-based exclusion. The transfer-based exclusion also includes a notification requirement, which is needed to enable credible evaluation of the status of hazardous secondary materials under section 3007 of RCRA and to ensure the terms of the exclusions are being met by generators, intermediate facilities, and reclaimers.

residuals were comprised of the most hazardous components of the hazardous secondary materials (e.g., polychlorinated biphenyls (PCBs) from transformers) and were simply disposed of in on-site landfills or piles, with little regard for the environmental consequences of such mismanagement or possible CERCLA liabilities associated with cleanup of these releases. Therefore, EPA proposed that “any residuals that are generated from reclamation processes will be properly managed. If any residuals exhibit a hazardous characteristic according to subpart C of 40 CFR part 261, or themselves are listed hazardous wastes, they are hazardous wastes (if discarded) and must be managed according to the applicable requirements of 40 CFR parts 260 through 272” (72 FR 17195). EPA continues to find that this condition is important to clarify the regulatory status of these waste materials, and to emphasize in explicit terms that the residuals generated from reclamation operations must be managed properly (i.e., consistent with federal and state requirements).

Finally, other provisions of the transfer-based exclusion help ensure that the hazardous secondary material is properly transferred to the reclamation facility for recycling. Only the hazardous secondary material generator, transporter, intermediate facility and reclaimer can handle the material. (Note that, as with hazardous waste, a hazardous secondary material can be held up to 10 days at a transfer facility and still be considered as being in transport.) The hazardous secondary material generators, intermediate, and reclamation facilities claiming the exclusion must keep records of the hazardous secondary material shipments, and reclamation and intermediate facilities must send confirmations of receipt back to the hazardous secondary material generator. Thus, all parties responsible for the excluded hazardous secondary materials will be able to demonstrate that the materials were in fact sent for reclamation and arrived at the intended facility and were not discarded in transit. For hazardous secondary material generators who are exporting to other countries for reclamation, notice and consent must be obtained, thus facilitating oversight of the hazardous secondary material when sent beyond the borders of the United States, helping to ensure that it is recycled rather than discarded.

C. Discard and Non-Waste Determinations

In addition to the exclusions discussed above, the Agency is also finalizing a process for obtaining a case-specific non-waste determination for certain hazardous secondary materials that are recycled. This process allows a petitioner to receive a formal determination from EPA (or the state, if the state is authorized for this provision) that its hazardous secondary material is not discarded and therefore is not a solid waste. The procedure allows EPA or the authorized state to take into account the particular fact pattern of the reclamation operation to determine that the hazardous secondary material in question is not a solid waste.

The determination is available to applicants who demonstrate (1) that their hazardous secondary materials are reclaimed in a continuous industrial process, or (2) that the materials are indistinguishable in all relevant aspects from a product or intermediate.

As discussed earlier, court decisions have made it clear that hazardous secondary materials reclaimed in a continuous industrial process are not discarded and, therefore, are not solid waste. As discussed in the March 2007 supplemental proposal, EPA believes that the generator-controlled exclusion also excludes from the definition of solid waste hazardous secondary materials recycled in a continuous industrial process (72 FR 14202). In effect, hazardous secondary materials reclaimed in a continuous process are a subset of the hazardous secondary materials reclaimed under the control of the generator that are excluded under today’s rule.

However, EPA also recognized in the March 2007 supplemental proposal that production processes can vary widely from industry to industry. Thus, in some cases, EPA may need to evaluate case-specific fact patterns to determine whether an individual hazardous secondary material is reclaimed in a continuous industrial process, and therefore not a solid waste.³ EPA

³ See, for example the ABR decision, where the Court acknowledged that the term “discard” could be “ambiguous as applied to some situations, but not as applied to others,” and particularly cited the difficulty in examining the details of the many processes in the mineral processing industry (208 F.3d at 1056). While the court overturned EPA’s regulations for casting too wide a net over continuous industrial processes, it acknowledged that there are a large number of processes, some of which may be continuous and some of which may not. Determining what is a continuous process in the mineral processing industry, according to the Court, would require examination of the details of the processes and does not lend itself, well, to broad abstraction. Specifically, the Court stated,

continues to believe that this is best done through a case-by-case procedure and is, therefore, finalizing the non-waste determination process today.

In addition to ruling that hazardous secondary materials recycled within a continuous industrial process are not discarded and therefore not solid waste, the courts have also said that hazardous secondary materials destined for recycling in another industry are not automatically discarded. In the *Safe Food* decision, the Court stated, “[n]obody questions that virgin * * * feedstocks are products rather than wastes. Once one accepts that premise, it seems eminently reasonable to treat [recycled] materials that are indistinguishable in the relevant respects as products as well” (350 F.3d at 1269). In *Safe Food*, the court accepted EPA’s determination that the “relevant respects” were that “market participants treat the * * * materials more like valuable products rather than like negatively-valued wastes managing them in ways inconsistent with discard, and that the fertilizers derived from these recycled feedstocks are chemically indistinguishable from analogous commercial products made from virgin materials.” *Id.* As a result, EPA recognized in the March 2007 supplemental proposal, and continues to believe today, that there may be some instances that would benefit from a non-waste determination (72 FR 14203). Thus, we are also finalizing the non-waste determination process for hazardous secondary materials indistinguishable in all relevant aspects from a product or intermediate.

VI. When Will the Final Rules Become Effective?

This final rule is effective on December 29, 2008. Section 3010(b) of RCRA allows EPA to promulgate a rule with a period for the effective date shorter than six months where the Administrator finds that the regulated community does not need additional time to come into compliance with the rule. This rule does not impose any requirements on the regulated

“Some mineral processing secondary materials covered under the Phase IV Rule may not proceed directly to an ongoing recycling process and may be analogous to the sludge in AMC II. The parties have presented this aspect of the case in broad abstraction, providing little detail about the many processes throughout the industry that generate residual material of the sort EPA is attempting to regulate under RCRA, * * *” 208 F.3d at 1056.

In the case of today’s final rule, which applies across industries, there are far larger and more diverse processes. While EPA believes it is establishing a reasonable set of principles, they must still be applied to the details of the industrial processes in question.

community; rather, the rule provides flexibility in the regulations with which the regulatory community is required to comply. The Agency finds that the regulatory community does not need six months to come into compliance.

VII. Exclusion for Hazardous Secondary Materials That Are Legitimately Reclaimed Under the Control of the Generator

A. What Is the Purpose of This Exclusion?

Sections 261.2(a)(2)(ii) and 261.4(a)(23), being finalized today, excludes from the definition of solid waste those hazardous secondary materials which remain under the control of the generator when legitimately reclaimed. By maintaining control over, and potential liability for, the hazardous secondary materials and the reclamation process, the generator ensures that such materials have not been discarded. When reclaimed under the control of the generator, the hazardous secondary materials are being treated as a valuable commodity rather than a waste. However, if such hazardous secondary materials are released into the environment and are not recovered immediately, they have been discarded and the generator is subject to all applicable federal and state regulations, as well as applicable cleanup authorities.

B. Scope and Applicability

EPA is today excluding from the definition of solid waste those hazardous secondary materials that are legitimately reclaimed under the control of the generator, provided they are not speculatively accumulated and they are reclaimed within the United States or its territories. In addition, the generator must submit a notification of the exclusion to EPA or the authorized state and the hazardous secondary material must be contained in the units in which it is stored. The provision excluding hazardous secondary materials that are under the control of the generator and that are managed in land-based units is found at 40 CFR 261.4(a)(23), while the provision excluding such materials that are managed in non-land-based units is found at 40 CFR 261.2(a)(2)(ii). A land-based unit is defined in 40 CFR 260.10 as an area where hazardous secondary materials are placed in or on the land before recycling, but this definition does not include land-based production units. Examples of land-based units include surface impoundments and piles.

The definition of "hazardous secondary material generated and

reclaimed under the control of the generator" is finalized in 40 CFR 260.10 and consists of three parts. The first part applies to hazardous secondary materials generated and legitimately reclaimed at the generating facility. For purposes of this exclusion, "generating facility" means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator, and "hazardous secondary material generator" means any person whose act or process produces hazardous secondary materials at the generating facility. A facility that collects hazardous secondary materials from other persons (for example, when mercury-containing equipment is collected through a special collection program) is not the hazardous secondary material generator of those materials.

Under this definition, if a generator contracts with a different company to reclaim hazardous secondary materials at the generator's facility, either temporarily or permanently, the materials would be considered under the control of the generator. However, generators sometimes contract with a second company to collect hazardous secondary materials at the generating facility and the materials are subsequently reclaimed at the facility of the second company. In that situation, the hazardous secondary materials would no longer be considered "under the control of the generator" and would instead be managed under the exclusion for materials transferred for reclamation.

The second part of the definition applies to hazardous secondary materials generated and legitimately reclaimed at different facilities if the reclaiming facility is controlled by the generator or if a person as defined in § 260.10 controls both the generator and the reclaimer. For purposes of this exclusion, "control" means the power to direct the policies of the facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate facilities on behalf of a different person as defined in § 260.10 shall not be deemed to "control" such facilities. Thus, when a contractor operates two facilities, each of which is owned by a different company, hazardous secondary materials generated at the first facility and reclaimed at the second facility are not considered "under the control of the generator" and must use the exclusion for such materials that are transferred for reclamation.

Under the definition promulgated in today's final rule, the generating facility must provide one of two certifications: (1) That the generating facility will send the indicated hazardous secondary

materials to the reclaiming facility, which is controlled by the generating facility, and that either the generating facility or the reclaiming facility has acknowledged full responsibility for the safe management of such hazardous secondary materials; or (2) that the generating facility will send the hazardous secondary materials to the reclaiming facility, that both facilities are under common control, and that either the generating facility or the reclaiming facility has acknowledged full responsibility for the safe management of such hazardous secondary materials. This certification should be made by an official familiar with the corporate structure of both the generating and the reclaiming facilities. The certification should be retained at the site of the generating facility.

The third part of the definition applies to hazardous secondary materials that are generated pursuant to a written contract between a tolling contractor and a toll manufacturer and legitimately reclaimed by the tolling contractor. For purposes of this exclusion, a tolling contractor is a person who arranges for the production of a product or intermediate made from specified unused materials through a written contract with a toll manufacturer. The toll manufacturer is the person who produces a product or intermediate made from specified unused materials pursuant to a written contract with a tolling contractor. Under today's final rule, the tolling contractor must certify that it has a written contract with the toll manufacturer to manufacture a product or intermediate made from specified unused materials, and that the tolling contractor will reclaim the hazardous secondary materials generated during the manufacture of the product or intermediate. The tolling contractor must also certify that it retains ownership of, and liability for, the hazardous secondary materials that are generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process at the toll manufacturer's facility. This certification should be made by an official familiar with the terms of the written contract and should be retained at the site of the tolling contractor.

C. Restrictions and Requirements

Hazardous secondary materials must be contained. The regulations at 40 CFR 261.2(a)(2)(ii) and 40 CFR 261.4(a)(23) apply to hazardous secondary materials that are generated and legitimately reclaimed under the control of the generator in the United States or its

territories. Under these provisions, the hazardous secondary materials must be contained, whether they are stored in land-based units or non-land-based units. Generally, such material is "contained" if it is placed in a unit that controls the movement of the hazardous secondary material out of the unit and into the environment. These restrictions support EPA's determination that materials managed in this manner are not discarded.

In the event of a release from a unit to the environment, the hazardous secondary materials that remain in the unit may or may not meet the terms of the exclusion. They would be considered solid wastes if they are not managed as a valuable raw material, intermediate, or product, and as a result, a "significant" release of hazardous secondary materials from the unit to the environment were to take place and the materials were not immediately recovered. If such a significant release were to occur, the hazardous secondary materials remaining in the unit would be considered solid and hazardous wastes and the unit would be subject to the appropriate hazardous waste regulations. For example, an acidic hazardous secondary material undergoing reclamation could be stored in a tank that experienced a failure. A facility might fail to monitor the structural integrity of the tank, as most product tanks are monitored, or the tank might not be constructed to contain acidic hazardous secondary materials, causing a significant release of such materials into the environment that is not immediately recovered. The unit itself would consequently be considered a hazardous waste management unit because the hazardous secondary materials were not being managed as a valuable raw material, intermediate, or product, as evidenced by the failure to monitor it for structural integrity, resulting in the release. Thus, the unit and any remaining waste would be subject to Subtitle C controls because the hazardous secondary materials in the unit have been discarded. In addition, any of the released materials that were not immediately recovered would also be considered discarded and, if hazardous, subject to appropriate federal or state regulations and applicable authorities. Thus, to be excluded from the definition of solid waste, the facility has an obligation to manage the material as it would any raw material, intermediate or product because of its value. This includes, for example, operating and maintaining storage units in the same manner as product units. In the above example,

whether by mismanagement of the hazardous secondary materials or by storing acidic materials in a tank not constructed to handle them or because of the failure to monitor the structural integrity of the unit, the result is that the unit would come under Subtitle C regulation.

Conversely, a tank or a surface impoundment in good condition may experience small releases resulting from normal operations of the facility. Sometimes a material may escape from primary containment and may be captured by secondary containment or some other mechanism that would prevent the material from being released to the environment or would allow immediate recovery of the material. In that case, the unit would retain its exclusion from RCRA hazardous waste regulation and the hazardous secondary materials in the unit would still be excluded from the definition of solid waste, even though any such materials that had been released would be considered discarded if not immediately recovered and would be subject to appropriate regulation. One specific example of "contained" hazardous secondary materials would be furnace bricks collected from production units and stored on the ground in walled bins before being used as feedstocks in the metals production process. If there were very small releases from the walled bins due to precipitation runoff, such releases would not cause the storage bins to be subject to Subtitle C controls.

It should be noted that a "significant" release is not necessarily large in volume. Such a release could include an unaddressed small release to the environment from a unit that, if allowed to continue over time, could cause significant damage. Any one release may not be significant in terms of volume. However, if the cause of such a release remains unaddressed over time and hazardous secondary materials are managed in such a way that the release is likely to continue, the materials in the unit would not be contained. For example, a rusting tank or containers that are deteriorating may have a slow leak that, if unaddressed, could, over time, cause a significant environmental impact. Similarly, a surface impoundment with a slow, unaddressed leak to groundwater could result, over time, in significant damage. Another example would be a large pile of lead-contaminated finely ground dust without any provisions to prevent wind dispersal of the dust. Such releases, if unaddressed over time and likely to continue, would mean that the hazardous secondary materials remaining in the unit were not being

managed as a valuable raw material, intermediate, or product and that the materials had been discarded. As a result, the hazardous secondary materials in the unit would be hazardous wastes and these units would be subject to the RCRA hazardous waste regulations.

Speculative accumulation. In addition to the containment provision, hazardous secondary materials that are generated and legitimately reclaimed under the control of the generator are subject to the speculative accumulation provisions of 40 CFR 261.1(c)(8). If these materials are speculatively accumulated, they are considered discarded. EPA did not propose changes to the speculative accumulation provisions in its March 26, 2007 proposal.

Legitimate Recycling. Under this exclusion, hazardous secondary materials under the control of the generator must be legitimately reclaimed, as specified under 40 CFR 260.43. Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or product and the recycling process must produce a valuable product or intermediate. In addition, as part of a legitimacy determination, persons must consider whether the hazardous secondary material is managed as a valuable product and must consider the levels of toxics in the product of the recycling process as compared to analogous products made from virgin materials. The details of the legitimacy provision are discussed in section IX of this preamble.

Notification. Under today's rule, hazardous secondary material generators, tolling contractors, toll manufacturers, and reclaimers (where the generator and reclaimer are part of the same company, but located at different facilities) managing hazardous secondary materials reclaimed under the control of the generator are required to submit a notification prior to operating under this exclusion and by March 1 of each even numbered year thereafter to the EPA Regional Administrator using EPA Form 8700-12. In states authorized by EPA to administer the RCRA Subtitle C hazardous waste program, notifications may be sent to the state Director. The notice must include:

- The name, address and EPA ID number (if applicable) of the facility;
- The name and telephone number of a contact person;
- The NAICS code of the facility;
- The exclusion under which the hazardous secondary materials will be managed (e.g., 40 CFR 261.2(a)(2)(ii))

and/or 40 CFR 261.4(a)(23) for hazardous secondary materials managed in a land-based unit);

- When the facility expects to begin managing the hazardous secondary materials in accordance with the exclusion;

- A list of hazardous secondary materials that will be managed according to the exclusion (reported as the EPA hazardous waste numbers that would apply if the hazardous secondary materials were managed as hazardous waste);

- For each hazardous secondary material, whether the material, or any portion thereof, will be managed in a land-based unit;

- The quantity of each hazardous secondary material to be managed annually; and

- The certification (included in EPA Form 8700-12) signed and dated by an authorized representative of the facility.

Generators and reclaimers are required to notify on a per facility basis. In other words, facilities managing hazardous secondary materials will need to submit a notification form in accordance with the exclusion. One notification cannot cover two or more facilities. Furthermore, each facility need only use one notification form to list all of the hazardous secondary materials to be managed under the exclusion (i.e., facilities need not file separate notifications for each hazardous secondary material).

We are also requiring facilities that stop managing hazardous secondary materials in accordance with the exclusion to notify the Regional Administrator within 30 days using the same EPA Form 8700-12. Notification in this instance serves two objectives: (1) It allows states to follow up with the facility to verify that the hazardous secondary material has not been discarded; and (2) it maintains the usability of the database to enable states to monitor compliance and, for today's transfer-based exclusion, to assist generators with performing reasonable efforts on potential reclaimers. We consider a facility to have 'stopped' managing hazardous secondary materials when a facility no longer generates, manages and/or reclaims hazardous secondary materials under the exclusion and does not expect to manage any amount of hazardous secondary material under the exclusion for at least one year. This includes if the facility chooses to manage the hazardous secondary materials as hazardous waste or the facility chooses to temporarily suspend management of hazardous secondary materials and does not expect to manage any amount of

hazardous secondary materials for at least one year. For example, a facility that has previously notified it is managing hazardous secondary materials under the exclusion, but then subsequently chooses to stop managing all hazardous secondary materials for a period of at least one year, must notify the Regional Administrator. However, if this same facility only stopped managing one type of hazardous secondary material (but continued to manage another type of hazardous secondary material under the exclusion) it would not need to notify, and could just update its list of hazardous secondary materials during the next periodic re-notification submitted every two years. Additionally, if a reclaimer or intermediate facility managing hazardous secondary materials under the transfer-based exclusion requests release of financial assurance under 40 CFR 261.143(h), it is clear the facility has 'stopped' managing hazardous secondary materials, and, therefore, must notify the Regional Administrator (for additional clarification, notification does not 'trigger' the process for releasing financial assurance; instead, a facility wishing to be released from financial assurance obligations must notify it has 'stopped' managing hazardous secondary materials). Of course, a facility could certainly choose to begin managing hazardous secondary materials again and would simply have to submit a notification in compliance with 40 CFR 260.42.

We note that the requirement to provide this notification is not a condition of the exclusion. Thus, failure to comply with the requirement constitutes a violation of RCRA, but does not affect the excluded status of the hazardous secondary materials.

We believe our authority to request such information is inherent in our authority to determine whether a material is discarded, and we consider this to be the minimum information needed to enable credible evaluation of the status of hazardous secondary materials under section 3007 of RCRA and to ensure that the terms of the exclusions are being met by generators and reclaimers. EPA further believes that RCRA section 3007 allows us to gather information about any material when we have reason to believe that it may be a solid waste and possibly a hazardous waste within the meaning of RCRA section 1004(5). Section 2002 also gives EPA authority to issue regulations necessary to carry out the purposes of RCRA.

We also note that after EPA promulgates regulations listing a material as a hazardous waste or

identifying it by its characteristics, section 3010 of RCRA requires generators of such materials to submit a notification to EPA within 90 days. Since the changes finalized today could substantially affect the universe of facilities in the Subtitle C system, we believe the notifications are appropriate.

The intent of this notification requirement is to provide basic information to the regulatory agencies about who will be managing hazardous secondary materials under the exclusion. The specific information included in today's notification requirement will enable regulatory agencies to monitor compliance adequately and to ensure hazardous secondary materials are managed according to the exclusion and not discarded. For example, in the notification, EPA requires facilities to include the quantity of hazardous secondary materials that will be managed according to the exclusion and whether certain types of hazardous secondary materials will be managed in land-based units. This information can be used to assist RCRA inspectors in determining which facilities may warrant greater oversight and provides a basis for setting enforcement priorities. Furthermore, requiring facilities to notify when they have stopped managing hazardous secondary materials allows states to follow-up and ensure that hazardous secondary materials were not discarded. Notification information is collected in EPA's RCRAInfo database, which is the national repository of all RCRA Subtitle C site identification information, whether collected by a state authority or EPA. EPA provides public access to this information through EPA's public Web site at <http://www.epa.gov/enviro/html/rcris/> (or other successor Web site).

This notification requirement is the same as the notification requirement for today's transfer-based exclusion found in section VIII.C. of today's preamble. *Sending to an intermediate facility.* We note that under this exclusion, hazardous secondary materials may not be sent to an intermediate facility as defined in 40 CFR 260.10 (i.e., a facility, other than a generator or reclaimer, that stores hazardous secondary materials for more than 10 days). If hazardous secondary materials are sent to intermediate facilities, they would not meet the definition of hazardous secondary materials reclaimed under the control of the generator, and they are subject to the conditions of the transfer-based exclusion, discussed below.

D. Terminating the Exclusion

Units managing excluded hazardous secondary materials are not subject to the closure regulations in 40 CFR parts 264 and 265 subpart G. However, when the use of these units is ultimately discontinued, all owners and operators must manage any remaining hazardous secondary materials that are not reclaimed and remove or decontaminate all hazardous residues and contaminated containment system components, equipment structures, and soils. These hazardous secondary materials and residues, if no longer intended for reclamation, would also no longer be eligible for the exclusion (which only applies to materials that will be reclaimed). Failure to remove these materials within a reasonable time frame after operations cease could cause the facility to become subject to the full Subtitle C requirements if the Agency determines that recycling is no longer feasible. While this final rule does not set a specific time frame for these activities, the Agency believes that they typically should be completed within the time frames established for analogous activities. For example, the requirements for product tanks under 40 CFR 261.4(c) allow 90 days for removal of hazardous material after the unit ceases to be operated for manufacturing. This time frame should serve as a guideline for regulators in determining on a case-by-case basis whether owners and operators have completed these activities within a reasonable time frame. In any event, these hazardous secondary materials remain subject to the speculative accumulation restrictions in 40 CFR 261.1(a)(8), which includes both a time limitation and a requirement that the facility be able to show there is a feasible means of recycling the hazardous secondary material.

E. Enforcement

Under today's rule, hazardous secondary materials generated and legitimately reclaimed within the United States under the control of the generator are excluded from RCRA Subtitle C regulation, but are subject to certain restrictions, principally speculative accumulation, legitimate recycling, and containment. Persons that handle these hazardous secondary materials are responsible for maintaining the exclusion by ensuring that these restrictions are met. If the hazardous secondary materials are not managed pursuant to these restrictions, they are not excluded. They would then be considered solid and hazardous wastes if they were listed or they

exhibited a hazardous waste characteristic for Subtitle C purposes from their point of generation. Persons operating under the exclusion are also required to notify EPA or the authorized state.

Persons taking advantage of today's exclusion that fail to meet the requirements may be subject to an enforcement action. EPA could choose to bring an enforcement action under RCRA section 3008(a) for violations of the hazardous waste requirements occurring from the time the hazardous secondary materials are generated through the time they are ultimately disposed of or reclaimed. The Agency affirms in this preamble that § 261.2(f) applies to claims that hazardous secondary materials are not solid waste because they are being legitimately recycled. Respondents in enforcement cases should be prepared to demonstrate that they meet the terms of the exclusion or exemption, which includes demonstrating that the recycling is legitimate. Appropriate documentation must be provided to the enforcing agency to demonstrate that the material is not a solid waste or is exempt from regulation. In addition, the recycler of the hazardous secondary materials should be prepared to show they have the necessary equipment to perform the recycling operation. Furthermore, any release of the hazardous secondary materials to the environment that is not immediately cleaned up would be considered discarded and, thus, the hazardous secondary materials that were released would be a solid waste and potentially subject to the RCRA hazardous waste regulations.

The Agency believes that this approach provides hazardous secondary material generators with an incentive to handle or (in the case of tolling) to ensure that their contractors handle the hazardous secondary materials pursuant to the requirements. It also encourages each hazardous secondary material generator to take appropriate steps to ensure that such materials are properly handled and legitimately reclaimed by others in the management chain. If there is a release of the hazardous secondary materials into the environment, they are considered discarded and subject to all applicable hazardous waste regulations and cleanup authorities.

VIII. Exclusion for Hazardous Secondary Materials That Are Transferred for the Purpose of Legitimate Reclamation

Today, EPA is also finalizing an exclusion from the definition of solid waste for hazardous secondary materials that are generated and subsequently

transferred to another company or person for the purpose of reclamation (i.e., "transfer-based exclusion"), provided that certain conditions are met. Reclamation that conforms to these conditions would not involve discard, and therefore the hazardous secondary materials would not be regulated as solid waste. As with all recycling-related exclusions and exemptions, such excluded hazardous secondary materials would also need to be recycled legitimately. For further discussion on how the transfer-based exclusion relates to the concept of discard, see section V.B. of this preamble.

The conditions that must be met for this exclusion are based on our analysis of how successful third-party recycling currently operates (and, conversely, how unsuccessful third-party recycling practices can result in recyclable hazardous secondary materials being discarded), and are supported by the information contained in the rulemaking record, including the recycling studies found in the public docket for today's rulemaking and discussed previously in section III.D. of today's preamble and in the preamble to the March 2007 supplemental proposal at 72 FR 14178-14183. For example, the successful recycling study indicates that many responsible generators examine the recycler's technical capabilities, business viability, environmental track record, and other relevant questions before sending hazardous secondary materials for recycling. Currently, these recycler audits, which can be thought of as a form of environmental "due diligence," are in essence a precaution to minimize the prospect of incurring CERCLA liability in the event that the recycling, or lack thereof, results in the release of material to the environment. The fact that these companies are willing to incur the expense of auditing recyclers as a business practice is of itself a marketplace affirmation that sending hazardous secondary materials to other companies for recycling involves some degree of risk. Although these risks may be small when the recycler is a well-established, successful enterprise with a good record of environmental stewardship, it also is apparent that not all recyclers fit this profile, as evidenced in the study of environmental problems associated with hazardous secondary materials recycling. Thus, we believe that there is sufficient basis for the Agency to place certain conditions on this exclusion for the generator to determine that the hazardous secondary material is not discarded, particularly since we expect that this rulemaking could encourage

some companies that are currently not involved with hazardous secondary materials recycling to enter the business.

A. What Is the Purpose of This Exclusion?

In finalizing this conditional exclusion, EPA's objectives are to encourage the reclamation of hazardous secondary materials and reduce unnecessary regulatory compliance costs to industry, while still maintaining protection of human health and the environment. After considering the entire rulemaking record, including comments submitted by the public, we continue to believe that this exclusion is a workable, common-sense approach to meeting these objectives; is well supported by the record for this rulemaking, including the recycling studies that EPA has conducted; and, in important ways, reflects current good industry practices that are used by responsible generators for recycling hazardous secondary materials.

B. Scope and Applicability

The conditional exclusion for the transfer-based approach applies to hazardous secondary materials that are currently regulated as hazardous wastes because their recycling involves reclamation—specifically, spent materials, listed sludges, and listed by-products. It would not be available for hazardous secondary materials that are regulated as hazardous wastes for other reasons, such as “inherently waste-like materials,” materials that are “used in a manner constituting disposal,” or “materials burned for energy recovery.” The conditional exclusion also does not apply to materials that are currently excluded from the definition of solid waste according to other, existing provisions of 40 CFR part 261. For example, the exclusion for broken cathode ray tubes requires them to be transported in closed containers per 40 CFR 261.4(a)(22). Today's exclusion does not supersede or otherwise affect these other exclusions, and such hazardous secondary materials will need to be managed in accordance with those existing exclusions. For a discussion of how this exclusion relates to particular existing exclusions and additional details involving these exclusions, see section XI of today's preamble.

This exclusion is available to hazardous secondary material generators, transporters, intermediate facilities, or reclaimers. In the March 2007 supplemental proposal, EPA proposed that the hazardous secondary material must be transferred directly

from the generator to the reclaimer and not be handled by anyone else other than a transporter. Thus, as proposed, a generator that wished to maintain the excluded status of its hazardous secondary materials would not be able to ship those materials to a middleman, such as a broker. We said that we believed that a generator who ships materials to a middleman, such as a broker typically does not know who will ultimately manage and reclaim them, or how they will be reclaimed (72 FR 14189). However, we requested comment on allowing middlemen to participate in the exclusion.

Comments on the proposal disputed the assumption that the generator does not know the final destination when shipping to an intermediate facility, saying, that in certain cases, the generator works with an intermediate facility to choose the reclamation facility and the final destination is arranged by contract before the hazardous secondary materials are shipped. Commenters also asserted that such arrangements allow for consolidation of shipments, making recycling economical for small businesses who generate hazardous secondary materials.

EPA agrees with the comments that some types of intermediate facilities could participate in the exclusion, while still allowing the hazardous secondary material generator to perform reasonable efforts to ensure that the hazardous secondary material is properly and legitimately recycled. Thus, in the final rule, EPA has determined that intermediate facilities will be allowed under the transfer-based exclusion. However, to limit the exclusion to those intermediate facilities where discard will not occur, if the hazardous secondary material will be passing through an intermediate facility, the hazardous secondary material generator must make contractual arrangements with the intermediate facility to ensure that the hazardous secondary material is sent on to the reclamation facility or facilities identified by the generator and must perform reasonable efforts on the intermediate facility, as well as on the reclamation facility. Also, the intermediate facility must send the hazardous secondary material to the reclaimer(s) designated by the generator.

In addition, the intermediate facility must meet the same conditions as the reclamation facility for the same reasons the reclamation facility must meet them. Section VIII.C.4. below discusses additional details as to why these conditions need to apply to the reclamation facilities and this reasoning applies equally to intermediate facilities

involved in the process. Of the 208 damage cases in the environmental problems study, 45 (22%) cases were from intermediate facilities. Therefore, EPA believes the record for requiring the conditions for the reclamation facility also supports promulgation of the same conditions for intermediate facilities.

In addition, in the March 2007 supplemental proposal, the Agency recognized that, in some cases, recycling of an excluded hazardous secondary material may involve more than one reclamation step. For example, a recyclable hazardous secondary material, such as an electroplating secondary material, might have a relatively high moisture content and a somewhat variable chemical composition. Such materials might need to be dried and blended to a suitable, consistent specification before they are amenable to a “final” reclamation process (e.g., metals smelting). In this example, the two different reclamation processes might be conducted by different companies and/or at different facilities. The Agency continues to see no reason to discourage this kind of recycling. The transfer-based exclusion finalized today is available for hazardous secondary materials that are recycled by means of one or more reclamation processes, including when they occur at more than one reclamation facility.

The conditions for generators and reclaimers under the terms of this exclusion would apply in the same way, regardless of how many reclamation steps were involved with recycling of an excluded material. For example, if the excluded hazardous secondary material was reclaimed by more than one facility or company, the generator of such material would need to make reasonable efforts to examine each facility or company involved in the reclamation process to ensure that the hazardous secondary materials would be properly and legitimately recycled. We believe that this is a consistent application of the idea of requiring “reasonable efforts” as a condition of this exclusion. Where recycling of a hazardous secondary material involves more than one reclamation step at more than one facility, generators should be well informed as to how the materials will be reclaimed, and by whom, throughout the recycling process. Additionally, each reclaimer (including ‘partial reclaimers’) managing hazardous secondary materials must meet all the reclaimer conditions listed under 40 CFR 261.4(a)(24), as well as the recordkeeping requirements.

C. Conditions and Requirements

1. Provisions Applicable to the Hazardous Secondary Materials Generator, the Reclamation Facility, and Any Intermediate Facility

Prohibition on speculative accumulation. As a condition of the transfer-based exclusion, hazardous secondary materials cannot be speculatively accumulated (40 CFR 261.1(c)(8)) at the hazardous secondary material generator, reclamation facility, or intermediate facility. Restrictions on speculative accumulation have been an important element of the RCRA hazardous waste recycling regulations since they were promulgated on January 4, 1985. According to this regulatory provision, hazardous secondary materials are accumulated speculatively if the person accumulating them cannot show that the material is potentially recyclable; further, the person accumulating the hazardous secondary material must show that during a calendar year (beginning January 1) the amount of such material that is recycled or transferred to a different site for recycling is at least 75% by weight or volume of the amount of the hazardous secondary material present at the beginning of the period. It is also the same prohibition that is being promulgated today for the generator-controlled exclusions.

Legitimate recycling. Under the transfer-based exclusion, hazardous secondary materials must be legitimately reclaimed, as specified under 40 CFR 260.43. Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or product and the recycling process must produce a valuable product or intermediate. In addition, as part of a legitimacy determination, persons must consider whether the hazardous secondary material is managed as a valuable product and must consider the levels of toxics in the product of the recycling process as compared to analogous products made from virgin materials. The details of the legitimacy provision are discussed in section IX of this preamble.

Notification. Under today's transfer-based exclusion, hazardous secondary material generators, reclaimers, and intermediate facilities are required to send a notification prior to operating under this exclusion and by March 1 of each even numbered year thereafter to the EPA Regional Administrator using EPA Form 8700-12. In states authorized by EPA to administer the RCRA Subtitle C hazardous waste program,

notifications may be sent to the state Director. The notice must include:

- The name, address, and EPA ID number (if applicable) of the facility;
- The name and telephone number of a contact person;
- The NAICS code of the facility;
- The exclusion under which the hazardous secondary materials will be managed (e.g., whether the hazardous secondary materials are managed under the transfer-based exclusion in 40 CFR 261.4(a)(24) and/or under the exclusion for hazardous secondary materials exported for reclamation in 40 CFR 261.4(a)(25));
- For reclaimers and intermediate facilities managing hazardous secondary materials, whether the reclaimer or intermediate facility has financial assurance for the management of such hazardous secondary materials (not applicable for hazardous secondary material generators);
- When the facility expects to begin managing the hazardous secondary materials in accordance with the exclusion;
- A list of hazardous secondary materials that will be managed according to the exclusion (reported as the EPA hazardous waste numbers that would apply if the hazardous secondary materials were managed as hazardous waste);
- For each hazardous secondary material, whether the material, or any portion thereof, will be managed in a land-based unit;
- The quantity of each hazardous secondary material to be managed annually; and
- The certification (included in EPA Form 8700-12) signed and dated by an authorized representative of the facility.

If a facility has submitted a notification, but then subsequently stops managing hazardous secondary materials in accordance with the exclusion, the facility must re-notify the Regional Administrator within 30 days using the same EPA Form 8700-12. We consider a facility to have 'stopped' managing hazardous secondary materials when a facility no longer generates, manages and/or reclaims hazardous secondary materials under the exclusion and does not expect to manage any amount of hazardous secondary material under the exclusion for at least one year. Of course, a facility could certainly choose to begin managing hazardous secondary materials again and would simply have to submit a notification in compliance with 40 CFR 260.42.

The requirement to provide this notification is not a condition of the exclusion. Thus, failure to comply with

the requirement constitutes a violation of RCRA, but does not affect the excluded status of the hazardous secondary materials.

This notification requirement is the same as the notification requirement for the generator-controlled exclusion. For further discussion on the notification, including examples of when a facility must re-notify that it has stopped managing hazardous secondary materials, see section VII.C. of today's preamble.

Hazardous secondary materials must be contained. Another condition of the transfer-based exclusion applicable to hazardous secondary material generators, reclamation facilities, and intermediate facilities is that the hazardous secondary materials must be contained in their management units. Hazardous secondary materials released to the environment from any unit are discarded and would be subject to the hazardous waste regulations, unless they are immediately cleaned up. Hazardous secondary materials remaining in a unit that experiences a release may also be considered discarded in certain cases. This is the same as the restriction that is being promulgated for the generator-controlled exclusions. For further discussion on the containment provisions, including examples of how they might be applied in case-specific situations, see section VII.C. of today's preamble.

2. Provisions Applicable to the Hazardous Secondary Material Generator

Reasonable efforts. Today's final rule requires generators to make reasonable efforts to ensure that their hazardous secondary materials are properly and legitimately recycled before shipping or otherwise transferring them to a reclamation facility or any intermediate facility. As discussed previously, this condition effectively requires that generators perform a type of environmental "due diligence" on a reclaimer or any intermediate facility to ensure that those facilities intend to properly manage the hazardous secondary materials as commodities and legitimately recycle rather than discard them. We believe that this condition reflects the existing best practices of many responsible generators who audit and assess recyclers to maintain their commitment to sound environmental stewardship, minimize their potential regulatory and liability exposures, and make decisions about with whom they should do business.

Our successful recycling study quotes one large recycling and disposal vendor

as stating that with respect to its new customers, 60% of its large customers and 30%–50% of its smaller customers now perform audits on them. Under current practices, such audits can involve a site visit to the recycling facility and an examination of the company's finances, technical capability, environmental compliance record, and housekeeping practices. (**Note:** Audits that are currently conducted may or may not cover all of these areas.) Through the codification of this condition, we want to reinforce this best practice among all generators who use the transfer-based exclusion to send hazardous secondary materials to reclamation and intermediate facilities. We believe that this condition is critical for generators who currently may not evaluate reclaimers and intermediate facilities because this condition provides these generators with a framework for making reasonable efforts to ensure their hazardous secondary materials are properly managed and reclaimed, and not discarded.

Currently, under 40 CFR part 262, a generator must make a hazardous waste determination and, thus, already has an obligation to determine whether the waste is subject to regulation as a hazardous waste. EPA believes that to make a parallel determination under 40 CFR 261.4(a)(24) that hazardous secondary materials are not solid wastes because they are destined for reclamation and are not discarded, the generator must meet the reasonable efforts condition. A reasonable efforts inquiry by the hazardous secondary material generator ensures that the reclaimer intends to recycle the hazardous secondary material legitimately pursuant to 40 CFR 260.43 and not discard it, and that the reclaimer or any intermediate facility will manage the hazardous secondary materials in compliance with 40 CFR 261.4(a)(24)(vi).

The reasonable efforts condition for generators applies when hazardous secondary materials are transferred to intermediate facilities (as defined in 40 CFR 260.10) and reclamation facilities operating without a RCRA Part B permit or under the interim status standards that extend to management of the hazardous secondary materials in question. If the permit or interim status standards address the units being used to manage the hazardous secondary materials, we do not require generators to conduct reasonable efforts because we believe that a Part B permit or the interim status standards provide some assurance to generators that the facility has a measure of financial stability and that the hazardous secondary materials

will be well managed. RCRA permitted or interim status facilities where the permit or interim status standards extend to the management of the hazardous secondary materials being reclaimed are already subject to stringent design and operating standards, must demonstrate financial assurance, and are subject to the corrective action requirements in the event of environmental problems. Not requiring reasonable efforts for generators that transfer hazardous secondary materials to these RCRA permitted or interim status recycling or intermediate facilities would likely be of particular benefit to relatively smaller volume generators who may not have the resources required to satisfy this condition.

Of course, if a permitted facility later modifies its permit terms in a way that the permit no longer extends to the management of the hazardous secondary materials, the generator would need to perform reasonable efforts in accordance with this exclusion. EPA recommends that any hazardous secondary material generator transferring hazardous secondary materials to a permitted facility request that it get placed on the facility mailing list, so they can then receive notice of changes to the permit status of the reclaimer or intermediate facility (*see* 40 CFR 270.42 and 40 CFR 124.10).

In contrast, if the permit or interim status standards do not extend to the hazardous secondary materials being reclaimed, the same level of assurance is not guaranteed. Therefore, if a reclamation or intermediate facility only has a RCRA permit or complies with the interim status standards for another on-site operation unrelated to the hazardous secondary materials of interest to the generator, then the hazardous secondary material generator is required to make a reasonable efforts inquiry of the facility as if it were a non-permitted facility.

EPA believes that a generator should be allowed to use any credible evidence available in making reasonable efforts, including information gathered by the generator, provided by the reclaimer or intermediate facility, and/or provided by a third party, in lieu of personally performing an assessment. For example, the hazardous secondary material generator might hire an independent auditor to review the operations, produce audit reports as a consortium of generators, or rely on an assessment of a recycler or intermediate facility by a parent corporation or trade association that is used by several generating facilities. In fact, EPA believes that many reputable third-party auditors,

parent companies, and trade associations already assemble the types of information based on credible evidence that would be needed for a generator to satisfy the reasonable efforts condition. EPA would encourage this type of pooling of information to reduce the burden on generators and to take advantage of specialized technical expertise.

EPA is also finalizing in the regulatory text a series of questions, which together represent a minimum standard for reasonable efforts, to provide generators and overseeing agencies with regulatory certainty regarding fulfillment of the condition. We believe that these questions are objective and must be answered affirmatively. Hazardous secondary material generators wishing to take advantage of the exclusion must be able to answer all questions affirmatively to determine that their hazardous secondary materials are or will be properly and legitimately recycled and will not be discarded. The reasonable efforts questions are straight-forward by design and will allow generators to use a common sense approach in answering the questions and satisfy the condition. These questions can be found at 40 CFR 261.4(a)(24)(v)(B) and are discussed below.

Of course, a generator could choose to seek additional information or ask additional questions to determine that its hazardous secondary materials will not be discarded due to concerns about CERCLA liability. One example of additional information that many responsible generators currently seek from recyclers, but that EPA is not including in today's final rule, is information about a reclamation facility's financial health. Based on EPA's successful recycling study and comments on the proposed rule, we know that responsible generators often inquire about a reclamation facility's financial health. These inquiries can include reviews of liability insurance coverage, company annual reports, bankruptcy filings, investments in capital improvements, markets for recycled products, and business reports, such as Dun & Bradstreet reports. EPA believes that evaluating the financial health of a company can benefit a generator's reasonable efforts inquiry of a reclamation or intermediate facility and encourages generators to do so, although we acknowledge that it is not an activity that lends itself to an objective standard that would be appropriate for regulation. Instead, EPA is requiring that, under the transfer-based exclusion and reasonable efforts condition, reclamation and intermediate

facilities have financial assurance and generators affirm that facilities have notified the appropriate authorities that the financial assurance condition is satisfied.

EPA intends that if a hazardous secondary material generator has met the reasonable efforts condition prior to transferring hazardous secondary materials to the reclamation or intermediate facility, then the reclaimer or intermediate facility, not the generator, would be liable under RCRA if the materials were discarded (i.e., not properly and legitimately recycled). However, if the generator does not meet the reasonable efforts condition, then the generator is ineligible for the transfer-based exclusion and would be potentially liable in the event its hazardous secondary materials were discarded by a reclamation or intermediate facility. (See section VIII.E. for more information.) EPA acknowledges that meeting this condition will not affect CERCLA liability. (See section XIII for more information on CERCLA liability.)

The following five questions represent a minimum standard for satisfying the reasonable efforts condition:

(1) Does the available information indicate that the reclamation process is legitimate pursuant to § 260.43? In answering this question, the hazardous secondary material generator can rely on its existing knowledge of the physical and chemical properties of the hazardous secondary material, as well as information from other sources (e.g., the reclamation facility, audit reports, etc.) about the reclamation process. (By responding to this question, the hazardous secondary material generator has also satisfied its requirement in § 260.43(a) to be able to demonstrate that the recycling is legitimate.)

(2) Does the publicly available information indicate that the reclamation facility and any intermediate facility that is used by the hazardous secondary material generator have notified the appropriate authorities of hazardous secondary materials reclamation activities pursuant to 40 CFR 260.42 and have they notified the appropriate authorities that the financial assurance condition is satisfied per 40 CFR 261.4(a)(24)(vi)(F)? In answering these questions, the hazardous secondary material generator can rely on the available information documenting the reclamation facility's and any intermediate facility's compliance with the notification requirements per § 260.42, including the requirement in § 260.42(a)(5) to notify EPA whether the reclaimer or intermediate facility has financial assurance.

(3) Does publicly available information indicate that the reclamation facility or any intermediate facility that is used by the hazardous secondary material generator has not had any formal enforcement actions taken against the facility in the previous three years for violations of the RCRA hazardous waste regulations and has not been classified a significant noncomplier with RCRA Subtitle C? In answering this question, the hazardous secondary material generator can rely on the publicly available information from EPA or the state. If the reclamation facility or any intermediate facility that is used by the hazardous secondary material generator has had a formal enforcement action taken against the facility in the previous three years for violations of the RCRA hazardous waste regulations and has been classified as a significant non-complier with RCRA Subtitle C, does the hazardous secondary material generator have credible evidence that the facilities will manage the hazardous secondary materials properly? In answering this question, the hazardous secondary material generator can obtain additional information from EPA, the state, or the facility itself that the facility has addressed the violations, taken remedial steps to address the violations and prevent future violations, or that the violations are not relevant to the proper management of the hazardous secondary materials.

(4) Does the available information indicate that the reclamation facility and any intermediate facility that is used by the hazardous secondary material generator have the equipment and trained personnel to safely recycle the hazardous secondary material? In answering this question, the generator may rely on a description by the reclamation facility or by an independent third party of the equipment and trained personnel to be used to recycle the generator's hazardous secondary material.

(5) If residuals are generated from the reclamation of the excluded hazardous secondary materials, does the reclamation facility have the permits required (if any) to manage the residuals? If not, does the reclamation facility have a contract with an appropriately permitted facility to dispose of the residuals? If not, does the hazardous secondary material generator have credible evidence that the residuals will be managed in a manner that is protective of human health and the environment? In answering these questions, the hazardous secondary material generator can rely on publicly available information from EPA or the

state, or information provided by the facility itself.

Question (1) focuses on whether the reclamation facility receiving hazardous secondary materials from a generator legitimately recycles such materials. EPA believes that any generator "regulated under § 260.34 or claiming to be excluded from the hazardous waste regulations under § 261.2(a)(2)(ii), § 261.4(a)(23), (24), or (25) because they are engaged in recycling, must be able to demonstrate that the recycling is legitimate" (40 CFR 260.43). Determining whether a recycling operation is legitimate is a fundamental basis for establishing that a generator's hazardous secondary materials will not be discarded after being transferred to a reclamation facility.

Since reclaimers must also be able to demonstrate that the recycling is legitimate under 40 CFR 260.43, EPA believes that generators can work with the owner or operator of the reclamation facility to verify that they have made a determination that the recycling is legitimate, which would answer question (1) for the purposes of satisfying the condition. We would expect that a reclaimer would be willing and able to adequately explain to the hazardous secondary material generator how the recycling activity satisfies the legitimacy requirements pursuant to 40 CFR 260.43, such that we would not expect that a generator would have to examine in detail the legitimacy factors. Of course, in order to answer question (1), a generator may also rely on its existing knowledge of the physical and chemical properties of the hazardous secondary material. Based on our discussions with the generating industry, we would expect that a hazardous secondary material generator that produces and manages a material that is more like an ingredient (i.e., a hazardous secondary material to be recycled) than a waste to be discarded would have a good understanding of the material's valuable components and useful contribution to a process. Since the generator manages the process that generates the hazardous secondary material, it would be knowledgeable about the makeup of the material and the value and usefulness of its components.

However, if questions or concerns remain regarding the legitimacy of the recycling activity, a generator could request additional information on how the definition of legitimacy is met. (See section IX of this rulemaking preamble for a discussion of determining legitimacy.)

Question (2) concentrates on whether the recycler or intermediate facility (to

the extent that the hazardous secondary material generator uses an intermediate facility) has met the following obligations under the exclusion before accepting hazardous secondary materials: Notification of the appropriate regulatory authorities that it plans to reclaim (or, in the case of the intermediate facility, properly store the hazardous secondary material) excluded hazardous secondary materials, and notification of the appropriate regulatory authorities that the facility has the necessary financial assurance to cover the costs of managing any hazardous secondary materials that remain if the facility closes. If a facility was found to have failed to meet the notification requirement and condition to have financial assurance, then it also would have failed to show a good faith effort towards demonstrating that it intends to recycle the hazardous secondary materials (or, in the case of the intermediate facility, properly store the hazardous secondary material) and not discard them.

For the purposes of reasonable efforts, generators will be able to determine that a facility has satisfied both the notification requirement and financial assurance condition if the reclamation or intermediate facility has submitted a notification. The notification form will include a section indicating the facility has satisfied the financial assurance condition. Generators may access the notification information, including the facility's notification that it has financial assurance, through EPA's public Web site at <http://www.epa.gov/enviro/html/rcris/> or other successor Web sites.

Question (3) focuses on the compliance history of the recycler or the intermediate facility (to the extent that the hazardous secondary material generator uses an intermediate facility). Although consideration of compliance data is an imperfect tool for determining whether a recycler would properly manage the hazardous secondary materials, we believe that publicly available compliance data are a reasonable starting point for evaluating a facility's environmental performance. Facility-specific enforcement data on compliance status, ongoing enforcement actions by both EPA and states, and specific case information for formal enforcement actions are readily available on EPA's public Web site at <http://www.epa.gov/echo>. "Formal enforcement" is a written document that mandates compliance and/or initiates a civil or administrative process, with or without appeal rights before a trier of fact that results in an enforceable agreement or order and an appropriate

sanction. For EPA, formal enforcement action is a referral to the U.S. Department of Justice for the commencement of a civil action in the appropriate U.S. District Court, or the filing of an administrative complaint, or the issuance of an order, requiring compliance and a sanction. For states, formal enforcement action is a referral to the state's Attorney General for the commencement of a civil or administrative action in the appropriate forum, or the filing of an administrative complaint, or the issuance of an order, requiring compliance and a sanction. "Significant non-complier" is a defined term in EPA's *Hazardous Waste Civil Enforcement Response Policy* and means the violators have caused actual exposure or a substantial likelihood of exposure to hazardous waste or hazardous waste constituents; are chronic or recalcitrant violators; or deviate substantially from the terms of a permit, order, agreement, or from the RCRA statutory or regulatory requirements. In evaluating whether there has been actual or likely exposure to hazardous waste or hazardous waste constituents, EPA and the states consider both the environmental and human health concerns, including the potential exposure of workers to hazardous waste or hazardous waste constituents. For both terms, see EPA's *Hazardous Waste Civil Enforcement Response Policy (Dec. 2003)* at <http://www.epa.gov/compliance/resources/policies/civil/rcra/finalerp1203.pdf>.

We do not believe that evaluating this publicly available information, which a generator would likely already be familiar with based on its own regulated activities, is difficult for a generator, nor is interpreting the data and deriving conclusions about facilities, since the database specifically notes whether a facility is alleged to be a "significant non-complier" (i.e., identified as a "SNC" or in "significant non-compliance"). We also note that since many states already provide compliance information to EPA and the public through the EPA Web site, we do not believe that requiring hazardous secondary material generators to review such information would pose a significant new burden for state agencies.

While a facility designated as a significant non-complier and the subject of a formal enforcement action does not mean that the facility would not reclaim the hazardous secondary materials properly, it does raise questions that we believe the hazardous secondary material generator should investigate. That is, if any formal enforcement actions were taken against the facility in

the previous three years for such non-compliance and the facility was alleged to be a significant non-complier, we would expect that the reclaimer would adequately explain to the hazardous secondary material generator how it has resolved any issues or how the reclamation facility will properly manage the hazardous secondary materials to avoid future violations and/or enforcement actions. Additionally, if the generator obtains reasonable information that the enforcement matters are unrelated to the facility's commitment to manage the hazardous secondary materials properly or that the violation has been corrected and the facility is back in compliance, then that would satisfy this aspect of the reasonable efforts determination. The generator also may wish to make a similar investigation of facilities designated as significant non-compliers by EPA or a state even if no formal enforcement action has been taken.

Question (4) concentrates on the technical capability of the recycler or intermediate facility, the most basic requirement for ensuring proper and legitimate recycling of hazardous secondary materials. If a reclamation or intermediate facility was found to have no equipment or inadequate equipment for storing the hazardous secondary material or was found to have personnel who have not been trained for reclaiming the hazardous secondary materials, it raises serious questions as to whether the facility would properly manage such materials and avoid discarding them to the environment.

In public comments on this question, which was included in the preamble to the proposed rule, commenters pointed out that a determination of what specific equipment and training would be appropriate to safely recycle hazardous secondary materials may be beyond the expertise of some generators. EPA agrees that, as drafted in the proposed rule, answering this question may require specialized knowledge and expertise. Accordingly, EPA is changing this question to allow the generator to rely on the reclamation facility to explain why its equipment and personnel are appropriate. Of course, the generator must have an objectively reasonable belief based on this information that the reclamation facility's equipment and trained personnel are adequate for safe recycling. Accordingly, if the equipment and personnel described by the reclamation facility would be, to an objective and reasonable person, clearly inadequate for safe recycling of the generator's hazardous secondary material, then the generator would not have met this condition. However, EPA

does not require or expect the generator to have specialized knowledge or expertise of the recycling process.

Of course, generators of hazardous secondary materials also are already familiar with equipment and personnel needed to manage their hazardous secondary materials properly at their own site. Therefore, a generator may also choose to answer question (4) using its existing knowledge of the physical and chemical properties of the hazardous secondary materials, technologies involved with managing and recycling such materials, and applicable regulations or industry standards based on the generator's experience producing and managing such materials.

Generators may also at their discretion use relevant third-party information sources to answer questions about a facility's equipment and personnel, including audit reports; information provided by industry or waste management associations related to the reclamation or intermediate facility; documents provided by the reclaimer or intermediate facility; and as noted in the successful recycling study, an evaluation by a qualified engineer.

Question (5) focuses on another major cause of environmental problems from recycling hazardous secondary materials: The management of residuals. This question relates to discard through the concept that a generator or reclaimer may actually be discarding hazardous secondary materials through the release of residuals from the recycling process. While the product made from recycling may be a legitimate product, the whole recycling process could be considered a discard activity if hazardous constituents from the recycled hazardous secondary materials are released to the environment. Roughly one-third of the damage cases documented in EPA's environmental problems study were caused by mismanagement of the residuals from recycling. Because the residuals from recycling can contain the hazardous constituents that originated with the hazardous secondary materials, it is important that the hazardous secondary material generator understands how a reclamation facility will manage any residuals generated.

Many generators of hazardous waste already understand and comply with the requirements for residuals management. Therefore, they may rely on their existing knowledge to answer question (5) and we do not anticipate that answering it will pose a significant challenge to them. We also anticipate that new generators will use the same resources that are publicly available to

current hazardous secondary material generators for determining applicable regulatory requirements. In addition, a reclamation facility would likely assist the generator in understanding any requirements applicable to residuals management. For example, the reclamation facility could identify the types of residuals generated by the recycling process and explain to the generator how they are managed, whether any requirements apply, and how the requirements are met.

To answer question (5), a generator should determine that the reclamation facility has practices in place to ensure that residuals are managed in a manner that is protective of human health and the environment and according to applicable federal or state standards. For example, residuals may or may not be regulated hazardous wastes. If a residual is a hazardous waste, generators could access information about a facility's permit for managing the material on EPA's public Web site at <http://www.epa.gov/enviro/html/rcris> (or successor Web sites) or through a state Web site if such information is made publicly available. If a residual is a non-hazardous waste, a generator could access permit information from state agencies or a state Web site if available. A reclamation facility may also send its residuals to a waste management facility, in which case, a generator could ask about contracts with appropriately permitted disposal facilities. If a reclamation facility does not have permits for managing residuals or disposal contracts with permitted facilities, then the generator should determine that a reclamation facility has a system in place for managing residuals in a manner that is protective of human health and the environment.

Any inquiry into a reclamation facility's system for analyzing options for residuals management should acknowledge that various options do exist and that price fluctuations may be a determining factor for selecting an option.

In today's final rule, EPA is requiring that hazardous secondary material generators make reasonable efforts every three years, at a minimum, in order to ensure that the generators adequately manage their risk and are attune to changes at reclamation and intermediate facilities with which they are partners. We believe that this schedule reflects an average time frame for re-evaluating facilities, based on public comments, although we acknowledge that shorter time frames could be appropriate for certain industries, as suggested by some commenters. By specifying periodic updates for reasonable efforts every

three years at a minimum, EPA in no way intends to limit a generator to conducting evaluations only every three years. In fact, EPA expects that any generator who has concerns about a reclamation or intermediate facility, or who gains new knowledge of significant changes or extraordinary situations at such facilities, would conduct reasonable efforts regardless of the required schedule. For example, if a hazardous secondary material generator conducted reasonable efforts in the first year it took advantage of the exclusion, prior to transferring materials to an intermediate facility, and then again conducted reasonable efforts in the second year upon learning about a significant change at the intermediate facility (such as bankruptcy), the hazardous secondary material generator would be required to update reasonable efforts three years later during the generator's fifth year of taking advantage of the exclusion.

EPA is requiring that generators maintain documentation showing that they satisfied the reasonable efforts condition under 40 CFR 261.4(a)(24)(v)(B) prior to transferring the hazardous secondary materials to the intermediate facility or the reclamation facility. Such records could include copies of audit reports and/or other relevant information that was used as the basis for affirmatively responding to inquiries about a reclamation or intermediate facility. Specifying that hazardous secondary material generators document these questions helps EPA and authorized states determine whether the generator made reasonable efforts to ensure that the hazardous secondary materials were not discarded. Documenting reasonable efforts is also beneficial for generators because EPA intends that if a generator has met the reasonable efforts condition prior to transferring the hazardous secondary materials to the reclamation or intermediate facility, then the reclaimer or intermediate facility, not the generator, would be liable under RCRA if the materials were discarded (*see* section VIII.E. for more information).

Generators are also required to certify for each reclamation and intermediate facility that reasonable efforts were made to ensure that hazardous secondary materials will be properly and legitimately recycled, and not discarded. This certification should be signed and dated by an authorized representative of the generating company prior to transferring the excluded hazardous secondary materials to a reclamation or intermediate facility under 40 CFR 261.4(a)(24). The

certification should also incorporate the certification language in 40 CFR 261.4(a)(24)(v)(C)(2). EPA believes that requiring a certification creates a necessary level of oversight from an authorized representative, who can be any appointed company representative, and who must affirm that the condition is met and that hazardous secondary materials will not be discarded.

Documentation and certification are both necessary requirements of the reasonable efforts condition. Documentation of questions (1)–(5) will support a hazardous secondary material generator's assertion that it affirmatively answered the questions and is in compliance with the regulations. It will also facilitate any review by regulatory authorities investigating whether the conditions of the transfer-based exclusion are satisfied and help delineate liability under RCRA if the materials were discarded. Having an authorized representative certify reasonable efforts is critical for guaranteeing accountability at the generator facility for meeting the condition and for ensuring that the act of making reasonable efforts is in fact genuine. The certification is also necessary in order to allow for the "flexible" documentation requirement that does not specify a particular format. Since individual generators may use any form of documentation, we believe it is critical for all generators to uniformly certify that the condition is satisfied. Furthermore, we find both reasonable efforts requirements (documentation and certification) to be appropriate based on our understanding that third-party auditors do not generally draw any conclusions based on their audits, but simply report the results to generators. While a generator may use any information for making reasonable efforts, the certification statement would affirm that a generator used information that is gathered and documented during the reasonable efforts inquiry, similar to how generators currently draw conclusions based on third-party audit documents.

The requirement for documentation and certification of reasonable efforts is not unlike existing forms of RCRA documentation that incorporate certifications, such as the RCRA Site ID Form, RCRA financial assurance requirements, and the Uniform Hazardous Waste Manifest.

Documentation of reasonable efforts and the certification statement must be maintained by the generator for a minimum of three years and it must be made available upon request by a regulatory authority within 72 hours, or within a longer period of time as

specified by the regulatory authority. Requiring documentation will help EPA and authorized states to determine that hazardous secondary material generators have made reasonable efforts to ensure that hazardous secondary materials were reclaimed and not discarded. We understand that many generators may maintain this kind of documentation and certification at their company headquarters or at another off-site facility; therefore, we are not requiring that they be maintained on-site. However, we do believe that generators, having satisfied the reasonable efforts condition and certified reasonable efforts prior to transferring the hazardous secondary materials, should be able to produce the documentation and certification readily. Moreover, we understand that since generators today conduct business in an age of near-instantaneous communication, retrieving documentation from company headquarters or another off-site facility should be relatively easy. EPA also notes that time frames for producing documentation are generally determined by regulatory authorities on a case-by-case basis and time frames are clearly outlined by authorities within RCRA section 3007 information request letters.

Recordkeeping. In addition to documentation and certification of reasonable efforts (discussed above in section VIII.C.2.), EPA is requiring hazardous secondary material generators to maintain at the generating facility certain records that document off-site shipments (i.e., transfers) of hazardous secondary materials for a period of three years. Specifically, for each shipment of hazardous secondary material, the generator must maintain documentation of when the shipment occurred, who the transporter was, the name and address of the reclaimer(s) and, if applicable, each intermediate facility, and the type and quantity of the hazardous secondary materials in the shipment. This recordkeeping requirement may be fulfilled by ordinary business records, such as bills of lading.

In addition, hazardous secondary material generators are required to maintain confirmations of receipt from each reclaimer and intermediate facility for all off-site shipments of hazardous secondary materials in order to verify that the hazardous secondary materials reached their intended destination and were not discarded. These receipts must be maintained at the generating facility for a period of three years. Specifically, the hazardous secondary material generator must maintain documentation of receipt that includes the name and

address of the reclaimer or intermediate facility, the type and quantity of hazardous secondary materials received, and the date which the hazardous secondary materials were received. The Agency is not requiring a specific template or format for confirmations of receipt and anticipates that routine business records (e.g., financial records, bills of lading, copies of Department of Transportation (DOT) shipping papers, electronic confirmations of receipt) would contain the appropriate information sufficient for meeting this requirement.

We recognize that, in some cases, reclamation of a hazardous secondary material may involve more than one reclamation step. In these cases, the recordkeeping conditions for generators and reclaimers under the terms of the exclusion applies for each reclaimer and intermediate facility, regardless of how many reclamation steps were involved. For example, if a hazardous secondary material generator transferred hazardous secondary materials to one reclaimer for partial reclamation and then arranged for the partially-reclaimed material to be subsequently transferred to another reclaimer for 'final' reclamation, the generator must maintain confirmations of receipt from each reclaimer involved in the reclamation process.

The Agency believes that the recordkeeping requirements in today's rule comprise the minimum information needed to enable effective oversight to ensure the hazardous secondary materials were transferred for reclamation and were not discarded.

3. Provisions Applicable to the Transportation of Hazardous Secondary Materials

Hazardous secondary materials may be stored for up to 10 days at a transfer facility and still be considered in transit. The 10-day storage standard for defining transfer facilities is the same as that used for hazardous waste transportation, and EPA has revised the definition of "transfer facility" at 40 CFR 260.10 to clarify that such facilities may store hazardous secondary materials, as well as hazardous waste. However, if the facility stores the hazardous secondary materials for more than 10 days, then it would be considered an intermediate facility and subject to the conditions in 40 CFR 261.4(a)(24)(vi). While at the transfer facility, the hazardous secondary materials must continue to meet all applicable DOT standards. Hazardous secondary materials may be consolidated for shipping, but cannot be intermingled in a way that would constitute waste management.

4. Provisions Applicable to the Reclamation Facility and Any Intermediate Facilities

Recordkeeping. Reclaimers and intermediate facilities who operate under the transfer-based exclusion must maintain certain records, similar to the records we are requiring for hazardous secondary material generators. Specifically, reclaimers and intermediate facilities must maintain at their facilities for a period of three years records of all shipments of hazardous secondary materials that were received at the facility and, if applicable, of all shipments of hazardous secondary materials sent off-site from the facility. For hazardous secondary materials received at the reclamation and intermediate facility, such records must document the name and address of the hazardous secondary material generator, the type and quantity of hazardous secondary materials received at the facility, any intermediate facilities that managed the hazardous secondary materials, the name of the transporter that brought the hazardous secondary materials to the facility, and the date such materials were received at the facility.

For hazardous secondary materials that, after being received by the reclaimer or intermediate facility, are subsequently transferred off-site for further reclamation, reclaimers and intermediate facilities must document the name and address of the hazardous secondary material generator, when the shipment occurred, who the transporter was, the name and address of the (subsequent) reclaimer and, if applicable, each (subsequent) intermediate facility, and the type and quantity of hazardous secondary materials in the shipment. This recordkeeping requirement may be fulfilled by ordinary business records, such as bills of lading.

Reclaimers and intermediate facilities must also send confirmations of receipt to the hazardous secondary material generator for all off-site shipments of hazardous secondary materials received at the facility in order to verify for the hazardous secondary material generator that their materials reached the intended destination and were not discarded. Specifically, the reclaimer (or each reclaimer, when more than one reclamation step is required) and, if applicable, each intermediate facility, must send documentation of receipt to the hazardous secondary material generator that includes the name and address of the reclaimer or intermediate facility, the type and quantity of the hazardous secondary materials received

and the date which the hazardous secondary materials were received. The Agency is not requiring a specific template or format for confirmations of receipt and anticipates that routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, electronic confirmations of receipt) would contain the appropriate information sufficient for meeting this requirement.

In addition, reclaimers and intermediate facilities must also meet the recordkeeping requirements under financial assurance discussed below in this section.

Storage of Recyclable Hazardous Secondary Materials. In addition to the condition that the hazardous secondary materials must be contained (40 CFR 261.4(a)(24)(v)(A)), reclamation facilities and intermediate facilities must also manage the hazardous secondary materials in a manner that is at least as protective as that employed for the analogous raw material, where there is an analogous raw material. An "analogous raw material" is a material for which a hazardous secondary material substitutes and which serves the same function and has similar physical and chemical properties as the hazardous secondary material. A raw material that has significantly different physical or chemical properties would not be considered analogous even if it serves the same function. For example, a metal-bearing ore might serve the same function as a metal-bearing air pollution control dust, but because the physical properties of the dust would make it more susceptible to wind dispersal, the two would not be considered analogous. Similarly, hazardous secondary materials with high levels of toxic volatile chemicals would not be considered analogous to a raw material that does not have these volatile chemicals or that has only minimal levels of volatile chemicals.

Storage conditions for reclamation facilities and intermediate facilities that operate under today's exclusion will show that the materials are not discarded, but instead are treated as commodities which the handler considers valuable and would be used and not be lost to the environment. The great majority of damage cases documented in the environmental problems study occurred at commercial reclamation and intermediate storage facilities, and mismanagement of hazardous secondary materials was found to be a cause of environmental problems in 40% of the incidents. Accordingly, EPA believes that this condition for storage is necessary and appropriate for reclamation facilities

and intermediate facilities that take advantage of this exclusion to show that storage of these materials is not just another way of disposing of them. In addition, it will establish an expectation for the owner/operators of such facilities that they must manage hazardous secondary materials in at least as protective a manner as they would an analogous raw material, and in such a way that materials would not be released into the environment.

Management of recycling residuals. Another condition of the transfer-based exclusion is that any residuals that are generated from the reclamation processes must be managed in a manner that is protective of human health and the environment. If any residuals exhibit a hazardous characteristic according to subpart C of 40 CFR part 261, or themselves are listed hazardous wastes, they are hazardous wastes (if discarded) and must be managed according to the applicable requirements of 40 CFR parts 260 through 273.

The purpose of this condition is to clarify the regulatory status of these waste materials and to emphasize in explicit terms that residuals that are generated from the reclamation of hazardous secondary materials must be managed properly so that the reclamation operation does not become another way of avoiding waste management and simply becomes another way of discarding unwanted material. The study of recent (i.e., post-CERCLA and post-RCRA) recycling-related environmental problems revealed that mismanagement of residuals was the cause of such problems in one-third of the incidents that were documented. Some common examples of these mismanaged residuals were acids and casings from the processing of lead-acid batteries, solvents and other liquids generated from cleaning drums at drum reconditioning facilities, and PCBs and other oils generated from disassembled transformers. In many of these damage incidents, the residuals were simply disposed of on-site with little regard for the environmental consequences of such mismanagement or possible CERCLA liabilities associated with cleanup of these releases. By making proper management of the recycling residuals a condition of the exclusion, EPA ensures that the reclamation operation is not just another way of discarding hazardous constituents. This has the added benefit of ensuring that the reclamation operation does not pose a significant risk to human health and the environment.

EPA notes that the “derived from” rule articulated in 40 CFR 261.3(c)(2) does not apply to residuals from the reclamation of hazardous secondary materials excluded under today’s rule. These residuals are a new point of generation for the purposes of applying the hazardous waste determination requirements of 40 CFR 262.11. If the residuals exhibit a hazardous characteristic, or they themselves are a listed hazardous waste, they would be considered hazardous wastes (unless otherwise exempted) and would have to be managed accordingly. If they did not exhibit a hazardous characteristic, or were not themselves a listed hazardous waste, they would need to be managed in accordance with applicable state or federal requirements for non-hazardous wastes.

Financial Assurance

For the transfer-based exclusion, EPA proposed in its March 2007 supplemental proposal that reclamation facilities comply with the 40 CFR part 265 subpart H financial assurance requirements as a condition of the exclusion. As discussed in section V.B of this preamble, by obtaining financial assurance, the reclamation or intermediate facility is making a direct demonstration that it will not abandon the hazardous secondary materials, it will properly decontaminate equipment, and it will clean up any unacceptable releases, even if events beyond its control make its operations uneconomical. Moreover, financial assurance also addresses the issue of the correlation of the financial health of a reclamation or intermediate facility with the absence of discard. In essence, financial assurance will help demonstrate that the reclamation or intermediate facility owner/operators who would operate under the terms of this exclusion are financially sound and will not discard the hazardous secondary materials.

An implementation issue for the financial assurance condition stems from the fact that the 40 CFR part 265 subpart H financial assurance requirements directly reference and rely on the provisions of the 40 CFR part 265 subpart G closure requirements. For example, in 40 CFR part 265 subpart H, a facility owner uses the “closure plan” in 40 CFR part 265 subpart G to calculate closure cost estimates, which then set the amount of financial assurance required under subpart H. Similarly, the financial assurance requirements remain in place until EPA has reviewed the closure plan, and the facility has closed according to the plan. At that point, EPA releases the financial

assurance instruments. Commenters expressed some confusion on this issue and requested that EPA clarify that the provisions of subpart G which are required to implement financial assurance be made explicit.

Thus, in today’s final rule, for the convenience of the regulated community, EPA has detailed the applicable requirements in a separate regulation, subpart H of 40 CFR part 261, using terminology appropriate for excluded facilities, that specifically identifies the processes by which a facility determines the amount of financial assurance required and by which it secures release of financial assurance when it no longer wishes to operate under the transfer-based exclusion. The financial assurance requirements detailed in 40 CFR part 261 subpart H incorporate those aspects of the hazardous waste closure and financial assurance regulations as they apply to the financial assurance condition for excluded hazardous secondary material reclamation and intermediate facilities. However, since these facilities are not regulated hazardous waste facilities, new subpart H does not include a stand-alone closure requirement, although some aspects of the closure process (described below) are included as being necessary for the implementation of the financial assurance condition.

Substantively, these requirements generally mirror the interim status standards in 40 CFR part 265 for hazardous waste treatment, storage and disposal facilities (TSDFs), but have been tailored for hazardous secondary material reclamation and intermediate facilities. The provision in the new subpart H in 40 CFR part 261 are linked to equivalent provisions under 40 CFR part 265, which, as we noted in the March 2007 supplemental proposal, “outline how owners and operators should determine cost estimates, explain the acceptable mechanisms for providing financial assurance, and set the minimum amounts of liability coverage required” (see 72 FR 14196).

In addition to the closure requirements, 40 CFR part 265 subpart H includes requirements for post-closure care. Post-closure care (e.g., groundwater monitoring, maintenance of waste containment systems) only applies to land disposal units, where hazardous waste remains in the unit or other contamination is present after Subtitle C closure. However, the conditional exclusion being promulgated today only applies to hazardous secondary materials intended for reclamation. In no cases should the storage of these materials be designed or

managed with the intent of leaving these hazardous secondary materials in place. Unlike the need for closure, which could occur at a reclamation or intermediate facility which meets all the conditions of the exclusion, but then becomes subject to forces beyond its control (such as a sudden downturn in the market for its recycled product), the need for post-closure care would only apply to a facility that does not meet the condition that the hazardous secondary materials are contained in the unit. Thus, the Agency has determined that the issue of post-closure care is most appropriately dealt with by enforcement of the condition that the hazardous secondary materials must be contained. If, during the life of the unit, there is a significant release that indicates that the hazardous secondary materials are discarded, and thus are wastes, then such waste is subject to the RCRA Subtitle C requirements, including the post-closure care requirements. See discussion of the condition that the hazardous secondary materials must be “contained” found in section VII.C.

Cost Estimate

Under subpart H of 40 CFR part 261, as it is under subpart H of 40 CFR part 265 for hazardous waste treatment storage and disposal facilities, the first step in obtaining financial assurance is to develop a detailed written estimate on the amount of financial assurance required. The cost estimate determines the amount of financial assurance that will be available to the state or EPA for a third party to close a facility if the owner or operator fails to do so. The requirements for a cost estimate in 40 CFR 261.142 generally tracks the procedures in 265.142 with changes to accommodate the absence of a closure plan. Because hazardous secondary materials that lose the exclusion may have to be disposed of as a hazardous waste and the facility may have to be closed as a hazardous waste facility in accordance with the requirements of 40 CFR part 265, the owner or operator must have a detailed written estimate in current dollars of performing this work. The detailed cost estimate should include all necessary information which will allow the state or EPA to assess whether the assumptions underlying the estimate are consistent with what could be required to close the facility. For example, do the estimates for disposal, including transportation charges, reflect the distance to available disposal facilities? What level of personal protective equipment is needed to protect workers? Is there sufficient sampling of equipment to determine that it has been decontaminated? Where

there is uncertainty about the scope of the work, is there a reasonable contingency factor included? While not required by this rule for developing a cost estimate, some owners or operators may find that developing a plan similar to the requirements in 40 CFR 265.112 would be beneficial for assessing the potential costs of closing the facility. (Note, however, that the cost estimate must reflect the costs of closure under the Subtitle C hazardous waste requirements, and any remaining hazardous secondary material must be managed as a hazardous waste, and therefore the procedures used as the basis of the cost estimate may differ from the actual procedures a compliant facility will carry out when it completes operations and exits from the exclusion.) The owner or operator can be required to provide the documentation of the cost estimate upon request.

The cost estimating requirements in 40 CFR 265.142 and 40 CFR 261.142 are designed so that if a state or EPA must close a facility because of an owner or operator's failure, there will be adequate funds to do so. The requirements for the cost estimate are therefore based upon the point when the extent and manner of the facility's operation would make these activities the most expensive.

The cost estimate must, at minimum, be based on the costs of hiring a third party or parties to conduct these activities. The cost estimate may not include any salvage value for the hazardous secondary materials as hazardous waste or non-hazardous waste and the owner or operator may not incorporate a zero cost for such materials that might have economic value.

The financial assurance provisions are intended, in part, to demonstrate that the owner and operator is not discarding the hazardous secondary materials. As noted earlier, 69 of the 208 incidents of environmental damage identified in EPA's environmental problems study involve abandonment of the hazardous secondary materials as the primary cause of damage. These cost estimate provisions, found in 40 CFR 261.142(a) are equivalent to those required to estimate financial assurance under 40 CFR 265.142(a).

In addition, the financial assurance cost estimate must be revised and additional financial assurance must be obtained to adjust annually for inflation or in the event that changes in the reclaimer's or intermediate facility's operations or unexpected events result in an increase in the cost of managing any hazardous secondary materials that are not reclaimed and the cost of

removing or decontaminating all hazardous residues. These cost estimate provisions, found in 40 CFR 261.142(b) and 40 CFR 261.142(c) are equivalent to those required under 40 CFR 265.142(b) and 40 CFR 265.142(c), and incorporates language from 40 CFR 265.112(c)(2) requiring the owner or operator to amend the estimates at least 60 days prior to a planned change in facility design or operation or no later than 60 days after an unexpected event has occurred that affects cost estimates. The financial assurance cost estimate must be documented and this documentation maintained at the facility. This information must be furnished upon request, and made available at all reasonable times for inspection. The requirement in 40 CFR 261.142(d) to maintain documentation at the facility is from the requirement in 40 CFR 265.142(d) and 40 CFR 265.73(b)(7), and the responsibility to make it available upon request, which will allow Agency representatives to review the cost estimate, is from 40 CFR 265.74(a) which covers information required in 40 CFR 265.73.

Interaction of the Cost Estimate and the Financial Assurance Instruments

As with the interim status regulations in 40 CFR part 265 subpart H, the interaction of the cost estimating requirements in 40 CFR 261.142 and the instrument requirements in 40 CFR 261.143 result in adjustments in the amount of financial assurance as facility operations change. If changes in the reclaimer's or intermediate facility's operations result in a reduction in the cost estimate, the owner or operator may submit a new cost estimate. If the new cost estimate is less than the amount of financial assurance provided, the amount of the financial assurance instrument may be reduced to the amount of the new cost estimate following written approval by the Regional Administrator (*see, for example, 40 CFR 261.143(b)(7)*). For example, a facility with three units managing hazardous secondary materials that use a single surety bond could close one unit according to the plan in 40 CFR 261.143(h). With a new cost estimate submitted by the facility that reflects the lower costs for the two remaining units, the Regional Administrator can approve a reduction in the value of the surety bond. On the other hand, a change in the facility's operating plan or design that increases the cost of closing necessitates a new cost estimate (40 CFR 261.142(c)) and an increase in the amount of financial assurance (*see, for example, 40 CFR 261.143(b)(7)*).

Establishment of the Instrument, Plan for Removal of All Hazardous Secondary Material Residues, and Release From Financial Assurance

Under 40 CFR 261.4(a)(24)(vi)(F), an owner or operator of a reclamation or intermediate facility must establish financial assurance as a condition of the exclusions under 40 CFR 261.4(a)(24) and 261.4(a)(25). The same general types of instruments that are available for interim status facilities under 40 CFR part 265 subpart H are also available to owners or operators of reclamation or intermediate facilities. Owners or operators may use trust funds, payment surety bonds, letters of credit, insurance, or a financial test and corporate guarantee to demonstrate financial assurance.

The regulations governing the financial assurance instruments that an owner or operator must provide to qualify for the exclusions have been modified to reflect that they apply to hazardous secondary materials and not hazardous wastes. The financial assurance instruments for the trust fund, surety bond, letter of credit, and corporate guarantee have been revised so that EPA can direct the financial assurance funds at the point the hazardous secondary material reclamation or intermediate facility no longer meets the exclusion and, therefore, is managing a hazardous waste. As long as a facility is operating under the transfer-based exclusion so that the hazardous secondary material is not being discarded, there would be no need to invoke the financial assurance instruments.

The regulations allow the same flexibility as in 40 CFR part 265 subpart H for using a combination of trust funds, surety bonds, letters of credit and insurance at a single facility (*see 40 CFR 261.143(f)*), and allow the use of a single mechanism for multiple facilities (*see 40 CFR 261.143(g)*).

The provisions for releasing the reclamation or intermediate facility from the financial assurance requirements, found in 40 CFR 261.143(h), are functionally equivalent to those under 40 CFR 265.143(h). "Within 60 days after receiving certifications from the owner or operator and a qualified Professional Engineer that all hazardous secondary materials have been removed from the unit and the unit has been decontaminated in accordance with the approved plan per paragraph (i), the Regional Administrator will notify the owner or operator in writing that he is no longer required under § 261.4(a)(24)(vi)(F) to maintain financial assurance for that

unit, unless the Regional Administrator has reason to believe that that all hazardous secondary materials have not been removed from the unit or that the unit has not been decontaminated in accordance with the approved plan.”

Under 40 CFR part 265 subpart H, the provisions for releasing financial assurance rely on receiving a certification that the unit was closed per the approved closure plan in 40 CFR 265.112. However, as noted earlier, under today’s exclusion, units managing hazardous secondary materials are not subject to closure. Thus, the provision for releasing financial assurance for these units adapts language from the closure plan requirement found in 40 CFR 265.112 and from the certification requirement found in 40 CFR 265.115. Instead of a hazardous waste “closure plan,” the 40 CFR 261.143(i) provisions for releasing financial assurance require submission of a plan for removing hazardous secondary materials and decontaminating the unit at least 180 days prior to the date that owner or operator expects to cease operating under the exclusion. The contents of the plan are detailed in 40 CFR 261.153(i)(2) and have been tailored to reflect the fact that, although the hazardous secondary material management units are not subject to closure, when reclamation operations or storage operations (in the case of an intermediate facility) ceases, the hazardous secondary materials must be removed or the unit would become subject to the Subtitle C hazardous waste requirements (see section VIII.D). Briefly, the plan must include, at least, (a) a description of how all excluded hazardous secondary materials will be reclaimed or sent for reclamation and how all residues, contaminated containment systems (liners, etc), contaminated soils, subsoils, structures, and equipment will be removed or decontaminated as necessary to protect human health and the environment (for guidance, see the March 16, 1998, memorandum entitled “Risk-Based Clean Closure,” from Elizabeth Cotsworth, Acting Director, Office of Solid Waste, to RCRA Senior Policy Advisors. Available at <http://www.epa.gov/correctiveaction/resource/guidance/risk/cclosfnl.pdf>); (b) a description of the steps necessary to remove or decontaminate all hazardous secondary material residues and contaminated containment system components, equipment, structures, and soils including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the

extent of decontamination necessary to protect human health and the environment; (c) a description of any other activities necessary to protect human health and the environment during this time frame, including, but not limited to, leachate collection, run-on and run-off control, etc.; and (d) a schedule for conducting the activities.

This plan, which is essentially the subset of information required in a 40 CFR part 265 closure plan that would apply to excluded hazardous secondary material units, would still need to be reviewed by the Regional Administrator (or State Director, in authorized states) because that would ensure that EPA would agree that the hazardous secondary materials, or equipment contaminated with hazardous secondary materials, will not remain unregulated at the facility after it is no longer operating under an exclusion and no longer maintains financial assurance. As with the financial assurance release provision of 40 CFR part 264, the Regional Administrator will provide notice to the owner or operator and the public and an opportunity to submit written comments on the plan and request modifications to the plan. The Regional Administrator will approve, modify, or disapprove the plan within 90 days of its receipt.

Once residuals (and any hazardous secondary materials) have been removed and the unit has been decontaminated according to the plan, the facility would send a certification to that effect from the owner or operator and a qualified Professional Engineer to the regulatory agency, and that agency would then authorize the release of the financial assurance for those specific units, unless there is reason to believe that the hazardous secondary materials and residues were not removed (in which case the regulatory authority would send a written explanation of this fact). Again, this process is similar to that required under 40 CFR 265.115, as referenced in 40 CFR part 265 subpart H.

Operation of the Instruments if the Exclusion Is No Longer Applicable

As noted above, as long as a facility is operating under the transfer-based exclusion and the hazardous secondary material is not being discarded, there would be no need to invoke the financial assurance instruments. However, if the exclusion is no longer applicable, then the hazardous secondary material is a hazardous waste subject to the Subtitle C requirements and the Regional Administrator can invoke the instruments consistent with RCRA 3004(t) and related laws.

Similarly, as in 40 CFR part 265, if an owner or operator fails to obtain an approved replacement instrument within 90 days after a notice of cancellation from a surety, issuer of a letter of credit, insurer, or guarantor, the Regional Administrator can invoke the instrument. The following descriptions of the instruments contain additional information on how the instruments operate under this rule.

Trust Funds

If facilities choose to use a trust fund, they must fully fund the trust before they can rely on it for financial assurance. This is consistent with the proposal, which was based on the pay-in provisions under 40 CFR part 265. In part 265, the pay-in period for trust funds is limited to the remaining operating life of a facility or 20 years from the effective date of the 40 CFR part 265 regulations, which became effective in 1982. Thus, under the exclusion, the pay-in period, which would allow a trust to build over time, is not available. This means that facilities that are not financially strong enough to qualify for the financial test and that cannot obtain a guarantee, such as a surety bond or a letter of credit from a third party (potentially because the surety or bank is not confident that it will be repaid if the instrument is called upon) will need to fully fund the trust before qualifying for the exclusion.

While the hazardous secondary materials retain the exclusion, EPA has no access to these funds. The trustee must meet the qualifications in 40 CFR 261.143(a)(1) and the wording of the trust agreement must be identical to the wording specified in § 261.151(a)(1). The trust agreement must include a Schedule A that lists each facility, including the units with hazardous secondary materials, and the amounts of the current cost estimates, or portions thereof, for which financial assurance is demonstrated by the trust. Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current cost estimate covered by the agreement.

Whenever the current cost estimate changes, the owner or operator must compare the new estimate with the trustee’s most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new cost estimate, the owner or operator, within 60 days after the change in the cost estimate, must either (1) deposit an amount into the trust fund so that its value after this deposit at least equals the amount of the current cost estimate, or (2) obtain other financial assurance,

such as a letter of credit, to cover the difference.

There are also circumstances when the owner or operator may request a release of funds from the trust fund. If the value of the trust fund is greater than the total amount of the current cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current cost estimate. This could occur as a result of the closing of a unit at the facility and the submission of a revised cost estimate. Alternatively, the earning of the trust fund could exceed the increase in the cost estimate due to inflation. Further, if an owner or operator substitutes other financial assurance as specified in the regulations for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current cost estimate covered by the trust fund.

Within 60 days after receiving a request from the owner or operator for release of funds, the Regional Administrator will instruct the trustee to release to the owner or operator such funds that exceed the amount of the current cost estimate, as the Regional Administrator deems appropriate and specifies in writing. Alternatively, in the event that the owner or operator begins final closure of the unit under subpart G of 40 CFR part 264 or 265, an owner or operator may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Regional Administrator.

The Regional Administrator will agree to termination of the trust fund when the owner or operator substitutes alternate financial assurance, such as receiving approval for an insurance policy to replace the trust, or if the owner or operator demonstrates that he meets the requirements of the financial test. It should be noted that both surety bonds and letters of credit require a standby trust, as discussed below. The Regional Administrator will also agree to the termination of the trust fund when he releases the owner or operator from the requirements of this section in accordance with 40 CFR 261.143(i).

The preceding discussion explained the operation of the regulations during the exclusion. The regulations also address the situation where the hazardous secondary materials lose their exclusion. The requirements in 40 CFR 261.151(a) for the trust fund provide that if the hazardous secondary materials lose their exclusion, EPA becomes the beneficiary of the trust, consistent with RCRA section 3004(t) and federal law. The trust fund also receives the proceeds of a payment

surety bond or letter of credit if the hazardous secondary materials lose the exclusion. The trustee shall make payments from the Fund as the EPA shall order or direct, in writing, to provide for the payment of the costs of the performance of closure activities required under subpart G of 40 CFR parts 264 or 265 for the facilities covered by the trust agreement. This provision allows funds from the trust to be used to close facilities as hazardous waste facilities.

An owner or operator whose hazardous secondary materials have lost their exclusion, but subsequently meets the requirements for the exclusion, including establishing financial assurance in accordance with the provisions of 40 CFR 261.143, may request a reduction in the amount of the trust fund and the Regional Administrator may instruct the trustee to return funds to the owner or operator under Section 4 of the trust agreement in 40 CFR 261.151(a). For example, hazardous secondary materials could lose their exclusion and the Regional Administrator could draw upon a letter of credit being used to establish financial assurance and have it deposited into the trust fund. If the hazardous secondary materials regained their exclusion and the owner or operator substituted a new approved letter of credit, the Regional Administrator may direct the trustee to refund funds to the owner or operator.

Surety Bonds

The surety bond operates similarly to the payment surety bond in 40 CFR part 265, with some modifications to reflect the differences between a conditionally exempt hazardous secondary material and a hazardous waste. The surety bond must conform to the requirements of 40 CFR 261.143(b) and the owner or operator must submit the bond to the Regional Administrator. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury. The wording of the surety bond must be identical to the wording specified in 40 CFR 261.151(b).

The owner or operator who uses a surety bond must also establish a standby trust fund and submit an originally signed duplicate of the trust agreement with the surety bond. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 261.143(a),

except that until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 261.143(a);

(B) Updating of Schedule A of the trust agreement (see § 261.151(a)) to show current cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

The penal sum of the bond must be in an amount at least equal to the current cost estimate, except as provided in 40 CFR 261.143(f). The regulations at 40 CFR 261.143(f) allow the use of certain combinations of instruments so long as their sum is at least equal to the total cost estimates.

Whenever the current cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current cost estimate and submit evidence of such increase to the Regional Administrator or obtain other financial assurance as specified in the regulations in 40 CFR 261.143 to cover the increase. Whenever the current cost estimate decreases, the penal sum may be reduced to the amount of the current cost estimate following written approval by the Regional Administrator. So long as the owner or operator meets the exclusion, the Regional Administrator will not access the bond.

The Regional Administrator will agree to termination of the surety bond when the owner or operator substitutes alternate financial assurance, such as an approved insurance policy to replace the surety bond, or if the owner or operator demonstrates that he meets the requirements of the financial test. The Regional Administrator will also agree to the termination of the surety bond when he releases the owner or operator from the requirements of this section in accordance with 40 CFR 261.143(i). Under 40 CFR 261.151(b), the Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded facility(ies) is (are) located.

Under 40 CFR part 261, the surety becomes liable for funding the trust if the owner or operator has failed to fund the trust before the loss of the exclusion. The cancellation provisions for the

surety bond in 40 CFR part 261 operate similarly to the provisions in 40 CFR part 265. If the surety has issued a notice of cancellation, and the owner or operator has not funded the trust or obtained approval by the Regional Administrator of a replacement instrument within 90 days, the surety becomes liable for payment into the trust fund. Under the hazardous waste rules, if the surety issues a notice of cancellation and the owner or operator does not fund the trust or obtain approved alternative financial assurance within 90 days, the Regional Administrator may access the funds.

Reclamation and intermediate facilities, as under 40 CFR part 265, may not use a performance surety bond because there is no closure plan that has undergone review under the permitting process. The performance surety bond, which is allowed under the permitting standards in 40 CFR part 264 subpart H, requires the surety, in the event of a failure by the owner or operator to comply with the requirements of the closure requirements of 40 CFR part 264, to perform closure in accordance with the closure plan and permitting requirements or to deposit the penal sum of the bond into the standby trust. Closure plans for permitted facilities undergo detailed review as part of the permitting process, so it is appropriate to allow a surety to perform closure in this circumstance. However, like interim status facilities, reclamation and intermediate facilities do not have closure plans that undergo this type of review. "During interim status, the closure and post-closure plans for a facility are generally not reviewed by the Regional Administrator until shortly before the time of closure. Upon such review, the Regional Administrator may find that major changes are needed in the plans. The Agency believes a performance bond is not appropriate when the actual required performance for the particular facility may not be specified in any detail during most of the term of the bond" (47 FR 15040).

Letters of Credit

The letter of credit requirements generally operate similarly to the requirements in 40 CFR part 265, except that they reflect the status of conditionally exempt hazardous secondary materials. An owner or operator may satisfy the requirements of 40 CFR 261.143 by obtaining an irrevocable standby letter of credit which conforms to the requirements of 40 CFR 261.143(c) and submitting the letter to the Regional Administrator. The issuing institution must be an entity which has the authority to issue letters

of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency.

The wording of the letter of credit must be identical to the wording specified in § 261.151(c). As with the surety bond, an owner or operator who uses a letter of credit must also establish a standby trust fund and submit to the Regional Administrator an originally signed duplicate of the trust agreement with the letter of credit. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 261.143(a), except that until the standby trust fund is funded pursuant to the requirements of this section, the requirements, as noted above, that are not necessary for a surety bond are also not required for a letter of credit.

The letter of credit must be issued in an amount at least equal to the current cost estimate, except as provided in 40 CFR 261.143(f). The regulations in 40 CFR 261.143(f) allow the use of certain combinations of instruments so long as their sum is at least equal to the total cost estimates.

Whenever the current cost estimate increases to an amount greater than the amount of the letter of credit, the owner or operator, within 60 days after the increase, must either cause the amount of the letter of credit to be increased so that it at least equals the current cost estimate and submit evidence of such increase to the Regional Administrator or obtain other financial assurance as specified in the regulations in 40 CFR 261.143 to cover the increase. Whenever the current cost estimate decreases, the amount of the letter of credit may be reduced to the amount of the current cost estimate following written approval by the Regional Administrator.

The Regional Administrator will return the letter of credit to the issuing institution for termination when an owner or operator substitutes alternate financial assurance as specified in 40 CFR 261.143, or when the Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 261.143(i).

So long as the owner or operator meets the exclusion and maintains financial assurance, the Regional Administrator will not access the letter of credit. Access to the letter of credit only occurs upon the loss of the exclusion. For the letter of credit, in the event that the hazardous secondary materials at the covered reclamation or

intermediate facilities no longer meet the conditions of the exclusion, EPA may draw upon the letter of credit. If the owner or operator does not establish alternate financial assurance and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. When the Regional Administrator draws on the letter of credit, the proceeds are deposited into the standby trust fund, and the funds in the trust become available for the payment of the costs of closure in compliance with subpart G of 40 CFR parts 264 or 265.

Insurance

Insurance operates similarly to the insurance instrument in 40 CFR part 265, with some modifications to reflect differences between conditionally exempt hazardous secondary materials and hazardous wastes. An owner or operator may satisfy the requirements of 40 CFR 261.143 by obtaining insurance that conforms to the requirements of 40 CFR 261.143(d) and submitting a certificate of such insurance to the Regional Administrator. At a minimum, the insurer must be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer, in one or more states.

The wording of the certificate of insurance must be identical to the wording specified in § 261.151(d). As part of the certificate, the insurer warrants that the policy conforms in all respects with the requirements of 40 CFR 261.143(d), as applicable, and agrees that any provision of the policy inconsistent with 40 CFR 261.143(d) is hereby amended to eliminate such inconsistency. The insurer also agrees to furnish to the EPA Regional Administrator(s) a duplicate original of the policy listed above, including all its endorsements, whenever requested by the Regional Administrator.

The insurance policy must be issued for a face amount at least equal to the current cost estimate, except as provided in § 261.143(f), which allows the use of certain combinations of instruments so long as their sum is at least equal to the total cost estimates.

Whenever the current cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current cost estimate

and submit evidence of such increase to the Regional Administrator or obtain other financial assurance as specified in 40 CFR 261.143 to cover the increase. Whenever the current cost estimate decreases, the face amount may be reduced to the amount of the current cost estimate following written approval by the Regional Administrator.

In 40 CFR 261.143(d)(4), the insurance policy must guarantee that funds will be available to pay the cost of removal of all hazardous secondary materials from the unit, to pay the cost of decontamination of the unit, and to pay the costs of the performance of any activities required under subpart G of 40 CFR parts 264 or 265 for the facilities covered by this policy, if they become necessary. This provision, as that in 40 CFR part 265, allows the owner or operator to recover the costs of removing hazardous secondary materials and is similar to the provisions in § 265.143(d) that allow the owner or operator of a facility to be reimbursed for the costs of closure. This provision also allows the Regional Administrator to allow reimbursement for the same activities that are allowed under the trust fund. The insurance provisions that allow for reimbursement for the cost of removal of hazardous secondary materials are broader than the provisions in 40 CFR 261.151(a) for payment from the trust fund. This difference is due to the fact that the monies in the trust fund are returned to the owner or operator once the facility exits the exclusion, but there is no such provision for insurance; in order to make the insurance provisions functionally equivalent to their counterparts in 40 CFR part 265, the insurance provisions must cover the cost of removing the hazardous secondary materials when the unit exits the exclusion. However, the owner or operator may request reimbursements only if the remaining value of the policy is sufficient to cover the maximum costs for the facility.

The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when the owner or operator substitutes alternate financial assurance as specified in § 261.143, or the Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 261.143(i).

Under 40 CFR 261.143(d)(8), cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration, the conditional exclusion terminates or is revoked. This is

analogous to the provisions for surety bonds and letters of credit that ensure that payments under those instruments will occur if the conditionally excluded hazardous secondary materials lose the exclusion.

Under the insurance provisions of § 265.143, failure of the owner or operator to pay the premiums of a policy without the substitution of an alternative mechanism constitutes a significant violation of the regulations. EPA was faced with a decision of how to implement that provision here. Since the exclusion relies upon compliance with the conditions, failure to pay the premium is significant and may result in loss of the exclusion. Similarly, loss of the exclusion will preclude the cancellation or termination of the policy. Under the circumstances, EPA recognizes that insurers may carefully screen applicants to ensure that they will meet the requirements of the exclusion and establish premiums, possibly with a substantial portion up front or collateralized, that reduce the insurer's risk of non-payment.

In 40 CFR 265.143(d)(1), there is a provision allowing an owner or operator of a treatment, storage, and disposal facility an additional 90 days from the effective date of the regulations to provide a certificate of insurance. The effective date of the interim status regulations was in 1982, and therefore this provision is no longer applicable and today's rule does not allow this additional 90 days. In keeping with the proposal to use requirements in subpart H of 40 CFR part 265, the additional 90-day period has been deleted from these regulations.

Financial Test

EPA had solicited comment on whether to use the financial assurance provisions in the standardized permit rule rather than those in 40 CFR part 265, but commenters generally did not support the standardized permit rule alternative. Therefore, certain provisions that are available under the standardized permit rule will not be available to reclamation and intermediate facilities, with one exception. The financial test provision referenced by subpart H of 40 part CFR 265 includes an obsolete requirement that the Certified Public Accountant's report state that "[i]n connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted." This is referred to by the auditing profession as a "negative assurance." However, the American Institute of Certified Public Accountants, Inc.'s (AICPA's) *Statement*

on Auditing Standards no longer permits independent auditors to express negative assurance. Thus, to ensure that today's final rule conforms with current professional auditing standards, EPA is using the language from the standardized permit rule for this aspect of the financial test.⁴

As noted in the March 2007 supplemental proposal, the Agency currently has underway a review of the subpart H financial assurance regulations, which will address this issue among others in the broader context of 40 CFR parts 264 and 265. As part of any rulemaking that addresses the results of that review, EPA will include any necessary changes to the financial assurance condition being finalized today.

In today's regulation, the letter from the chief financial officer (*see* § 261.151(e) or (f)) contains a requirement to account for obligations assured through a financial test or corporate guarantee for facilities handling conditionally excluded hazardous secondary materials. This addition is necessary because the chief financial officer's letter required in the 40 CFR part 265 regulations does not anticipate these obligations.

The financial test and the letter from the chief financial officer use accounting terms, such as current assets, current liabilities, and liabilities. Under 40 CFR 261.141, which defines the terms used in this subpart, these and other accounting terms follow their definition in 40 CFR 265.141(f). As noted in 40 CFR 265.141(f), "The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices." This is an important provision of the financial assurance regulations because it allows the terms used in the test to reflect evolving definitions. For example, if the accounting standards covering retiree obligations change, this provision ensures that the accounting in the financial test submission to EPA reflects the new standards. Companies may not use an obsolete definition of these terms.

Like the 40 CFR part 265 regulations, this regulation includes a provision

⁴ For current EPA guidance for companies using the financial test in 40 CFR part 264 or 265, please see the February 27, 1997 Memorandum from Elizabeth Cotsworth to Senior RCRA Policy Advisors entitled "Obsolete Language in the Financial Test for Subtitle C Treatment Storage and Disposal Facilities," at [http://yosemite.epa.gov/osw/rcra.nsf/ea6e50dc6214725285256bf00063269d/C68C99D730932BE28525670F006C2B4A/\\$file/14066.pdf](http://yosemite.epa.gov/osw/rcra.nsf/ea6e50dc6214725285256bf00063269d/C68C99D730932BE28525670F006C2B4A/$file/14066.pdf).

allowing an owner or operator to obtain a corporate guarantee as a method of complying with the financial assurance requirements. The provisions governing who may extend a guarantee are the same as those in 40 CFR part 265. Since there is no requirement for an up-front closure plan, the text of the guarantee in 40 CFR part 261 differs somewhat from the language in 40 CFR part 265. In § 261.151(g)(1), the guarantor “guarantees that in the event of a determination by the Regional Administrator that the hazardous secondary materials at the owner or operator’s facility covered by this guarantee do not meet the conditions of the exclusion under § 261.4(a)(24), the guarantor will manage any hazardous secondary material in accordance with applicable regulations and close the facility in accordance with closure requirements found in parts 264 and 265 of this chapter or establish a trust fund as specified in § 261.143(a) in the name of the owner or operator in the amount of the current cost estimate.”

Liability Requirements

The liability coverage requirements for sudden and nonsudden accidental occurrences in subpart H of 40 CFR part 261 are essentially the same as those for TSDFs in 40 CFR 265.147, with revised terminology so that the regulatory language applies to hazardous secondary material reclamation and intermediate facilities. Sudden accidental coverage for bodily injury and property damage to third parties is required for all units, and nonsudden accidental coverage is required for land-based units. Land-based units are defined in 40 CFR 260.10 as an area where hazardous secondary materials are placed in or on the land before recycling and are functionally equivalent to the units required to have nonsudden accidental coverage under 40 CFR 265.147(b) (e.g., surface impoundments). In addition, the provisions for requesting a variance or adjusting the coverage are the same as 40 CFR 265.147(c) and (d) respectively, except the reference that ties these procedures to the Subtitle C permit modification procedures under 40 CFR 270.41(a)(5) and 40 CFR 124.5 has been removed, because these provisions would not apply to excluded hazardous secondary material.

Other Financial Assurance Provisions

Finally, the provisions for incapacity of owners or operators, guarantors, or financial institutions (40 CFR 261.148), use of state-required mechanisms (40 CFR 261.149), and state assumption of responsibility (40 CFR 261.150) are

essentially the same as their counterparts in 40 CFR part 265, with one exception. The state-required mechanism provisions have been expanded to indicate that states may allow facilities to use their existing Subtitle C financial assurance policies to address the financial assurance condition of 40 CFR 261.4(a)(24)(vi)(F), provided they can ensure that the instruments actually cover the financial assurance cost estimate.

5. Provisions Applicable to Hazardous Secondary Materials That Are Exported and Imported

Under today’s final rule, generators who export hazardous secondary materials are required to notify the receiving country through EPA and obtain consent from that country before shipment of the hazardous secondary materials takes place (*see* 40 CFR 261.4(a)(25)). These notice and consent requirements provide notification to the receiving country so that it can ensure that the hazardous secondary materials are reclaimed rather than disposed of or abandoned. As an additional benefit, these requirements allow the receiving country the opportunity to consent or not consent based on its analysis of whether the reclamation facility can properly recycle the hazardous secondary materials and manage the process residuals in an environmentally sound manner within its borders. EPA believes that sections 2002, 3002, 3007, and 3017 of RCRA provide authority to impose this condition because such notice and consent help determine that the materials are not discarded.

Specifically, hazardous secondary materials that are exported from the United States and its territories and recycled at a reclamation facility located in a foreign country are not solid wastes, provided the hazardous secondary material generator complies with the requirements of 40 CFR 261.4(a)(25), including notifying EPA of the proposed export and obtaining subsequent consent from the receiving country.

Included by reference in 40 CFR 261.4(a)(25), the generator must comply with the requirements of 40 CFR 261.4(a)(24)(i)–(v), which comprise the hazardous secondary material generator requirements under the transfer-based exclusion, such as speculative accumulation and reasonable efforts. However, hazardous secondary material generators who export hazardous secondary materials for reclamation are not required to comply with 40 CFR 261.4(a)(24)(v)(B)(2) for foreign reclaimers and intermediate facilities because, as part of satisfying reasonable efforts, this question requires the

generator to affirmatively answer if the reclaimer or intermediate facility has notified the appropriate authorities pursuant to § 260.42 and if the reclaimer or intermediate facility has financial assurance as required under § 261.4(a)(24)(vi)(F). Since foreign reclaimers and foreign intermediate facilities are not subject to U.S. regulations, they cannot comply with the notification and financial assurance requirements under today’s rule (however, hazardous secondary material generators must affirmatively answer this question for domestic intermediate facilities).

The provisions that we are finalizing today in 40 CFR 261.4(a)(25) require hazardous secondary material generators to notify EPA of an intended export 60 days before the initial shipment is intended to be shipped off-site. The notification may cover export activities extending over a 12-month or shorter period. The notification must include contact information for the hazardous secondary material generator, as well as for the reclaimer and intermediate facility, including any alternate reclaimer or alternate intermediate facilities.⁵ The notification must also include a description of the type(s) of hazardous secondary materials and the manner in which the hazardous secondary materials will be reclaimed, the frequency and rate at which they will be exported, the period of time over which they will be exported, the means of transport, the estimated total quantity of hazardous secondary materials to be exported, and information about transit countries through which such hazardous secondary materials will pass.

Notifications must be sent to EPA’s Office of Enforcement and Compliance Assurance,⁶ which will then notify the receiving country and any transit countries. For purposes of 40 CFR 261.4(a)(25), the terms “Acknowledgement of Consent,” “receiving country,” and “transit country” are used as defined in 40 CFR 262.51 with the exception that the terms in this section refer to hazardous

⁵ Hazardous secondary material generators may choose, in the notice of export, to designate alternate reclaimers or alternate intermediate facilities to which the hazardous secondary materials may be exported in the event that delivery to the primary reclaimer or intermediate facility cannot take place. Hazardous secondary material generators, of course, must comply with all conditions (e.g., reasonable efforts) for each alternate reclaimer and alternate intermediate facility as with a primary reclaimer and intermediate facility.

⁶ The Office of Enforcement and Compliance Assurance (OECA) is the office within EPA that implements the notice and consent process for exports.

secondary materials, rather than hazardous waste.

When the receiving country consents (or objects) to the receipt of the hazardous secondary materials, EPA will inform the hazardous secondary material generator, through an Acknowledgement of Consent, of the receiving country's response, as well as any response from any transit countries.

For exports to Organization for Economic Cooperation and Development (OECD) Member countries, the receiving country may choose to respond to the notification with tacit, rather than written, consent. With respect to exports to such OECD Member countries, if no objection has been lodged by the receiving country or transit countries to a notification within 30 days after the date of issuance of the acknowledgement of receipt of notification by the competent authority of the receiving country, the U.S. understands that an export may commence at that time. In such cases, EPA will send an Acknowledgment of Consent to inform the hazardous secondary material generator that the receiving country and any relevant transit countries have not objected to the shipment, and are thus presumed to have consented tacitly. Tacit consent expires one calendar year after the close of the 30-day period; re-notification and renewal of all consents is required for exports after that date. This tacit consent procedure for exports of hazardous secondary materials to OECD Member countries in this rule is similar to the tacit consent procedure for hazardous waste exports to OECD Member countries under 40 CFR part 262 subpart H. We note that Canada and Mexico, though they are OECD Member countries, typically require written consent for exports to their countries.

The hazardous secondary material generator may proceed with the shipment of the hazardous secondary materials only after it has received an Acknowledgment of Consent from EPA indicating the receiving country's consent (actual or tacit). If the receiving country does not consent to the receipt of the hazardous secondary materials or withdraws a prior consent, EPA will notify the hazardous secondary material generator in writing. EPA also will notify the hazardous secondary material generator of any responses from transit countries. Hazardous secondary material generators must keep copies of any notifications and consents for a period of three years following receipt of the consent.

Hazardous secondary material generators must also file with the Administrator, no later than March 1 of

each year, a report containing its name, mailing and site address, and EPA ID number (if applicable); the calendar year covered by the report; the name and site address of each reclaimer and intermediate facility; and, for each hazardous secondary material exported, a description of the hazardous secondary material, the type of hazardous secondary material (reported as the EPA hazardous waste numbers that would apply if the hazardous secondary materials were managed as hazardous wastes), the DOT hazard class, the name and U.S. EPA ID number (where applicable) for each transporter used, the total amount of hazardous secondary material shipped and the number of shipments pursuant to each notification. Hazardous secondary material generators must also sign a certification statement (found under 40 CFR 261.4(a)(25)(xi)(E)). These procedures are similar to those required for exports of hazardous waste under 40 CFR part 262 subpart E, except for the use of the hazardous waste manifest which is not required under today's exclusions.

Imports of hazardous secondary materials are eligible for today's transfer-based exclusion, provided that the person who imports the hazardous secondary material fulfills all requirements and conditions (*e.g.*, notification, reasonable efforts, recordkeeping) for a hazardous secondary material generator under 40 CFR 261.4(a)(24) of today's rule. Persons who import hazardous secondary materials are not eligible for today's generator-controlled exclusion since EPA would not be able to ensure the close management and monitoring of the hazardous secondary materials by a single entity in a foreign country.

D. Termination of the Exclusion

As with the generator-controlled exclusion, units managing hazardous secondary materials excluded under the transfer-based exclusion are not subject to the closure regulations in 40 CFR parts 264 and 265 subpart G. However, when the use of these units is ultimately discontinued, all owners and operators must manage any remaining hazardous secondary materials that are not reclaimed and remove or decontaminate all hazardous residues and contaminated containment system components, equipment structures, and soils. These hazardous secondary materials and residues, if no longer intended for reclamation, would also no longer be eligible for the exclusion (which only applies to hazardous secondary materials that will be reclaimed). Failure to remove these

materials within a reasonable time frame after operations cease could cause the facility to become subject to the full Subtitle C requirements if the Agency determines that reclamation is no longer feasible. While this final rule does not set a specific time frame for these activities, the Agency believes that they typically should be completed within the time frames established for analogous activities. For example, the requirements for product tanks under 40 CFR 261.4(c) allow 90 days for removal of hazardous material after the unit ceases to be operated for manufacturing. This time frame should serve as a guideline for regulators in determining, on a case-by-case basis, whether owners and operators have completed these activities within a reasonable time frame. In any event, these hazardous secondary materials remain subject to the speculative accumulation restrictions in 40 CFR 261.4(a)(8), which includes both a time limitation of recycling 75% of the hazardous secondary material within a year and a requirement that the facility be able to show there is a feasible means of recycling the hazardous secondary material.

In addition, as described in section VIII.C. above, in order to be released from the financial assurance condition, intermediate and reclamation facilities will need to submit for approval a plan for removing the hazardous secondary material and decontaminating the unit, and then, when the work is completed, submit a certification from a qualified Professional Engineer that all hazardous secondary materials have been removed from the unit and the unit has been decontaminated.

E. Enforcement

Hazardous secondary materials transferred to a third party for the purpose of reclamation are excluded from RCRA Subtitle C regulation under certain conditions and restrictions. If a hazardous secondary material generator fails to meet any of the above-described conditions that are applicable to the generator, then the hazardous secondary materials would be considered discarded by the generator and would be subject to the RCRA Subtitle C requirements from the point at which such material was generated. In addition, if a reclaimer or an intermediate facility failed to meet any of the above-described conditions, then the hazardous secondary materials would be considered discarded by the reclaimer or intermediate facility and would be subject to the RCRA Subtitle C requirements from the point at which the reclaimer or intermediate facility

failed to meet a condition or restriction, thereby discarding the material.

It should be noted that the failure of the reclaimer or intermediate facility to meet the conditions of the exclusion does not mean that the hazardous secondary material was considered waste when handled by the generator, as long as the generator can adequately demonstrate that it has met its obligations, including the obligation under 40 CFR 261.4(a)(24)(v)(B) to make reasonable efforts to ensure that the hazardous secondary material will be reclaimed legitimately and properly managed. A hazardous secondary material generator that met its reasonable efforts obligations could, in good faith, ship its excluded materials to a reclamation facility or intermediate facility where, due to circumstances beyond its control, they were released and caused environmental problems at that facility. In such situations, and where the generator's decision to ship to that reclaimer or intermediate facility is based on an objectively reasonable belief that the hazardous secondary materials would be reclaimed legitimately and otherwise managed in a manner consistent with this regulation, the generator would not have violated the terms of the exclusion.

In addition, the Agency affirms in this preamble that § 261.2(f) applies to all claims that hazardous secondary materials are not solid waste because they are being legitimately recycled, including those that are not specifically addressed in this final rule. Respondents in enforcement cases should be prepared to demonstrate that they meet the terms of the exclusion or exemption, which includes demonstrating that the recycling is legitimate. Appropriate documentation must be provided to the enforcing agency to demonstrate that the material is not a solid waste or is exempt from regulation. In addition, the recycler of the hazardous secondary material should be prepared to show it has the necessary equipment to perform the recycling operation. Furthermore, any release of the hazardous secondary materials to the environment that is not immediately cleaned up would be considered discarded and, thus, the hazardous secondary material that was released would be a solid waste and potentially subject to the RCRA hazardous waste regulations.

IX. Legitimacy

As part of this final rulemaking, EPA has decided to codify in 40 CFR 260.43 the requirement that materials be legitimately recycled as a requirement for the exclusion for hazardous

secondary materials that are legitimately reclaimed under the control of the generator (40 CFR 261.2(a)(2)(ii) and 40 CFR 261.4(a)(23)) and as a condition of the exclusion for hazardous secondary materials that are transferred for the purpose of legitimate reclamation (40 CFR 261.4(a)(24) and 40 CFR 261.4(a)(25)). EPA is also requiring that hazardous secondary materials must be legitimately recycled under the final non-waste determinations (40 CFR 260.34) for hazardous secondary materials that are (a) reclaimed in a continuous industrial process and (b) indistinguishable in all relevant aspects from a product or intermediate.

In addition, in Section IX.B.3, EPA has included a discussion of how the current legitimacy policy continues to apply to existing exclusions and how the four factors being added to 40 CFR 260.43 are substantively the same as the current legitimacy policy.

A. Background of Legitimacy

Under the RCRA Subtitle C definition of solid waste, many existing hazardous secondary materials are not solid wastes and, thus, not subject to RCRA's "cradle to grave" management system if they are recycled. The basic idea behind this construct is that recycling of such materials often closely resembles normal industrial manufacturing rather than waste management. However, since there can be a significant economic incentive to manage hazardous secondary materials outside the RCRA regulatory system, there is a potential for some handlers to claim that they are recycling, when, in fact, they are conducting waste treatment and/or disposal in the guise of recycling.⁷ To guard against this, EPA has long articulated the need to distinguish between "legitimate" (i.e., true) recycling and "sham" (i.e., fake) recycling, beginning with the preamble to the 1985 regulations that established the definition of solid waste (50 FR 638, January 4, 1985).

In the October 28, 2003, proposal at 68 FR 61581–61588, EPA discussed its position on the relevance of legitimacy to hazardous secondary materials recycling in general and to the

⁷ As an example of sham recycling, in a recent case the owner of a facility in Mississippi was found to be illegally burying hazardous waste on his property, where it was leaching into the surrounding soil and groundwater, while he was telling regulators and customers that he was recycling it into a salable product (Department of Justice, "Mississippi Hazardous Waste Operator Sentenced to 41 Months in Prison for Environmental Crimes," news release, February 7, 2008, <http://www.epa.gov/compliance/resources/cases/criminal/highlights/2008/pridmore-02-07-08.pdf>).

redefinition of solid waste specifically. We proposed to codify in the RCRA hazardous waste regulations four general criteria to be used in determining whether recycling of hazardous secondary materials is legitimate. In the supplemental proposal of March 26, 2007, at 72 FR 14197–14201, we proposed two changes to the 2003 proposed legitimacy criteria and asked for public comment on those changes. The changes were (1) a restructuring of the proposed criteria, called "factors" in this proposal, to make two of them mandatory, while leaving the other two as factors to be considered, and (2) additional guidance on how the economics of the recycling activity should be considered in a legitimate recycling determination.

The concept of legitimacy being finalized in today's rule as a restriction or a condition for the final exclusions and the non-waste determinations is not substantively different from the Agency's longstanding policy that has been expressed in our earlier preamble discussions and policy statements. The October 28, 2003, definition of solid waste proposal discussed the history of the guidance EPA has provided to the regulated community on the question of what it means to legitimately recycle. To summarize that discussion, the January 4, 1985, preamble to the final rule that promulgated the original definition of solid waste regulations established EPA's concept of legitimacy and described several indicators of sham recycling. A similar discussion that addressed legitimacy as it pertains to burning hazardous secondary materials for energy recovery was presented in the preamble to the January 8, 1988, proposed amendments to the definition of solid waste (53 FR 522).

On April 26, 1989, the Office of Solid Waste (OSW) issued a memorandum that consolidated preamble statements concerning legitimate recycling that had been articulated previously into a list of criteria to be considered in evaluating legitimacy [OSWER directive 9441.1989(19)]. This memorandum, known to many as the "Lowrance Memo," has been a primary source of guidance for the regulated community and for implementing agencies in distinguishing between legitimate and sham recycling for many years.

The legitimacy provision applicable to these exclusions and non-waste determinations is based on the October 2003 proposal and March 2007 supplemental proposal and all relevant information available to EPA as contained in the rulemaking record. The basis for how the legitimacy requirement in 40 CFR 260.43 works

includes the reasoning in the October 2003 and March 2007 preambles to the proposal and supplemental proposal, respectively, and consideration of all significant public comments as discussed in section XVIII of this preamble, as well as in the response to comment document.

Following the detailed discussion of the structure of the 40 CFR 260.43 legitimacy factors and each individual factor in this preamble, EPA has included a discussion of how the current legitimacy policy continues to apply to existing exclusions and how the four factors being added to 40 CFR 260.43 compare to the questions in the Lowrance Memo and the discussions in the preambles identified above.

B. How To Determine When Recycling Is Legitimate

1. What Is the Purpose of Legitimacy?

As discussed in the October 2003 proposal and the March 2007 supplemental proposal to this rulemaking, the Agency has a long-standing policy that all recycling of hazardous secondary materials must be legitimate, including both excluded recycling and the recycling of regulated hazardous wastes. The legitimacy provision in today's final exclusions and non-waste determinations is designed to distinguish between real recycling activities—legitimate recycling—and “sham” recycling, an activity undertaken by an entity to avoid the requirements of managing a hazardous secondary material as a hazardous waste. Because of the economic advantages in managing hazardous secondary materials as recycled materials rather than as wastes, there is an incentive for some handlers to claim they are recycling when, in fact, they are conducting waste treatment and/or disposal.

2. Legitimacy Requirements

In this action, EPA is finalizing requirements that reclamation being undertaken under the exclusions at § 261.2(a)(2)(ii), § 261.4(a)(23), (24), and (25) and the non-waste determinations at § 260.30(d) and (e) be legitimate. These requirements can be found in the final regulatory text at § 260.34(b), § 261.2(a)(2)(ii), § 261.4(a)(23)(v), and § 261.4(a)(24)(iv). Each of these provisions refers to § 260.43, where the full requirements for determining the legitimacy of the reclamation operation can be found.

The design of legitimacy in the final rule has two parts. The first is a requirement that hazardous secondary materials being recycled provide a

useful contribution to the recycling process or to the product of the recycling process and a requirement that the product of the recycling process is valuable. These two legitimacy factors make up the core of legitimacy and, therefore, a process that does not conform to them cannot be a legitimate recycling process, but would be considered sham recycling.

The second part of legitimacy is two factors that must be considered when a recycler is making a legitimacy determination. EPA believes that these two factors are important in determining legitimacy, but has not made them factors that must be met because the Agency knows that there will be some situations in which a legitimate recycling process does not conform to one or both of these two factors, yet the reclamation activity would still be considered legitimate. EPA does not believe that this will be a common occurrence, but in recognition that legitimate recycling may occur in these situations, EPA has made management of the hazardous secondary materials and the presence of hazardous constituents in the product of the recycling process to be factors that must be considered in the overall legitimacy determination, but not factors that must always be met.

Structure of legitimacy provision. Under the first paragraph of 40 CFR 260.43, hazardous secondary materials that are not legitimately recycled are discarded materials and, therefore, are solid wastes. This paragraph also states that anyone claiming an exclusion at § 261.2(a)(2)(ii), § 261.4(a)(23), § 261.4(a)(24), or § 261.4(a)(25) or using a non-waste determination at § 260.30(d) or (e) must be able to demonstrate that its recycling activity is legitimate. The Agency has included the language “In determining if their recycling is legitimate, persons must address the requirements of § 260.43(b) and must consider the requirements of § 260.43(c)” to make it clear that the factors in paragraph (b) must be met, while the factors in paragraph (c) must be considered and evaluated in determining whether the recycling activity overall is legitimate.

Although there is no specific recordkeeping requirement that goes with the ability to demonstrate legitimacy, EPA would expect that in the event of an inspection or an enforcement action by an implementing agency, the recycler would be able to show how it made the overall legitimacy determination per § 261.2(f).⁸ In the

⁸ Under the transfer-based exclusion being finalized in today's rule, a claimer should also

event that the process does not conform to one of the two factors under § 260.43(c), the facility should be able to show that it considered that factor and why the recycling activity overall remains legitimate. For example, under existing exclusions from the definition of solid waste, reuse of lead contaminated foundry sands may or may not be legitimate, depending on the use. The use and reuse of foundry sands for mold making in a facility's sand loop under normal industry practices has been found to be legitimate because the sand is part of an industrial process where there is little chance of the hazardous constituents being released into the environment or causing damage to human health and the environment when it is kept inside, because there is lead throughout the foundry's process, and because there is a clear value to reusing the sand.⁹ However, in the case of lead contaminated foundry sand used as children's play sand, the same high levels of lead would disqualify this use from being considered legitimate recycling,¹⁰ the same result would be reached when applying Factor 4.

Factor 1—Useful Contribution.

“Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product of the recycling process * * * The hazardous secondary material provides a useful contribution if it (i) contributes valuable ingredients to a product or intermediate; or (ii) replaces a catalyst or carrier in the recycling process; or (iii) is the source of a valuable constituent recovered in the recycling process; or (iv) is recovered or regenerated by the recycling process; or (v) is used as an effective substitute for a commercial product” (40 CFR 260.43(b)(1)).

This factor, one of the two core legitimacy factors, expresses the principle that hazardous secondary materials should contribute value to the recycling process. This factor is an

anticipate that a hazardous secondary material generator may inquire as to whether the reclamation process is legitimate (40 CFR 261.4(a)(24)(v)(B)(1)). Reasonable effort inquiries will vary by generator and may include a request for information or documentation of legitimacy.

⁹ Letter. Elizabeth Cotsworth, Director Office of Solid Waste, to Amy Blankenbiller, American Foundry Society, March 28, 2001. [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/4C9A2EE6E5F859B85256AC5004FC1C2/\\$file/14534.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/4C9A2EE6E5F859B85256AC5004FC1C2/$file/14534.pdf)

¹⁰ One of the profiles in the docket shows that from 1997–1998, a horticultural nursery purchased approximately 375 tons of foundry sand that contained lead above the regulatory limits and that was then bagged and sold as play sand to approximately 40 different retailers. (U.S. EPA, *An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials*, Appendix 2).

essential element to legitimate recycling because real recycling is not occurring if the hazardous secondary materials being added or recovered do not add anything to the process. This factor is intended to prevent the practice of adding to or recovering hazardous secondary materials from a manufacturing operation simply as a means of disposing of them, or recovering only small amounts of a constituent, which EPA would consider sham recycling.

In response to comments received on this factor asking for more clarification on what useful contribution means, the regulatory text includes an explanation of how useful contribution might be achieved in (i) through (v) of § 260.43(b)(1). EPA stresses that the ways in which hazardous secondary materials can add value and be useful in a recycling process are (i) contributing valuable ingredients to a product or intermediate; (ii) replacing a catalyst or carrier in the recycling process; (iii) providing a valuable constituent to be recovered; (iv) being regenerated; or (v) being used as an effective substitute for a commercial product. The preamble to the October 2003 proposed rule gave full descriptions of these five situations (68 FR 61585), but the Agency has also included them in the regulatory text to clarify this factor for the regulated community.

The Agency also wants to restate for clarification that for hazardous secondary materials to meet the useful contribution factor, not every constituent or component of the hazardous secondary material has to make a contribution to the recycling activity. For example, a legitimate recycling operation involving precious metals might not recover all of the components of the hazardous secondary material, but would recover precious metals with sufficient value to consider the recycling process legitimate. In addition, the recycling activity does not have to involve the hazardous component of the hazardous secondary materials if the value of the contribution of the non-hazardous component justifies the recycling activity. One example of this factor from an existing exemption is where hazardous secondary materials containing large amounts of zinc, a non-hazardous component, are recycled into zinc micronutrient fertilizers. In cases where the hazardous component is not being used or recycled, the Agency stresses that the recycler is responsible for the management of any hazardous residuals of the recycling process.

In a situation where more than one hazardous secondary material is used in

a single recycling process and the hazardous secondary materials are mixed or blended as a part of the process, each hazardous secondary material would need to satisfy the useful contribution factor. This requirement prevents situations where a worthless hazardous secondary material could be mixed with valuable and useful hazardous secondary materials in an attempt to disguise and dispose of it. In addition, a situation in which hazardous secondary materials that can be useful to a process are added to that process in much greater amounts than are needed to make the end-product or to otherwise provide its useful contribution would also be sham recycling.

Another way the usefulness of the hazardous secondary material's contribution could be demonstrated is by looking at the efficiency of the material's use in the recycling process—that is, how much of the constituent in a hazardous secondary material is actually being used. As an example, if there is a constituent in the hazardous secondary material that could add value to the recycling process, but, due to process design, most of it is not being recovered but is being disposed of in the residuals, this would be a possible indicator of sham recycling. However, there are certainly recycling scenarios where a low recovery rate could still be legitimate. For example, under an existing exclusion, if the concentration in a metal-bearing hazardous secondary material is low (2%–4%) and a recycling process was able to recover a large percentage of the target metal, this factor could be met and the recycling may be legitimate (depending on the outcome of the analysis of the other legitimacy factors).

One way to use the efficiency of the recycling process to evaluate legitimacy is to compare the process to typical industry recovery rates from raw materials to determine if the recycling process is reasonably efficient. This method should involve an examination of the overall process, not just a single step of the process. For example, if one step in the process recovers a small percentage of the constituent, but the overall process recovers a much larger percentage, the Agency would consider the overall efficiency of the recycling process in determining whether hazardous secondary materials are providing a useful contribution.

There are various ways in which hazardous secondary materials can be useful to a recycling process and various ways are laid out in this discussion of how a facility might demonstrate conformity with this factor. In addition,

we provided a number of different ways a material could contribute to the process in the regulatory text describing this factor. Any one of these would be sufficient to demonstrate that the hazardous secondary material provides a useful contribution. Overall, the Agency considers this factor to be a critical element in determining legitimacy and any recycling process that does not meet this factor cannot be considered legitimate recycling.

Factor 2—Valuable Product or Intermediate. “The recycling process must produce a valuable product or intermediate * * * The product or intermediate is valuable if it is (i) sold to a third party or (ii) used by the recycler or the generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process” (40 CFR 260.43(b)(2)).

This factor, one of the two core legitimacy factors, expresses the principle that the product or intermediate of the recycling process should be a material of value, either to a third party who buys it from the recycler, or to the generator or recycler itself, who can use it as a substitute for another material that it would otherwise have to buy or obtain for its industrial process. This factor is also an essential element of the concept of legitimate recycling because recycling cannot be occurring if the product or intermediate of the recycling process is not of use to anyone and, therefore, is not a real product. This factor is intended to prevent the practice of running a hazardous secondary material through an industrial process to make something just for the purpose of avoiding the costs of hazardous waste management, rather than for the purpose of using the product or intermediate of the recycling activity. Such a practice would be sham recycling.

Most commenters on the proposed rule for this factor stated that this is a useful way of gauging whether recycling is actually taking place, but requested that the Agency clarify the meaning of the term valuable, as it is used in the regulatory text. EPA is repeating and clarifying today that for the purpose of this factor, a recyclable product may be considered “valuable” if it can be shown to have either economic value or a more intrinsic value to the end user. Evaluations of “valuable” for the purpose of this factor should be done on a case-by-case basis, but one way to demonstrate that the recycling process yields a valuable product would be the documented sale of a product of the recycling process to a third party. Such documentation could be in the form of

receipts or contracts and agreements that establish the terms of the sale or transaction. This transaction could include money changing hands or, in other circumstances, may involve trade or barter. A recycler that has not yet arranged for the sale of its product to a third party could establish value by demonstrating that it can replace another product or intermediate that is available in the marketplace. A product of the recycling process may be sold at a loss in some circumstances, but the recycler would have to be prepared to show how the product is clearly valuable to the purchaser.

However, many recycling processes produce outputs that are not sold to another party, but are instead used by the generator or recycler. A product of the recycling process may be used as a feedstock in a manufacturing process, but have no established monetary value in the marketplace. Such recycled products or intermediates would be considered to have intrinsic value, though demonstrating intrinsic value may be less straightforward than demonstrating value for products that are sold in the marketplace. Demonstrations of intrinsic value could involve showing that the product of the recycling process or intermediate replaces an alternative product that would otherwise have to be purchased or could involve a showing that the product of the recycling process or intermediate meets specific product specifications or specific industry standards. Another approach could be to compare the product's or intermediate's physical and chemical properties or efficacy for certain uses with those of comparable products or intermediates made from raw materials.

Some recycling processes may consist of multiple steps that may occur at separate facilities. In some cases, each processing step will yield a valuable product or intermediate, such as when a metal-bearing hazardous secondary material is processed to reclaim a precious metal and is then put through another process to reclaim a different mineral. When each step in the process yields a valuable product or intermediate that is salable or usable in that form, the recycling activity would conform to this factor.

Like the other factors, this factor should be examined and evaluated on a case-by-case basis looking at the specific facts of a recycling activity. If, for instance, a recycling activity produces a product or intermediate that is used by the recycler itself, but does not serve any purpose and is just being used so that the product or intermediate appears valuable, that would be an indicator of

sham recycling. An example of this would be a recycler that reclaims a hazardous secondary material and then uses that material to make blocks or building materials for which it has no market and then "uses" those building materials to make a warehouse in which it stores the remainder of the building materials that it is unable to sell.

Factor 3—Managed as a Valuable Commodity. "The generator and the recycler should manage the hazardous secondary material as a valuable commodity. Where there is an analogous raw material, the hazardous secondary material should be managed, at a minimum, in a manner consistent with the management of the raw material. Where there is no analogous raw material, the hazardous secondary material should be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded" (40 CFR 260.43(c)(1)).

The first of the additional factors that must be considered expresses the principle that hazardous secondary materials being recycled should be managed in the same manner as other valuable materials. This factor requires those making a legitimacy determination to look at how the hazardous secondary material is managed before it enters the recycling process. In EPA's view, a recycler will value hazardous secondary materials that provide an important contribution to its process or product and, therefore, will manage those hazardous secondary materials in a manner consistent with how it manages a valuable feedstock. If, on the other hand, the recycler does not manage the hazardous secondary materials as it would a valuable feedstock, that behavior may indicate that the hazardous secondary materials may not be recycled, but rather released into the environment and discarded.

This factor may be particularly appropriate in the case where a recycler has been paid by a generator to take its materials as a result of the economic incentives in the hazardous secondary materials market. By looking at the management of the hazardous secondary material before it enters the recycler's process, the entity making the legitimacy determination can tell that a material being managed like an analogous raw material is, in fact, valued by the recycler. If the hazardous secondary material is not being managed like a valuable raw material because it is uncontrolled or is being released, that indicates that the fee the recycler obtains for taking the hazardous secondary material may be its only value to that recycler. If the fee received

were the only value to the recycler, it would mean that discard was taking place.

This factor addresses the management of hazardous secondary materials in two distinct situations. The first situation is when a hazardous secondary material is analogous to a raw material which it is replacing in the process. In this case, the hazardous secondary material should be managed prior to recycling similarly to the way the analogous raw materials are managed in the course of normal manufacturing. EPA expects that all parties handling hazardous secondary materials destined for recycling—generators, transporters, intermediate facilities and reclamation facilities—will handle them in generally the same manner in which they would handle the valuable raw materials they might otherwise be using in their process. "Analogous raw material," as defined elsewhere in this preamble, is a raw material for which the hazardous secondary material substitutes and which serves the same function and has similar physical and chemical properties as the hazardous secondary material.

The second situation the factor addresses is the case where there is no analogous raw material that the hazardous secondary material is replacing. This could be either because the process is designed around a particular hazardous secondary material—that is, the hazardous secondary material is not replacing anything—or it could be because of physical or chemical differences between the hazardous secondary material and the raw material that are too significant for them to be considered "analogous."

Hazardous secondary materials that have significantly different physical or chemical properties when compared to the raw material would not be considered analogous even if they serve the same function because it may not be appropriate to manage them in the same way. In this situation, the hazardous secondary material would have to be contained for this factor to be met. A hazardous secondary material is "contained" if it is placed in a unit that controls the movement of that material out of the unit. This requirement is consistent with the idea that normal manufacturing processes are designed to use valuable material inputs efficiently rather than allow them to be released into the environment.

For example, if a manufacturer has an ingredient that is a dry raw material managed in supersacks, the Agency would expect that a hazardous secondary material that is a similar dry

material also would be managed in supersacks or in a manner that would provide equivalent protection. If, on the other hand, the hazardous secondary material was instead managed in an outdoor pile without appropriate controls in place to address releases to the environment, it may indicate that it was not being handled as a valuable commodity. If, however, the manufacturer decided to replace the dry raw material in its process with a liquid having the same constituents, it would not be sufficient, nor would it make sense, for the liquid to be managed in supersacks. Instead, the liquid would have to be “contained” (for example in a tank or surface impoundment).

An important part of this factor is the statement in the regulatory text clarifying that hazardous secondary materials that are released to the environment and not recovered immediately are discarded. Valuable products should not be allowed to escape into the environment through poor management and this factor clarifies that those hazardous secondary materials that do escape (and are not immediately recovered) are clearly discarded. Either a large release or ongoing releases of smaller amounts could indicate that, in general, the hazardous secondary material is not being managed as a valuable product, which could potentially lead to the recycling process being found not to be legitimate. Hazardous secondary materials that are immediately recovered before they disperse into the environment—air, soil, or water—and are reintroduced in the recycling process are not discarded. This determination must be made on a case-by-case basis, however.

EPA has determined that it is appropriate that this factor is one of the two that must be considered rather than a factor that must be met because there are situations in which this factor is not met, but recycling appears to be legitimate. An example of this kind of situation is described in the March 2007 supplemental proposal (72 FR 14199). In the example, a hazardous secondary material that is a powder-like material is shipped in a woven super sack and stored in an indoor containment area, whereas the analogous raw material is shipped and stored in drums. A strict reading of this factor may determine that the hazardous secondary material is not being managed in a manner consistent with the raw material even if the differences in management are not actually impacting the likelihood of a release. By designing the legitimacy factors so that this one has to be considered, but not necessarily met, the

individual facts of situations like the one described here can be evaluated on a case-by-case basis to determine if they affect the legitimacy of the recycling activity.

In summary, given the nature of the legitimacy factors and their need to apply to all the practices covered by the exclusions in this final rule, it is not appropriate or practicable for EPA to develop a specific management standard. In the absence of such a management standard, EPA is using this factor: materials must be managed as analogous raw materials or, if there are no analogous raw materials, the materials must be contained. EPA’s intent with this factor is that hazardous secondary materials are managed in the same manner as materials that have been purchased or obtained at some cost, just as raw materials are. Just as it is good business practice to ensure that raw materials enter the manufacturing process rather than being spilled or released, we would expect hazardous secondary materials to be managed effectively and efficiently in order that their full value to the manufacturing process would be realized.

Factor 4—Comparison of Toxics in the Product. “The product of the recycling process does not (i) contain significant concentrations of any hazardous constituents found in Appendix VIII of part 261 that are not found in analogous products; or (ii) contain concentrations of any hazardous constituents found in Appendix VIII of part 261 at levels that are significantly elevated from those found in analogous products; or (iii) exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit” (40 CFR 260.43(c)(2)).

The second of the additional factors that must be considered requires those making a legitimacy determination to look at the concentrations of the hazardous constituents found in the product made from hazardous secondary materials and compare them to the concentrations of hazardous constituents in analogous products. Any of the following three situations could be an indicator of sham recycling: a product that contains significant levels of hazardous constituents that are not found in the analogous products; a product with hazardous constituents that were in the analogous products, but contains them at significantly higher concentrations; or a product that exhibits a hazardous characteristic that analogous products do not exhibit. Any of these situations could indicate that sham recycling is occurring because in lieu of proper hazardous waste disposal, the recycler could have incorporated

hazardous constituents into the final product when they are not needed to make that product effective in its purpose. This factor, therefore, is designed to determine when toxics that are “along for the ride” are discarded in a final product and, therefore, the hazardous secondary material is not being legitimately recycled.

To evaluate this factor, a recycler will ordinarily compare the product of the recycling process to an analogous product made of raw materials. For example, if a recycling process produced paint, the levels of hazardous constituents in the paint will be compared with the levels of the same constituents found in similar paint made from virgin raw materials.

A recycler is also allowed to perform this evaluation by comparing the hazardous constituents in the hazardous secondary material feedstock with those in an analogous raw material feedstock. If the hazardous secondary material feedstock does not contain significantly higher concentrations of hazardous constituents than the raw material feedstock, then the end product of the recycling process would not contain excess hazardous constituents “along for the ride” either. EPA is clarifying here that this method of showing that the product does not have “toxics along for the ride” is acceptable. There may be cases in which it is easier to compare feedstocks than it is to compare products because the recycler knows that the hazardous secondary material is very similar in profile to the raw material. A comparison of feedstocks may also be easier in cases where the recycler creates an intermediate which is later processed again and may end up in two or more products, when there is no analogous product, or when production of the product of the recycling process has not yet begun.

This factor identifies three ways to evaluate whether or not unacceptable amounts of hazardous constituents are passed through to the products of the recycling process. (As explained above, these methods also could be used to compare the hazardous secondary material feedstock to a raw material feedstock, if the recycler prefers.) The first method specifies that when analogous products made from raw materials do not contain hazardous constituents, the product of the recycling process should not contain significant amounts of hazardous constituents. For example, if paint made from reclaimed solvent contains significant amounts of cadmium, but the same type of paint made from virgin raw materials does not contain cadmium, it could indicate that the cadmium serves

no useful purpose and is being passed through the recycling process and discarded in the product.

The second method addresses analogous products that do contain hazardous constituents and asks whether the concentrations of those hazardous constituents are significantly higher in the product of the recycling process than in the product made from raw materials. Concentrations of hazardous constituents in the product of the recycling process that are significantly higher than in the product made from virgin raw materials could again be an indicator of sham recycling. For example, if a lead-bearing hazardous secondary material was reclaimed and then that material was used as an ingredient in making ceramic tiles and the amount of lead in the tiles was significantly higher than the amount of lead found in similar tiles made from virgin raw materials, the recycler should look more closely at the factors to determine the overall legitimacy of the process.

The third method under this factor is whether the product of the recycling process exhibits a hazardous characteristic that analogous products do not exhibit. Requiring an evaluation of hazardous characteristics ensures that products of the recycling process do not exhibit the characteristics of toxicity, ignitability, corrosivity, or reactivity when the analogous products do not. The Agency believes that most issues associated with “toxics along for the ride” will involve the presence of toxic constituents, which are addressed under the first two parts of the factor. That is, we believe that it is likely that there are few instances where hazardous secondary materials are used in the process and hazardous constituents are not present at significantly higher levels, but the product made from the hazardous secondary material nevertheless exhibits the hazardous characteristic of toxicity when the analogous product does not. It is possible, though, that the use of hazardous secondary materials as an ingredient could cause a product to exhibit a hazardous characteristic, such as corrosivity, that is not exhibited by analogous products.

The Agency has determined that it is appropriate for this factor to be considered in legitimacy determinations under the final exclusions and in the non-waste determinations in this action, but thinks that there may be situations in which the factor is not met but the recycling would still be considered legitimate. An example of this kind of situation that has been addressed by the Agency under the current regulatory

scheme would be in the use and reuse of foundry sands for mold making in a facility's sand loop. Because of repeated exposure to metals in a foundry's process, the sands used to make the molds may have significantly higher concentrations of hazardous constituents than virgin sand. However, because the sand is part of an industrial process where there is little chance of the hazardous constituents being released into the environment or causing damage to human health and the environment when it is kept inside, because there is lead throughout the foundry's process, and because there is a clear value to reusing the sand, this would be an example of a situation where this factor is not met, but it does not affect the legitimacy of the recycling process.

In fact, EPA has concluded as a general matter that foundries engaged in the reuse of lead-containing foundry sands are recycling those sands legitimately and these sands would not be regulated under RCRA Subtitle C (under the circumstances described in EPA's March 2001 memorandum on this subject).¹¹ Thus, while the used sands in the sand loop arguably have toxics-along-for-the-ride, EPA did not raise questions about the legitimacy of the recycling, given the overall nature of the operations. If the used foundry sand were being recycled into a different product, such as a material used on the ground or in children's play sand, the legitimacy determination would be very different and significant levels of metals would likely render the recycling illegitimate. The same conclusions would be reached applying the factors codified in 260.43.

Another example of recycling that may be legitimate although this factor has not been met could be when the material has concentrations of toxics that could be considered “significantly higher” than the analogous product, but meets industry specifications for the product that include specific specifications for the hazardous constituent of concern. Meeting accepted industry standards would be a strong indication that this material is being legitimately recycled. A third example could be in the mining and mineral processing industry. In many mineral processing operations, the very nature of an operation results in hazardous constituents concentrating in

the product as it proceeds through the various steps of the process. In many cases, there is not an analogous product to compare the products of these processes so this factor may not be relevant because of the nature of the operations. As with the above example, if a facility considers a factor and decides that it is not applicable to its process, the Agency suggests that the facility evaluate the presence of hazardous constituents in its product and be prepared to demonstrate both that it considered this factor and the reasons it believes the factor is not relevant.

As discussed in more detail in the comments section of this preamble (section XVIII) and in the response to comments document in the docket, commenters on this factor requested clarification concerning what EPA meant by the terms used in this factor. In response to some of these comments, EPA has made two clarifications in the regulatory text by (1) specifying that the hazardous constituents referred to in the regulation are those that are found in Appendix VIII to 40 CFR part 261 and (2) clarifying that the hazardous characteristics to which EPA is referring to are those in 40 CFR part 261 subpart C.

The Agency also received much comment on the term “significant” and what the Agency intended by this term. EPA has decided to keep the term in the final rule. The alternative to using “significant” or a similarly flexible term to determine when there may be hazardous constituents in the product made from recycled hazardous secondary materials that are not in the analogous products made from raw materials would be to set an absolute standard. In its discussion of legitimacy in the October 2003 proposed rule, EPA discussed possible “bright line” or risk-based approaches as a way to set absolute lines to define “significant” based on either a numerical limit or a risk level (68 FR 61587–61588). EPA recognizes that the “bright line” or the risk-based approach may provide greater clarity and predictability to the regulated community, but that in both cases the Agency would have to establish a line for what is acceptable and the line may either be somewhat arbitrary or it may exclude recycling practices that, if carefully considered, should be considered legitimate. Based on the comments received on those approaches, we are convinced that they would not be workable.

On the other hand, a case-by-case analysis of a recycling process can take into consideration the relevant principles and facts for that activity,

¹¹ Letter, Elizabeth Cotsworth, Director Office of Solid Waste, to Amy Blankenbiller, American Foundry Society, March 28, 2001. [http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/4C9A2EEE6E5F859B85256AC5004FC1C2/\\$file/14534.pdf](http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/4C9A2EEE6E5F859B85256AC5004FC1C2/$file/14534.pdf)

leading to a determination of significance based on the facts of the activity. Because this factor must apply to various different recycling activities, we believe the case-by-case approach is most appropriate.

EPA, therefore, is finalizing its proposed option of using the term "significant" in 40 CFR 260.43(c)(2)(i) and (ii). Evaluating the significance of levels of hazardous constituents in products of the recycling process may involve taking into consideration several variables, such as the type of product, how it is used and by whom, whether or not the elevated levels of hazardous constituents compromise the efficacy of the product, the availability of the hazardous constituents to the environment, and others. For example, if a hazardous secondary material has been reclaimed and made into a product that will be used by children, and that product contains hazardous constituents that are not in analogous products, that product will likely need to be closely scrutinized. On the other hand, low levels of a hazardous constituent in a product from that same reclamation operation that is used as an ingredient in an industrial process or for another industrial application may not be significant and must be evaluated in the context of the product's use.

EPA provided several additional examples in implementing this factor in the October 2003 proposed rule which will be repeated here. If zinc galvanizing metal made from hazardous secondary materials that were reclaimed contains 500 parts per million (ppm) of lead, while the same zinc product made from raw materials typically contains 475 ppm, this difference in concentration would likely not be considered "significant" in the evaluation of this factor. If, on the other hand, the lead levels in the zinc product made from reclaimed hazardous secondary materials were 1,000 ppm, it may indicate that the product was being used to illegally dispose of lead and that the activity is sham recycling, unless other factors would demonstrate otherwise.

In another example, if a "virgin" solvent contains no detectable amounts of barium, while spent solvent that has been reclaimed contains a minimal amount of barium (e.g., 1 ppm), this difference might not be considered significant. If, however, the barium in the reclaimed solvent were at much higher levels (such as 50 ppm), it may indicate discard of the barium and sham recycling.

Unfortunately, because of the variety of possible recycling scenarios under the exclusions and in the non-waste determinations covered by this final

rule, we cannot provide examples for how this factor might work for all possible recycling situations. The Agency stresses that the determination of legitimacy for this factor should consider both the use and the users of the product in addition to the concentration of the hazardous constituents or the presence of a hazardous characteristic, as well as other relevant information. In addition, in some cases, the implementing agency may accept a risk argument from a recycler to show that the recycling activity meets this factor. If the recycler can show that despite elevated concentrations of hazardous constituents, such constituents pose little or no risk to human health or the environment, the implementing agency may consider that as evidence that the elevated concentrations are not significant. *How consideration of economics applies to legitimacy.* Consideration of economics has long been a part of the Agency's concept of legitimacy, as is evident in the Lowrance Memo and earlier preamble text (50 FR 638, January 4, 1985 and 53 FR 522, January 8, 1988; *see also American Petroleum Institute v. EPA ("API II")*, 216 F.3d 50, 57-58 (DC Cir. 2000)). This final rule does not codify specific regulatory language on economics as part of the legitimacy provision, but EPA offers further guidance and clarification on how economics may be considered in making legitimacy determinations, which is similar to the preamble discussion in the March 2007 supplemental proposal.

Specifically, EPA believes that consideration of the economics of a recycling activity can be used to inform and help determine whether the recycling operation is legitimate. Positive economic factors would be a strong indication of legitimate recycling, whereas negative economic factors would be an indication that further evaluation of the recycling operation may be warranted in assessing the legitimacy factors.

Considering the economics of a recycling activity can also inform whether the hazardous secondary material inputs provide a useful contribution and whether the product of recycling is of value. Economic information that may be useful could include (1) the amount paid or revenue generated by the recycler for recycling hazardous secondary materials; (2) the revenue generated from the sale of recycled products; (3) the future cost of processing existing inventories of hazardous secondary materials; and (4) other costs and revenues associated with the recycling operation. The

economics of the recycling transaction may be more of an issue when hazardous secondary materials are sent to a third-party recycler, but even when the hazardous secondary materials are recycled under the control of the generator, the generator must still show that the hazardous secondary materials are, at a minimum, providing a useful contribution and producing a valuable product.

Useful Economic Information

(1) The amount paid or revenue generated by the recycler for recycling hazardous secondary materials is one example of how economic information can help support a legitimacy determination. We have three primary illustrations to exemplify this. First, the basic economic flows can suggest whether the recycling operation will process inputs, including hazardous secondary materials, and produce products over a reasonable period of time, recognizing that there will be lean and slow times. A general accounting of the major costs, revenues, and economic flows for a recycling operation over a reasonable period of time can provide information for considering whether recycling is likely to continue at a reasonable rate, compared to the rate at which inputs are received, or whether it is likely that significant amounts of hazardous secondary materials would be accumulated and then abandoned when the facility closes. Any bona fide sources of revenues would be included in this consideration, such as payments by generators to recyclers for accepting hazardous secondary materials and subsidies supporting recycling. However, in order to have some level of confidence that beneficial products are or will be produced over a reasonable timeframe, we believe that at least some portion of the revenues should be from product sales (or savings due to avoided purchases of products if the hazardous secondary materials are used directly by the recycler). This is consistent with the factor requiring that the hazardous secondary material must be recycled to make a valuable product or intermediate.

Two scenarios illustrate this first example: A recycling operation that generates revenues from the sale of recycled products that greatly exceed the costs of the operation is an indication of a process that turns the hazardous secondary materials into useful products, and is unlikely to over accumulate them. A very different example is an operation that has, relative to its revenues, large inventories of unsold product and large future liabilities in terms of stocks of

unprocessed hazardous secondary materials. This operation could potentially fail the "useful contribution" and "produces a valuable product or intermediate" legitimacy factors, and would draw closer attention to determine whether it is engaged in treatment and/or abandonment in the guise of recycling.

Second, when the economics of a recycling operation that uses hazardous secondary materials to produce and sell final products are similar to a manufacturing operation using raw materials to produce and sell final products, we believe that such an operation is likely to be legitimate. For instance, if the recycler pays for hazardous secondary materials as a manufacturer would pay for raw materials, the recycler sells products from the recycling process as a manufacturer would sell products from manufacturing, and the revenues generated equal or exceed costs, then the hazardous secondary materials appear to be valuable (i.e., the recycler is willing to pay for them) and appear to make a useful contribution to a valuable recycled product.

However, we also recognize that the economics of many legitimate recycling operations that utilize hazardous secondary materials differ from the economics of more traditional manufacturing operations. For example, many recyclers are paid by generators to accept hazardous secondary materials. Generators may be willing to pay recyclers because generators can save money if the recycling is less expensive than disposing of the hazardous secondary materials in landfills or incinerators. Also, some recyclers receive subsidies that may be designed to develop recycling infrastructure and markets or to achieve other benefits of recycling. For instance, the recycling of electronic materials can be legitimate even when the recycler is subsidized for processing the material.

Third, any analysis of the economics of a recycling operation should recognize that a recycler may be able to charge generators and still be a legitimate recycling operation. Because these hazardous secondary materials are hazardous wastes if disposed of, typically the generators' other alternative management option already carries a cost that is based on the existing market for hazardous waste transportation, treatment, and disposal. Hence, unless there is strong competition in recycling markets or the hazardous secondary materials are extremely valuable, a recycler may be able to charge generators simply because alternative disposal options cost more.

Recognizing that such a dynamic exists can assist those making legitimacy determinations in evaluating recycling operations. For example, if a recycler is charging generators fees (or receiving subsidies from elsewhere) for taking hazardous secondary materials and receives a far greater proportion of its revenue from acceptance of the fees than from the sale of its products, both the useful contribution and the valuable product factors may warrant further review, unless other information would indicate that such recycling is legitimate. Fees and subsidies may indicate that the economic situation allows the recycler to charge high fees, regardless of the contribution provided by the inputs, including hazardous secondary materials. In this situation, recyclers may also have an increased economic incentive to over-accumulate or overuse hazardous secondary materials or to manage them less carefully than one might manage more valuable inputs. Additionally, if there is little competition in the recycling market, and/or if acceptance fees seem to be set largely to compete with the relative costs of alternative disposal options rather than to reflect the quality or usefulness of the input to the recycling operation, this may also suggest a closer look at the useful contribution factor.

(2) A comparison of revenue from sales of recycled products to payments by generators is another example of how economic information can help support an evaluation of "valuable product." It is possible that product sales revenues could be dwarfed by the acceptance of fees because markets for particular products are highly competitive or because high alternative disposal costs allow for high acceptance fees. However, relatively low sales revenues could also require a review of other factors, such as whether product sales prices are lower than other comparable products, products are being stockpiled rather than sold, or very little product is being produced relative to the amount of inputs to the recycling operation. These indicators may suggest that the product of the recycling process is not valuable and, thus, sham recycling may be occurring.

(3) A consideration of the future cost of processing or alternatively managing existing inventories of hazardous secondary material inputs is another example of how economic information can inform a legitimacy determination. When hazardous secondary materials make a significant useful contribution to the recycling process, a recycler will have an economic incentive to process the input materials relatively quickly

and efficiently, rather than to maintain large inventories. While recyclers often need to acquire sufficient amounts of hazardous secondary materials to make it economically feasible to recycle them, there should be little economic incentive to over-accumulate such materials that make a useful contribution. Overly large accumulations of input materials may indicate that the hazardous secondary materials are not providing a useful contribution or that the recycler is increasing its future costs of either processing or disposing of the material, and may be faced with an unsound recycling operation in the future. However, it is important to keep in mind that possible explanations for this may exist. For example, the recycler may have acquired a large stock of hazardous secondary materials because the price was unusually low or perhaps the hazardous secondary materials are generated episodically and the recycler has few opportunities to acquire them.

(4) An analysis of costs and revenues specific to on-site recycling is an additional, albeit specific, example of economic information to consider. When recycling is conducted under the control of the generator, the recycler may not account formally for some of the costs and savings of the operation. Still, when deciding whether to undertake or continue the recycling operation or to utilize alternative outside recycling or disposal options, the on-site recycler (under the control of the generator) will evaluate the basic economic factors as a part of doing business. One such factor could be an accounting of the costs of virgin materials avoided by using hazardous secondary materials. Similarly, sales of recycled products under the control of the generator that are sold to an external market may support the valuable product criterion.

3. Legitimacy Policy for Other Exclusions and Exemptions

EPA is codifying a legitimacy provision in this final rule as part of the final exclusions and non-waste determinations, but stresses that EPA retains its long-standing policy that all recycling of hazardous secondary materials must be legitimate. If a facility is engaged in sham recycling, this, by definition, is not real recycling and that material is being discarded. The legitimacy policy continues to apply to all hazardous secondary materials that are excluded or exempted from Subtitle C regulation because they are recycled and to recyclable hazardous wastes that remain subject to the hazardous waste regulations. This policy is well-

understood throughout the regulated community and among the state implementing agencies.

EPA believes that the four legitimacy factors being codified in 40 CFR 260.43 are substantively the same as the existing legitimacy policy. These factors are a simplification and clarification of the policy statements in the 1989 Lowrance Memo and in various Definition of Solid Waste **Federal Register** notices.

Nonetheless, to avoid confusion among the regulated community and state and other implementing regulatory agencies about the status of recycling under the existing exclusions, the Agency has decided not to codify the legitimacy factors for existing exclusions and, thus, states and other implementing agencies will continue to apply the existing legitimacy policy to all recycling as they have in the past in order to ensure that recycling is real and not a sham. The legitimacy provisions of the final rule are codified only for the exclusions and non-waste determinations being promulgated today. In developing the codified legitimacy language, we did not intend to raise questions about the status of legitimacy determinations that underlie existing exclusions from the definition of solid waste, or about case-specific determinations that have been made by EPA or the states. Current exclusions and other prior solid waste determinations or variances, including determinations made in letters of interpretation and inspection reports, remain in effect.

A number of commenters raised concerns with the application of the codified legitimacy factors to these existing waste-specific and industry-specific exclusions. In particular, as we noted in the October 2003 proposal, EPA has examined in depth a number of waste-specific and industry-specific recycling activities and has promulgated specific regulatory exclusions or provisions that address the legitimacy of these practices in much more specific terms than the general factors being finalized as part of the exclusions and non-waste determination process today. One example is the regulation for zinc fertilizers made from recycled hazardous secondary materials. In the zinc fertilizer regulation, among the requirements established by EPA are specific numerical limits on five heavy metal contaminants and dioxins in the zinc fertilizer product exclusion at 40 CFR 261.4(a)(21). Other examples are shredded circuit boards excluded under 40 CFR 261.4(a)(14), which must be free of mercury switches, mercury relays and nickel-cadmium and lithium batteries,

and comparable fuels excluded under 40 CFR 261.4(a)(16), which must meet specific levels for hazardous constituents. The conditions developed for the recycling exclusions in § 261.4(a) were found to be necessary under material-specific rulemakings that determined when the particular hazardous secondary material in question is not a solid waste. When EPA originally made the decision that these materials are not solid waste, the Agency took into account the relevant factors about the hazardous secondary materials, including how the material was managed and what toxic chemicals were present. By limiting the codified legitimacy provision to the exclusions and non-waste determinations in today's final rule, EPA is avoiding any implication that we are revisiting these determinations.

However, at the same time, these material-specific exclusions from the definition of solid waste do not negate the basic requirement that the hazardous secondary material must be "legitimately" recycled. Recycling that is not legitimate is not recycling at all, but rather "sham recycling"—discard in the guise of recycling.

For example, under EPA's historic guidance, particularly questions (1) and (3) in OSWER Directive 9441.1989(19), the "Lowrance Memo," a facility could not plausibly claim the zinc fertilizer product exclusion at 40 CFR 261.4(a)(21) for a hazardous secondary material that contained absolutely no or minimal levels of zinc, even if all the conditions of the zinc fertilizer exclusion were met. The exclusion was developed to encourage legitimate recycling of zinc-containing hazardous secondary materials, not to allow any hazardous waste to be discarded to purported fertilizer in the name of recycling when the hazardous secondary material provided no recognizable benefit to the product.

Similarly, if a facility accepted zinc-containing hazardous waste, claiming to make zinc fertilizer, but failed to produce a product that was actually sold or was otherwise valuable, such a process would not be legitimate recycling (under question (4) of the Lowrance Memo in the historic legitimacy guidance), even if the management conditions or the constituent levels in the zinc fertilizer exclusion were met. The consequences of the latter example are illustrated in one of the damage cases in the environmental problems study. A facility whose primary business was mixing electric arc furnace dust (K061) with agricultural lime for sale as a micronutrient lost its customers and

could not sell its product. However, the facility continued to accept EPA Hazardous Waste K061, and, in approximately seven months, the facility had accepted over 60,000 tons of this hazardous waste and stored it on the ground in piles up to 30 feet high, with no prospect of it being used to produce a product and, thus, legitimately recycled. While the initial recycling of the K061 hazardous waste was legitimate, when the facility failed to produce a product that was actually sold, the K061 could no longer be considered legitimately recycled.

In summary, all hazardous secondary materials recycling and hazardous waste recycling, whether such recycling remains under hazardous waste regulations or is excluded from the definition of solid waste, must be legitimate. This has been our long-standing policy and it is well understood throughout the regulated community and the implementing state regulatory agencies. In order to be clear that the legitimacy provision codified at 40 CFR 260.43 under today's final rule would not affect how the current legitimacy policy applies to recycling under existing exclusions, the legitimacy provision at 40 CFR 260.43 is explicitly designated as applying only to the exclusions and non-waste determinations being finalized in today's rule.

EPA also maintains that the legitimacy provision being finalized as part of the exclusions and non-waste determinations is substantively the same as existing policy because we developed the legitimacy factors in 40 CFR 260.43 by closely examining the questions and sub-questions in the Lowrance Memo and in the **Federal Register** preambles and converting them into four more direct questions. The following explanations show how each of the four factors is derived from the Lowrance Memo and other existing policy statements.

Factor 1—The Hazardous Secondary Material Provides a Useful Contribution
Relevant Lowrance Memo Questions

(1) Is the secondary material similar to an analogous raw material or product?

Is much more of the secondary material used as compared with the analogous raw material/product it replaces? Is only a nominal amount of it used?

Is the secondary material as effective as the raw material or product it replaces?

(3) What is the value of the secondary material?

Is it listed in industry news letters, trade journals, etc.?

Does the secondary material have economic value comparable to the raw material that normally enters the process?

Discussion

The factor addressing “useful contribution” has been distilled from and clarifies concepts in the Agency’s existing policy for legitimate recycling. For example, the preamble to the January 4, 1985, recycling regulations noted that if a hazardous secondary material is “ineffective or only marginally effective for the claimed use, the activity is not recycling but surrogate disposal.” Similarly, the January 8, 1988, proposed rule discussed “how much energy or material value each waste contributes to the recycling purpose.”

In the 1989 Lowrance Memo, the issue of effectiveness was addressed by the following questions: “Is much more of the secondary material used as compared with the analogous raw material/product it replaces?”; “Is only a nominal amount used?”; and “Is the secondary material as effective as the raw material or product it replaces?” The memo also addressed the value of the secondary material by asking, “Is [the secondary material] listed in industry news letters, trade journals, etc.?” and “Does the secondary material have economic value comparable to the raw material that normally enters the process?”

Factor 1 takes these broad concepts of effectiveness and value and turns them into the requirement that the hazardous secondary material in the process must provide a “useful contribution” to the recycling process, that is, it must actually be adding something to the process into which they are being put. The factor provides more specifics than the Memo or preamble by providing a list of ways that a hazardous secondary material could provide that useful contribution to the process. EPA requested comment on other ways in which a hazardous secondary material might provide a useful contribution, but did not receive any from commenters.

Factor 2—The Recycling Process Produces a Valuable Product or Intermediate**Relevant Lowrance Memo Questions****(4) Is there a guaranteed market for the end product?**

Is there a contract in place to purchase the “product” ostensibly

produced from the hazardous secondary materials?

If the type of recycling is reclamation, is the product used by the reclaimer? The generator? Is there a batch tolling agreement? (Note that since reclaimers are normally TSDFs, assuming they store before reclaiming, reclamation facilities present fewer possibilities of systemic abuse).

Is the reclaimed product a recognized commodity?

Are there industry-recognized quality specifications for the product?

Discussion

Factor 2 distills several of the questions posed by the 1989 legitimacy memo. The memo addressed the value of recycled products sold to third parties by posing the questions, “Is there a guaranteed market for the end product?” and “Is there a contract in place to purchase the “product” ostensibly produced from the hazardous secondary materials?” The memo addressed the value of recycled products used by the recycler or the generator as process ingredients by posing the questions, “Is the product used by the (recycler)? The generator? Is there a batch tolling agreement?” The “usefulness” of a recycled material was addressed by posing the questions, “Is the (recycled) product a recognized commodity?” and “Are there industry-recognized quality specifications for the product?”

The language of the factors in the legitimacy provision in the final rule reflects these concepts in a concrete manner by, for example, making it clear that the indicator of legitimacy is that a recycling process results in a valuable product or intermediate and that the product or intermediate is valuable if it is “(i) sold to a third party or (ii) used by the recycler or the generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process.”

The Lowrance Memo posed additional questions aimed at distinguishing recycling operations that involve direct use or reuse of secondary materials from recycling operations that involve reclamation. These concepts, however, are not particularly relevant to distinguishing legitimate from sham recycling and are not generally used by implementing agencies in legitimacy analyses, so we therefore did not attempt to capture them in the codified regulatory text.

Factor 3—Managed as a Valuable Commodity**Relevant Lowrance Memo Questions****(5) Is the secondary material handled in a manner consistent with the raw material/product it replaces?**

Is the secondary material stored in a similar manner as the analogous raw material (*i.e.*, to prevent loss?)

Are adequate records regarding the recycling transactions kept?

Do the companies involved have a history of mismanagement of hazardous wastes?

Discussion

Although worded somewhat differently, this factor is essentially the same as the fifth question in the Lowrance Memo. Similarly, the 1985 preamble asked whether recyclable hazardous secondary materials were “handled in a manner consistent with their use as raw materials or commercial product substitutes.”

In one respect, however, Factor 3 is less restrictive than the Lowrance Memo—the memo posed an additional question, “Is the secondary material stored on the land?” This could be read as implying that storage on the land is an indication of sham recycling. Of course, this question is just one of the more than two dozen questions from the Lowrance memo, that, when taken as a whole, help draw the distinction between legitimate recycling and sham recycling. Also, the Agency is aware of situations where storage of raw materials on the land is a normal part of the manufacturing process. Thus, Factor 3 does not identify land storage as a specific indicator of sham recycling.

Factor 4—The Product Does Not Contain Significant TARs**Relevant Lowrance Memo Questions****(1) Is the secondary material similar to an analogous raw material or product?**

Does it contain Appendix VIII constituents not found in the analogous raw material/product (or at higher levels)?

Does it exhibit hazardous characteristics that the analogous raw material/product would not?

Does it contain levels of recoverable material similar to the analogous raw material/product?

(6) Other Relevant Factors

Are the toxic constituents actually necessary (or of sufficient use) to the product or are they just “along for the ride”?

Discussion

The Lowrance Memo and the definition of solid waste preamble statements from which it was developed have addressed the question of “toxics along for the ride” in a slightly different way than the factor in the final rule. The Lowrance Memo, for example, allows for examination of toxic constituents in the hazardous secondary material destined for recycling and/or in the recycled product. As noted above, Factor 4 is intended to primarily address the question of “toxics along for the ride” in the products of recycling. We believe that the presence of toxic constituents in recyclable hazardous secondary materials is less relevant to assessing the legitimacy of recycling, primarily because much if not most recycling (as well as manufacturing) involves removing or destroying such harmful materials. As reflected in the factor, the central question is whether or not (and in what amount) hazardous constituents pass through the recycling process and become incorporated into the products of recycling. While some may argue that the approach of focusing on toxic constituents in recycled products may be somewhat less restrictive than the policy it would replace, we believe it is a better indicator of legitimate recycling. In cases where a recycler would prefer to compare the virgin feedstock to the hazardous secondary material going into the process, the rule makes it clear that this would be an adequate stand-in for the comparison described in the regulatory text.

Lowrance Memo Questions Not Covered in Factors

A few of the questions from the Lowrance Memo are not covered by the factors in the regulatory text for the legitimacy provision in § 260.43. The above discussions address why EPA believes this is appropriate. In the case of the role economics can play in a legitimacy determination, this preamble has discussed how it can inform an overall legitimacy determination, but there is no particular factor on economics.

Relevant Lowrance Memo Questions

(2) What degree of processing is required to produce a finished product?

Can the secondary material be fed directly into the process (*i.e.*, direct use) or is reclamation (or pretreatment) required?

How much value does final reclamation add?

Is the secondary material stored on the land? (a sub-question of (5) Is the

secondary material handled in a manner consistent with the raw material/product it replaces?)

(6) Other Relevant Factors

What are the economics of the recycling process? Does most of the revenue come from charging generators for managing their wastes or from the sale of the product?

For the reasons outlined above, EPA believes that the legitimacy factors in 260.43 are equivalent to the existing legitimacy policy that applies to all recycling.

X. Non-Waste Determination Process

A. What Is the Purpose of This Provision?

The purpose of the non-waste determination process is to provide persons with an administrative procedure for receiving a formal determination that their hazardous secondary materials are not discarded and, therefore, are not solid wastes when recycled. This process is available in addition to the solid waste exclusions in today's rule. Once a non-waste determination has been granted, the hazardous secondary material is not subject to the limitations and conditions discussed elsewhere in today's rule (*e.g.*, prohibition on speculative accumulation, storage standard, or, for the transfer-based exclusion, recordkeeping, reasonable efforts, financial assurance, and export notice and consent); however, the regulatory authority may specify that a hazardous secondary material meet certain conditions and limitations as part of the non-waste determination.

The non-waste determination process is voluntary. Facilities may choose to continue to use the self-implementing portions of any applicable waste exclusions and, for the vast majority of cases, where the regulatory status of the hazardous secondary material is evident, self-implementation will still be the most appropriate approach. In addition, facilities may continue to contact EPA or the authorized state to ask for informal assistance in making these types of non-waste determinations. However, for cases where there is ambiguity about whether a hazardous secondary material is a solid waste, today's formal process can provide regulatory certainty for both the facility and the implementing agency.

EPA is finalizing two types of non-waste determinations:¹² (1) A

¹² In the March 2007 supplemental proposal, EPA also proposed (but is not finalizing) a third type of non-waste determination for hazardous secondary materials reclaimed under the control of the

determination for hazardous secondary materials reclaimed in a continuous industrial process; and (2) a determination for hazardous secondary materials indistinguishable in all relevant aspects from a product or intermediate. The process for applying for a non-waste determination is found at 40 CFR 260.34.

The Agency confirms today's process for non-waste determinations is not intended to affect any existing exclusion under 40 CFR 261.4. The process is also not intended to affect any variance already granted under 40 CFR 260.30 or other EPA or authorized state determination. In other words, generators or reclaimers operating under an existing exclusion, variance, or other EPA, or authorized state, determination do not need to apply for a formal non-waste determination under today's rule. This process also does not affect the authority of EPA or an authorized state to revisit past determinations according to appropriate procedures, if they so choose.

B. Scope and Applicability

Hazardous secondary materials presented for a non-waste determination must be legitimately recycled and, therefore, must meet the legitimacy factors under 40 CFR 260.43 of today's rule. For further discussion of legitimacy and the factors to be considered, see section IX of today's preamble.

In addition, today's rule limits non-waste determinations to reclamation activities and does not apply to recycling of “inherently waste-like” materials (40 CFR 261.2(d)); recycling of materials that are “used in a manner constituting disposal,” or “used to produce products that are applied to or placed on the land” (40 CFR 261.2(c)(1)); or for “burning of materials for energy recovery” or materials “used to produce a fuel or otherwise contained in fuels” (40 CFR 261.2(c)(2)). Today's rule does not affect how these recycling practices are regulated.

C. Types of Non-Waste Determinations

1. Non-Waste Determination for Hazardous Secondary Materials Reclaimed in a Continuous Industrial Process

As discussed earlier in today's preamble, previous court decisions have indicated that hazardous secondary

generator via a tolling arrangement or similar contractual arrangement. EPA, however, did not identify any comments that described specific types of contractual arrangements that would meet the proposed criteria for this non-waste determination. See section XIX for more information.

materials that are reclaimed in a continuous industrial process are not discarded and, therefore, not a solid waste. EPA believes, in most instances, hazardous secondary materials reclaimed in a continuous process would be excluded under today's self-implementing exclusions. However, production processes can vary widely from industry to industry and it is possible that the regulatory status of certain materials may be unclear under a self-implementing exclusion (including those exclusions finalized today). Thus, to determine whether individual hazardous secondary materials are reclaimed in a continuous industrial process, and, therefore, not a solid waste, EPA has developed the non-waste determination process to evaluate case-specific fact patterns.

EPA is finalizing four criteria for making the non-waste determination for hazardous secondary materials reclaimed in a continuous industrial process. The first is the extent that the management of the hazardous secondary material is part of the continuous production process and is not waste treatment. At one end of the spectrum, if the hazardous secondary material is handled in a manner identical to virgin feedstock, then it would appear to be fully integrated into the production process. At the other end of the spectrum, hazardous secondary materials that are indisputably discarded prior to being reclaimed are not a part of the continuous primary production process, (*“AMC IP”*), 907 F. 2d 1179 (DC Cir. 1990) (listed wastes managed in units that are part of wastewater treatment units are discarded materials (and solid wastes), especially where it is not clear that the industry actually reuses the materials). For cases that lie within the spectrum, persons applying for a non-waste determination need to provide sufficient information about the production process to demonstrate that the management of the hazardous secondary material is an integral part of the production process and is not waste treatment. It is important to note that this non-waste determination is not necessarily limited to cases under the control of the generator. For example, hazardous secondary materials that are hard piped from one facility to another facility that is under separate control would appear to be fully integrated into the production process and may therefore be eligible for this non-waste determination, provided the other criteria are met.

The second criterion examined under this non-waste determination is the capacity of the production process to

use the hazardous secondary material in a reasonable time frame and ensure that it will not be abandoned. This criterion can be satisfied by a consideration of past practices, market factors, the nature of the hazardous secondary material, or any contractual arrangements. Abandonment of stockpiled hazardous secondary materials is one way that discard can occur at recycling operations and is one of the major causes of environmental problems. As indicated in the recycling studies, 69 of the 208 incidents of environmental damage involve abandonment of the hazardous secondary materials as the primary cause of damage. For today's self-implementing exclusions for hazardous secondary materials, EPA is using speculative accumulation (as defined in 40 CFR 261.1(c)(8)) as the method for determining when a hazardous secondary material is discarded by abandonment. For the non-waste determination, a person does not need to demonstrate that the hazardous secondary material meets the speculative accumulation limits per 40 CFR 261.1(c)(8), but he must provide sufficient information about the hazardous secondary material and the process to demonstrate that the hazardous secondary material will in fact be reclaimed in a reasonable time frame and will not be abandoned. EPA is not explicitly defining “reasonable time frame” because such time frames could vary according to the hazardous secondary material and industry involved and, therefore, determining this time frame should be made on a case-specific basis. However, a person may still choose to use the speculative accumulation time frame as a default.

The third criterion for this non-waste determination is whether the hazardous constituents in the hazardous secondary material are reclaimed rather than released to the air, land, or water at significantly higher concentrations from either a statistical or from a health and environmental risk perspective than would otherwise be released by the production process. To the extent that the hazardous constituents are an extension of the original hazardous secondary material, their release to the environment is an indicator of discard. The Agency recognizes that normal production processes may also result in a certain level of releases and, in evaluating this criteria, would not deny a non-waste determination if the increase in releases is not significantly different from either a statistical or risk perspective. However, when unacceptably high levels of the hazardous constituents in the hazardous

secondary material are released to the environment rather than reclaimed, then that material (or at least the portion of the material that is of most concern) is not in fact being “reclaimed in a continuous industrial process.”

The fourth and final criterion for this non-waste determination includes any other relevant factors that demonstrate the hazardous secondary material is not discarded. This catch-all criterion is intended to allow the person to provide any case-specific information deemed important and relevant in making the case that the hazardous secondary material is not discarded and, therefore, not a solid waste.

2. Non-Waste Determination for Hazardous Secondary Materials Indistinguishable in All Relevant Aspects From a Product or Intermediate

Although the courts have indicated that hazardous secondary materials recycled within a continuous industrial process are not discarded and, therefore, are not solid wastes, they have also said that hazardous secondary materials destined for recycling in another industry are not automatically discarded. However, there may be some situations where the regulatory status of a certain material is unclear under a self-implementing exclusion and thus may benefit from a non-waste determination that evaluates case-specific fact patterns. EPA is finalizing five criteria for making a non-waste determination for hazardous secondary materials indistinguishable in all relevant aspects from a product or intermediate.

The first criterion for this non-waste determination is consideration of likely markets for the hazardous secondary material (e.g., based on the current positive value of the hazardous secondary material, stability of demand, and any contractual arrangements). This evaluation of market participation is a key element for determining whether companies view these hazardous secondary materials like products rather than negatively-valued wastes. EPA's market forces study on how market incentives affect the management of hazardous secondary materials indicates that both high value and stable markets are strong incentives to refrain from over-accumulating hazardous secondary materials, thus maximizing the likelihood that the hazardous secondary materials will be reclaimed and not abandoned.

The second criterion for this non-waste determination is the chemical and physical identity of the hazardous secondary material and whether it is comparable to commercial products or

intermediates. This “identity principle” is a second key factor that the Court in *Safe Foods* found useful in determining whether a material is indistinguishable from a product. It is important to note that the identity of a material can be comparable to a product without being identical. However, to qualify for a non-waste determination, any differences between the hazardous secondary material in question and commercial products or intermediates should not be significant from either a statistical or from a health and environmental risk perspective.

The third criterion for making this non-waste determination is the capacity of the market to use the hazardous secondary material in a reasonable time frame and ensure that it will not be abandoned. Abandonment of stockpiled hazardous secondary materials is one way that discard can occur at recycling operations and is one of the major causes of environmental problems (a key finding from the recycling studies discussed earlier). For today’s self-implementing exclusions for hazardous secondary materials, EPA is using speculative accumulation (as defined in 40 CFR 261.1(c)(8)) as the method for determining when a hazardous secondary material is discarded by abandonment. For the non-waste determination, a person does not need to demonstrate that the hazardous secondary material meets the speculative accumulation limits per 40 CFR 261.1(c)(8), but he must provide sufficient information about the hazardous secondary material and the market demand for it to demonstrate that the hazardous secondary material will in fact be reclaimed in a reasonable time frame and will not be abandoned. EPA is not explicitly defining “reasonable time frame” because such time frames could vary according to the hazardous secondary material and industry involved, and therefore determining this time frame should be made on a case-specific basis. However, a person may still choose to use the speculative accumulation time frame as a default.

The fourth criterion for this non-waste determination is whether the hazardous constituents in the hazardous secondary materials are reclaimed rather than released to the air, land, or water at significantly higher concentrations from either a statistical or from a health and environmental risk perspective than would otherwise be released by the production process. The Agency believes that to the extent that the hazardous constituents are an extension of the original hazardous secondary material, their release to the

environment is a possible indicator of discard. The Agency recognizes that normal production processes also result in a certain level of releases and, in evaluating this criteria, would not deny a non-waste determination if the increase in releases is not significant from either a statistical or a health and environmental risk perspective. However, when unacceptably high levels of the hazardous constituents in the hazardous secondary material are released to the environment rather than reclaimed, then that material (or at least the portion of the hazardous secondary material that is of most concern) is not being handled as a commercial product or intermediate.

As with the non-waste determination for hazardous secondary materials reclaimed in a continuous industrial process, the fifth and final criterion for this non-waste determination includes any other relevant factors that demonstrate the hazardous secondary material is not discarded. This catch-all criterion is intended to allow the person to provide any case-specific information it deems important and relevant in making the case that its hazardous secondary material is not discarded.

D. Non-Waste Determination Process

The process for the non-waste determination is the same as that for the solid waste variances found in 40 CFR 260.30. In order to obtain a non-waste determination, a facility that manages hazardous secondary materials that would otherwise be regulated under 40 CFR part 261 as either a solid waste or an excluded waste must apply to the Administrator or the authorized state per the procedures described in 40 CFR 260.33, which EPA is amending today to apply to non-waste determinations. The application must address the relevant criteria discussed in detail above. The Administrator will evaluate the submission and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement or radio broadcast in the locality where the facility is located. The Administrator will accept comment on the tentative decision for 30 days, and may also hold a public hearing. The Administrator will issue a final decision after receipt of comments and after the hearing (if held). If the application is denied, the facility may still pursue a solid waste variance or exclusion (for example, one of the solid waste variances under 40 CFR 260.30 or solid waste exclusions under 40 CFR 261.4).

After a formal non-waste determination has been granted, if a

change occurs that affects how a hazardous secondary material meets the relevant criteria contained in 40 CFR 260.34, persons must re-apply to the Administrator for a formal determination that the hazardous secondary material continues to meet the relevant criteria and is not discarded and not a solid waste.

As discussed in more detail in section XX of today’s preamble, under section 3006 of RCRA, EPA would authorize states to administer the non-waste determinations as part of their base RCRA program. Because states are not required to implement federal requirements that are less stringent or narrower in scope than the current requirements, authorized states are not required to adopt the non-waste determination process. Ordinarily this provision could not go into effect in an authorized state until the state chooses to adopt it. However, because the non-waste determination process is a formalization of determinations that states may already perform, states that have not formally adopted this non-waste determination process may participate if the following conditions are met: (1) The state determines that the hazardous secondary material meets the criteria in either paragraph (b) or (c) of 40 CFR 260.34; (2) the state requests EPA to review its determination; and (3) EPA approves the state determination. In addition, of course, states may continue to make regulatory determinations under their authorized state regulations, as they do now.

E. Enforcement

If a regulatory authority determines that a hazardous secondary material is not a solid waste through the non-waste determination process, the hazardous secondary material is not subject to the RCRA Subtitle C hazardous waste requirements. However, as part of this process, the applicant has an obligation to submit, to the best of his ability, complete and accurate information. If the information in the application is found to be incomplete or inaccurate and, as a result, the hazardous secondary material does not meet the criteria for a non-waste determination, then the material may be subject to the RCRA Subtitle C requirements and EPA or the authorized state could choose to bring an enforcement action under RCRA section 3008(a). Moreover, if the person submitting the non-waste determination is found to have knowingly submitted false information, then he also may be subject to criminal penalties under RCRA section 3008(d).

Once a non-waste determination has been granted, the applicant is obligated

to ensure the hazardous secondary material continues to meet the criteria of the non-waste determination, including any conditions specified therein by the regulatory authority. If a change occurs that affects how a hazardous secondary material meets the relevant criteria and (if applicable) any conditions as specified by the regulatory authority and the applicant fails to re-apply to the Administrator for a formal determination, the hazardous secondary material may be determined to be a solid and hazardous waste and subject to the RCRA Subtitle C hazardous waste requirements.

XI. Effect on Other Exclusions

The final rule will not supersede any of the current exclusions or other prior solid waste determinations or variances, including determinations made in letters of interpretation and inspection reports. If a hazardous secondary material has been determined not to be a solid waste, for whatever reason, such a determination will remain in effect, unless the regulatory agency decides to revisit the regulatory determination under their current authority. In addition, if a hazardous secondary material has been excluded from hazardous waste regulations—for example, under the Beville exclusion in 40 CFR 261.4(b)(7)—the regulatory status of that material will not be affected by today's rule.

In the October 2003 proposal, EPA proposed a number of specific “conforming changes” to existing exclusions (68 FR 61578–61580). The purpose of these conforming changes was to simplify and clarify the regulations. EPA did not intend to make any substantive changes as to how currently excluded materials would need to be managed or regulated. However, comments to the proposed changes were overwhelming in favor of retaining the existing exclusions. These existing exclusions are familiar to both the states and the regulated community, and making wholesale adjustments, it appears, would have had unintended consequences in many cases.

Thus, in the March 2007 supplemental proposal, we proposed to retain the existing exclusions exactly as written (72 FR 14205). In addition, recycling of such hazardous secondary materials at new facilities, or at existing facilities that are not currently operating under the terms of an existing exclusion, would also be subject to the existing applicable regulatory exclusions, rather than the proposed exclusions.

We did request comment, however, on the option of allowing a regulated

entity to choose which exclusion it is subject to in those cases where more than one exclusion could apply and, if so, whether that entity should be required to document the choice made. One state supported allowing a regulated entity to choose if that entity documents its choice and the few comments that were submitted by industry on this matter, generally, preferred to have the option to choose which exclusion they would be subject to. EPA has determined, however, that the conditions that were developed for the existing exclusions were found to be necessary under case-specific rulemakings that determined when the hazardous secondary material in question is not a solid waste. For example, broken cathode ray tubes must be transported in closed containers (40 CFR 261.4(a)(22)) and shredded circuit boards need to be free of mercury switches and relays (40 CFR 261.4(a)(14)).

Therefore, the final rule requires that hazardous secondary materials specifically subject to the existing exclusions must continue to meet the existing conditions or requirements in order to be excluded from the definition of solid waste. Moreover, industry and the states are familiar with these requirements and EPA believes that changing them would only lead to confusion in the regulated community. In addition, the current exclusions would apply to facilities not currently operating under terms of an existing exclusion. They would also be subject to the conditions for that exclusion if they decide to recycle the particular excluded wastes in the future.

In the March 2007 supplemental proposal, we also requested comment on whether any specific regulatory exclusion would need revision in order to avoid confusion or contradictions. With a few exceptions, public comments did not discuss this issue in depth. Only three states commented on this issue. One supported the requirement that currently-excluded facilities must stay under their specific exclusions and two requested clarifications on how such a requirement would be implemented. Industry, in a few cases, had specific comments on the provisions already in place.

One commenter asked that EPA clarify that wood preserving waste be allowed to be reclaimed off-site under the new exclusion. This would be an expansion of the existing exclusion, which is limited to on-site reuse. Another comment was in regards to whether hazardous secondary materials currently regulated under the closed-

loop exclusion would be eligible for the new exclusions that do not require closed-loop operations. The third comment, from both reclaimers of spent lead-acid batteries and spent lead-acid battery manufacturers requested that EPA clarify that spent lead-acid battery recycling continue to be regulated under 40 CFR 266.80 or as a universal waste at 40 CFR part 273. The mining industry requested that EPA clarify that the proposed exclusions would have “no impact” on 40 CFR 266.70 (precious metals exclusion) and 40 CFR 266.100(d) and (g) (conditional exclusions from boiler and industrial furnace (BIF) regulations for “smelting, melting, and refining furnaces” and precious metals recovery furnaces).

A. Solid Waste Exclusions Found in 40 CFR 261.4(a)

Under today's final rule, if a hazardous secondary material is subject to material-specific management conditions under 40 CFR 261.4(a) when reclaimed, such a material is not eligible for the final rule exclusions. For most of the exclusions in 40 CFR 261.4(a), this provision will have no practical effect because the current exclusion either (1) has no conditions, (2) has conditions that overlap with those of the final rule exclusions (i.e., no speculative accumulation, or land disposal),¹³ (3) does not involve reclamation, or (4) involves hazardous secondary materials burned for energy recovery or used in a manner constituting disposal. These include the exclusions in 40 CFR 261.4(a)(1)–(7), 40 CFR 261.4(a)(10)–(13), 40 CFR 261.4(a)(15)–(16), 40 CFR 261.4(a)(18), and 40 CFR 261.4(a)(20)–(21).

The exclusions in 40 CFR 261.4(a) that are for a specific material and include conditions that are more specific than those included for the exclusions being finalized today are those for (1) spent wood preserving solutions (40 CFR 261.4(a)(9)), (2) shredded circuit boards (40 CFR 261.4(a)(14)), (3) mineral processing spent materials (40 CFR 261.4(a)(17)), (4) spent caustic solutions from petroleum refining liquid treating processes (40 CFR 261.4(a)(19)), and (5) cathode ray tubes (40 CFR 261.4(a)(22)). For each of these cases, EPA has made a material-specific determination of

¹³ “Disposal” is defined in 40 CFR 260.10 as “the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.” Thus a hazardous secondary material that is land disposed would presumably not meet the “contained” standard.

when such a material is not discarded and therefore not a solid waste and such a determination is more appropriately applied to these materials than the general conditions of today's final rule. The conditions of the material-specific exclusion essentially help define when that material is legitimately recycled and not discarded.

However, in the case of the spent wood preserving exclusion (40 CFR 261.4(a)(9)), EPA agrees with the comments that this exclusion is limited to on-site recycling. Thus, if managed on-site, these materials would need to comply with the existing conditions to be eligible for an exclusion from the definition of solid waste. However, since the current exclusion does not apply to hazardous secondary materials sent off-site, and the substance of the exclusion (i.e., drip pad requirements) applies to a management method not applicable to off-site transfers, the new exclusion in today's rule would apply to hazardous secondary materials that are sent off-site for reclamation. Thus, if sent off-site for legitimate reclamation, these materials could be eligible for today's exclusion if the restrictions and/or the conditions are met.

Finally, the closed-loop exclusion 40 CFR 261.4(a)(8) is not specific to a material, but rather identifies a recycling process. EPA agrees with comments stating that hazardous secondary materials recycled via the closed-loop exclusion at 40 CFR 261.4(a)(8) could be recycled under a different process and still be eligible for today's exclusions. The closed-loop exclusion is based on the premise that hazardous secondary materials reclaimed in a continuous process within an industry are not discarded and, therefore, are not solid wastes subject to EPA's RCRA jurisdiction (See AMC I.) In fact, closed loop recycling is a subset of materials reclaimed in a continuous industrial process, since materials may be reclaimed in a continuous process outside of a closed loop system. EPA did not make a finding that any particular hazardous secondary material must be reclaimed in a continuous process. The Agency only determined that closed-loop recycling, in general, should be excluded. Today's exclusions, however, allow any hazardous secondary materials to be excluded if reclamation meets the restrictions and/or conditions set forth in the rules. Thus, a facility currently engaged in closed-loop recycling could change their processes and still be excluded, as long as all applicable restrictions and/or conditions are met.

In addition to the solid waste exclusions currently in 40 CFR 261.4(a),

EPA is planning to propose—in a separate rulemaking from today's final rule—to amend its hazardous waste regulations to conditionally exclude from the definition of solid waste spent hydrotreating and hydrorefining catalysts generated in the petroleum refining industry when these hazardous secondary materials are reclaimed (see entry in the *Introduction to the Fall 2007 Regulatory Plan*, 72 FR 69940, December 10, 2007). Spent hydrotreating and hydrorefining catalysts generated in the petroleum refining industry are routinely recycled by regenerating the catalyst so that it may be used again as a catalyst. When regeneration is no longer possible, these spent catalysts are either treated and disposed of as listed hazardous wastes or sent to RCRA-permitted reclamation facilities, where metals, such as vanadium, molybdenum, cobalt, and nickel are reclaimed from the spent catalysts.

EPA originally added spent hydrotreating and hydrorefining catalysts (waste codes K171 and K172) to the list of RCRA hazardous wastes found in 40 CFR 261.31 on the basis of toxicity (i.e., these materials were shown to pose unacceptable risk to human health and the environment when mismanaged) (63 FR 42110, August 6, 1998). In addition, EPA based its decision to list these materials as hazardous due to the fact that these spent catalysts can at times exhibit pyrophoric or self-heating properties.

It is largely because of these pyrophoric properties that EPA is considering a separate proposal to conditionally exempt these catalysts from hazardous waste regulation. This future proposal will allow the agency to consider and seek comment on specific conditions to address the pyrophoric properties of these hazardous secondary materials, particularly during transportation and storage prior to reclamation, in order for the Agency to determine that they are not being discarded. As a result of this separate effort, these spent catalysts will not be eligible for today's exclusions. Once EPA has proposed a conditional exclusion specifically for these spent catalysts, and after consideration of public comments, EPA will either finalize a conditional exclusion specific to these spent catalysts or may decide that the conditions being promulgated in today's final rule are fully adequate for the management of these spent catalysts when recycled, and therefore would remove the restriction preventing these spent catalysts from being eligible for today's exclusions.

B. Spent Lead-Acid Battery Recycling and Precious Metals Reclamation

EPA also agrees that spent lead-acid battery recycling should continue to be regulated under 40 CFR 266.80 or 40 CFR part 273. This is because these regulations are actually hazardous waste regulations and are not solid waste exclusions. Continuing the regulation of spent lead-acid battery (SLAB) recycling as hazardous waste is necessary due to the unique nature of these batteries. Also, as noted by the commenters, the current battery recycling regulations are working well. More than 95% of SLABs are currently recycled and generators of SLABs are exempt from Superfund liability under the Superfund Recycling Equity Act (SREA), provided that they meet the requirements of the exemption, including the requirement to take "reasonable care" to determine that the accepting facility is in compliance with the substantive environmental regulations.

Because SREA was based on the current SLAB hazardous waste regulations under RCRA, changing the regulation of SLABs could have unintended consequences. For example, the current regulations prohibit battery-breaking without a permit because such battery-breaking operations have been high-risk activities. In addition, as noted in the environmental problems study, 12% of our damage cases were from battery-breaking operations. Moreover, the high value of the lead plates and low entry cost for a battery-breaking facility provides a strong market incentive for facilities to recycle without investing in adequate management systems for the discarded battery acid and casings.

In addition, because the RCRA-regulated "generator" of a SLAB is often the garage or junkyard that removed the battery from the automobile (rather than the original owner who discarded the battery), the generator-controlled exclusion could be read to apply to these operations. Therefore, the reasonable efforts and financial assurance conditions that are a part of the transfer-based exclusion would not apply, despite the fact that their activities would resemble waste management rather than production. Because, in these cases, the SLABs have effectively already been discarded by the original owners before they enter the RCRA hazardous waste regulatory system, EPA will continue to regulate SLABs as solid and hazardous waste under 40 CFR 266.80 or 40 CFR part 273.

EPA also agrees with comments that the exclusions should have no impact on 40 CFR 266.70 (precious metals

exclusion) and 40 CFR 266.100(d) and (g) (conditional exclusions from the boiler and industrial furnace (BIF) regulations for “smelting, melting, and refining furnaces” and precious metals recovery furnaces). Because these exclusions are exclusions from certain hazardous waste regulations, not solid waste exclusions, as a general matter, EPA believes that facilities should have a choice of whether they manage their materials as hazardous waste under these exclusions or seek an exclusion from the definition of solid waste through today’s final rule.

However, part of what 40 CFR 266.100(d) accomplishes is to define when an operation involving burning is solely a metals recovery operation rather than a burning for energy recovery or destruction operation, neither of which is eligible for today’s exclusions. This distinction is an important one to make, and EPA did not intend to revise how such material recovery operations were identified, nor did EPA ask for comment on such a revision.

Thus, for the purpose of defining the type of burning for metals recovery to be allowed under these exclusions, EPA will reference the requirements in 40 CFR part 266 subpart H that defines when a “smelting, melting, and refining” furnace is solely engaged in metals recovery, but will not require the other conditions that are not related to distinguishing legitimate materials recovery from burning. Therefore, under today’s final rule, hazardous secondary materials burned for metals recovery would still be required to meet the minimum metals and maximum toxic organic metals content specified in 40 CFR part 266 (as part of the definition of this activity), and would continue to be exempt from BIF permits, but they would not be subject to hazardous waste manifests and storage permits, as long as the conditions of the exclusions promulgated in today’s rule are met.

C. Other Recycling Exclusions

For other hazardous secondary materials currently eligible for management under other exclusions or alternative regulatory structures that do not include an exclusion from the definition of solid waste (such as the universal waste regulations in 40 CFR part 273), the facility would have the choice of either continuing to manage the hazardous secondary material as a hazardous waste under the existing regulations or under today’s exclusions from the definition of solid waste.

In addition, it should be noted that, for the purposes of § 261.2(a)(2)(ii) and § 261.4(a)(2)(23), when a facility collects hazardous secondary materials from

other persons (for example, when mercury-containing equipment is collected through a special collection program), it is not the hazardous secondary material generator. Therefore, a universal waste handler who collects hazardous secondary materials from other persons would not be eligible for the generator-controlled exclusion, even if it would be considered a “generator” for purposes of the Universal Waste regulations.

XII. Effect on Permitted and Interim Status Facilities

A. Permitted Facilities

Facilities that currently have RCRA permits or interim status and manage hazardous wastes that are excluded under today’s final rule will be affected in a number of ways, depending on the situation at the facility. At some facilities, some of the hazardous waste management units will be converted solely to manage excluded hazardous secondary materials, and other units may continue to manage hazardous wastes. At other facilities, all of the hazardous waste management units will be converted to manage wastes excluded under today’s final rule. In still other cases, individual units may manage both excluded materials and hazardous wastes. In all cases, the owner or operator of the facility must comply with the applicable conditions and limitations of the exclusion (including the containment of the hazardous secondary material in units operating under the exclusion, recycling legitimately, and the prohibition against speculative accumulation of excluded hazardous secondary materials) to maintain the exclusion.

Permitted facilities that continue to manage hazardous wastes in addition to managing hazardous secondary materials excluded under this final rule must continue to maintain their Part B permits. Individual units may be converted solely to manage excluded hazardous secondary materials; however, the permit requirements applicable to the newly excluded units will remain in effect until they are removed from the permit. Owners and operators that seek to remove permit conditions applicable to units that are no longer hazardous waste management units must submit a permit modification request to the implementing agency. In the March 26, 2007, supplemental proposed rule, the Agency requested comment on requiring owners and operators seeking to modify their permits to remove units that are no longer regulated to follow the procedures of 40 CFR 270.42(a) for Class

1 permit modifications, with prior Agency approval. The Agency received few comments on this issue, and is proceeding in this final rule with the proposed approach. Thus, this final rule modifies 40 CFR 270.42 by adding an entry to Appendix 1 that classifies permit modifications to remove units that are no longer regulated as a result of this rule as Class 1 with prior Agency approval.

As was discussed in the preamble of the March 26, 2007, supplemental proposal, under the Class 1 with prior Agency approval approach, the owner or operator must submit notification of the permit modification to the implementing agency, along with documentation demonstrating that the operations at the unit meet the conditions of the exclusion and that the unit is used solely to manage excluded hazardous secondary materials. In addition, the owner or operator must comply with the requirements of 40 CFR 270.42(a)(ii) for public notification. Under § 270.42(a)(ii), the permit modification will not become effective until the owner or operator receives written approval by the implementing agency. The implementing agency will approve the permit modification so long as the owner or operator has complied with the procedural requirements of § 270.42(a) and has demonstrated that the operations meet the conditions of the exclusion, and that the unit does not manage non-excluded hazardous wastes.

One commenter disagreed with the Agency’s approach, and believed that the Class 2 permit modification procedures were necessary to provide the public an opportunity to comment on the removal of the unit from the permit. The Agency disagrees with this commenter. The regulations that govern permit modification classify modifications to the permit term, to allow for earlier permit termination, as Class 1 with prior Agency approval. The Agency believes that removing permit conditions for units that are no longer regulated is, in effect, allowing earlier permit termination at those units. Thus, the Agency believes that Class 1 with prior Agency approval is the appropriate designation for these permit modifications.

In the preamble of the March 26, 2007, supplemental proposal, the Agency discussed the issue of whether closure requirements at formerly regulated units would be triggered when this rule becomes effective and the hazardous secondary materials they are receiving is no longer hazardous waste. This issue was also discussed in the October 2003 proposal, in which EPA

expressed the view that requiring closure of units in these situations would serve little environmental purpose, since after closure the unit would be immediately reopened and used to store the same (now excluded) hazardous secondary material (68 FR 61580–61581).

In today's final rule, a permitted unit that is converted solely to manage excluded hazardous secondary materials will not be subject to the 40 CFR part 264 closure requirements, since, typically, it will be managing the same material, with the only difference being that the material is now excluded from regulation as a hazardous waste. However, we expect that any funds in the closure or post-closure financial assurance mechanisms will be converted to provide financial assurance under today's exclusion, assuming the facility is operating under the transfer-based exclusion. In addition, as described in sections VII.D. and VIII.D of this preamble, at the end of the operating life of these units, all owners and operators (i.e., of units operating under either exclusion promulgated in this final rule) must manage any hazardous secondary materials that are not recycled, and remove or decontaminate all hazardous residues and contaminated containment system components, equipment structures, and soils.

A permitted facility that converts to manage only hazardous secondary materials excluded under this final rule, and is, therefore, no longer a hazardous waste management facility, will no longer be required to maintain a hazardous waste operating permit (although, as discussed below, may still be subject to corrective action).¹⁴ However, permits issued to these facilities remain in effect until they are terminated.

In the March 2007 supplemental proposal, the Agency also requested comment on requiring owners and operators seeking to terminate their operating permits (as opposed to just removing units from their permit) by modifying the permit term to follow the procedures of 40 CFR 270.42(a) for Class 1 permit modifications, with prior Agency approval. The Agency received few comments on this issue, and is proceeding in this final rule with the proposed approach. Thus, this final rule modifies § 270.42 by adding an entry to

¹⁴ Again, the owner/operator of the facility must comply with the applicable conditions and limitations of the exclusion (including the containment of the hazardous secondary material in the unit, legitimate recycling, and the prohibition against speculative accumulation) to maintain the exclusion.

Appendix 1 that classifies permit modifications to terminate operating permits by modifying the permit term, at facilities at which all units are excluded as a result of this final rule, as Class 1 with prior Agency approval. Under this approach, owners and operators seeking to terminate their operating permits must submit a permit modification request to the overseeing agency following the procedures of § 270.42(a) for Class 1 modifications with prior Agency approval, as described above.¹⁵

To support a request for permit termination by modifying the permit term, the owner or operator must demonstrate that the operations meet the conditions of the exclusion, and that the facility does not manage non-excluded hazardous wastes.

In addition, as was explained in the October 28, 2003, proposal (*see* 68 FR 61580) and again in the March 26, 2007, supplemental proposal (72 FR 14206), the obligation of 40 CFR 264.101 to address facility-wide corrective action at permitted facilities, is not affected by this final rule, and remains in effect.¹⁶ Therefore, an owner or operator of a facility that manages only hazardous secondary materials excluded under this final rule, who seeks to terminate the facility's permit by modifying the permit term, must demonstrate as part of the permit modification request that the corrective action obligations at the facility have been addressed or where corrective action obligations remain, that continuation of the permit is not necessary to assure that they will be addressed. The Agency's corrective action authority at such facilities is not affected by this rulemaking and the Agency thus retains its authority to address corrective action at such facilities using all authorities applicable prior to this rulemaking.

At some facilities, corrective action obligations will likely continue to be addressed through the corrective action

¹⁵ The commenter discussed above who disagreed with the Agency's approach for permit modifications to remove units that are no longer regulated, also believed that Class 2 permit modification procedures were necessary to provide the public an opportunity to comment on the owner or operator's request to terminate a permit by modifying the permit term. The Agency disagrees with this commenter. As was discussed above, the regulations governing permit modifications classify changes to the expiration date to allow earlier permit termination as Class 1 with prior Agency approval.

¹⁶ Owners and operators of permitted and interim status facilities with corrective action obligations should refer to the Agency's February 25, 2003, guidance entitled "Final Guidance on Completion of Corrective Action Activities at RCRA Facilities," (*see* 68 FR 8757) for a detailed discussion of corrective action completion.

provisions of the permit. In these cases, maintenance of the permit would ensure that facility-wide corrective action will be addressed. Thus, in these cases, the permit would not be terminated by modifying the permit term, but would be modified to remove the provisions that applied to the now-excluded hazardous secondary material. The facility's permit would, thereafter, only address corrective action.

In other cases, however, EPA or an authorized state may have available an alternative federal or state enforcement mechanism or other federal or state cleanup authority, through which it could choose to address the facility's cleanup obligations, rather than continue to pursue corrective action under a permit. In these cases, where the alternate authority would ensure that facility-wide corrective action will be addressed, maintenance of the permit would not be necessary.

B. Interim Status Facilities

A facility that is operating under interim status will be affected by this final rule in much the same way as is a permitted facility and the issue of corrective action will be addressed in a similar manner. At an interim status facility that converts to managing only hazardous secondary materials that become excluded under this final rule, the part 265 interim status standards that applied to the hazardous waste management units at the facility, as well as the general facility standards in part 265, will no longer apply. At the same time, the Agency's authority to address corrective action at the facility is not affected by this final rule, and the owner or operator retains responsibility for unaddressed corrective action obligations at the facility.

C. Releases From Excluded Units at Interim Status or Permitted Facilities

Commenters on the October 28, 2003, proposal stated that one of the main purposes of the RCRA Subtitle C closure requirements is to identify and remediate any releases originating from the units. In response, the Agency noted in the March 26, 2007, supplemental proposal that releases from these units are discarded solid wastes and, therefore, potentially hazardous wastes, and agreed with the commenter's concern that such releases should be addressed. The Agency suggested in that preamble that the specific Subtitle C closure requirements may not be the most appropriate means of addressing cleanup of releases from these units, if any have occurred. Rather, the Agency suggested that a better approach to address historical releases from these