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40 CFR Parts 260 and 261
Definition of Solid Waste; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 260 and 261

[EPA–HQ–RCRA–2010–0742; FRL–9728–5–OSWER]

RIN 2050–AG62

Definition of Solid Waste

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA, or the Agency) is publishing a final rule that revises several recycling-related provisions associated with the definition of solid waste used to determine hazardous waste regulation under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The purpose of these revisions is to ensure that the hazardous secondary materials recycling regulations, as implemented, encourage reclamation in a way that does not result in increased risk to human health and the environment from discarded hazardous secondary material.

DATES: This final rule is effective on July 13, 2015.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–RCRA–2010–0742. All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, such as 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 at *www.regulations.gov* or in hard copy at the RCRA Docket, EPA/DC, William Jefferson Clinton Building 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 RCRA Docket is (202) 566–0276.

FOR FURTHER INFORMATION CONTACT: Tracy Atagi, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, MC 5304P, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460, at (703) 308–8672, (*atagi.tracy@epa.gov*) or Amanda Kohler, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, MC 5304P, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460, at (703) 347–8975, (*kohler.amanda@epa.gov*).

SUPPLEMENTARY INFORMATION:

A. Does this action apply to me?

Entities potentially affected by today's action include over 5,000 industrial facilities in 634 industries (at the 6-digit North American Industry Classification System (NAICS) code level) that generate or recycle hazardous secondary materials (HSM). Most of these 634 industries have relatively few entities that are potentially affected. The top-5 economic sectors (at the 2-digit NAICS code level) with the largest number of potentially affected entities are as follows: (1) 41% in NAICS code 33—the manufacturing sector, which consists of metals, metal products, machinery, computer & electronics, electrical equipment, transportation equipment, furniture, and miscellaneous manufacturing subsectors, (2) 23% in NAICS code 32—the manufacturing sector, which consists of wood products, paper, printing, petroleum & coal products, chemicals plastics & rubber products, and nonmetallic mineral products manufacturing subsectors, (3) 3.0% in NAICS code 92—the public administration sector, (4) 2.9% in NAICS code 61—the educational services sector, and (5) 2.8% in NAICS code 54—the professional, scientific and technical services sector.

Information on the estimated future economic impacts of today's action is presented in section XXI of this notice, as well as in the RIA available in the docket for today's action.

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XXI. Statutory and Executive Order (E.O.) Reviews

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. 6921, 6922, 6923, and 6924. This statute is commonly referred to as "RCRA."

II. Which revisions to the regulations is EPA finalizing?

In today's rule, EPA is revising a number of provisions related to the definition of solid waste as it applies to the regulation of hazardous waste under Subtitle C of RCRA (42 U.S.C. 6921 through 6939(e)). These revisions affect certain types of hazardous secondary materials that are currently conditionally excluded from the definition of solid waste when reclaimed. These exclusions were promulgated in October 2008 (73 FR 64688, October 30, 2008) and were intended to encourage the recovery and reuse of valuable resources as an alternative to land disposal or incineration, while at the same time maintaining protection of human health and the environment. In response to concerns raised by stakeholders about potential increases in risks to human health and the environment from hazardous secondary materials, today's rule revises the 2008 DSW final rule in order to ensure that the rule, as implemented, encourages reclamation in a way that protects human health and the environment from the

mismanagement of hazardous secondary materials.

The six major regulatory areas are summarized below.[1] The intent of this summary is to give a brief overview of the actions EPA is taking today. More detailed discussions, including the Agency's rationale for the changes, are found in later sections of this preamble.

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

Under today's final rule, EPA is retaining the exclusion for hazardous secondary materials that are legitimately reclaimed under the control of the generator ("generator-controlled exclusion"), with certain revisions from the 2008 DSW final rule. These revisions include (1) adding a codified definition of "contained," (2) adding recordkeeping requirements for same-company and toll manufacturing reclamation, (3) making notification a condition of the exclusion, (4) adding a requirement to document that recycling under the exclusion is legitimate, and (5) adding emergency preparedness and response conditions. In addition, we have amended the speculative accumulation provisions to add a recordkeeping requirement. This requirement applies to all persons subject to speculative accumulation.

The generator-controlled exclusion (40 CFR 261.4(a)(23)) excludes certain hazardous secondary materials (*i.e.*, listed sludges, listed by-products, and spent materials) from the definition of solid waste if they are generated and legitimately reclaimed within the United States or its territories under the control of the generator. Specifically, hazardous secondary materials are excluded if (1) the reclamation process meets the definition of legitimate recycling under 40 CFR 260.43; (2) the materials are not speculatively accumulated as defined in 40 CFR 261.1(c)(8) (including a new recordkeeping requirement, being finalized today); (3) they meet the notification condition under 40 CFR 260.42; (4) they are managed in a unit that meets the new definition of "contained" in 40 CFR 260.10, which specifies that storage units must be in good condition, properly labeled, do not hold incompatible materials, and address potential risks of fires or explosions; and (5) the generator satisfies certain emergency preparedness and response conditions. Further discussion of the generator-controlled exclusion can be found in section V of this preamble.

B. Verified Recycler Exclusion Replacing the Exclusion for Hazardous Secondary Materials That Are Transferred for the Purpose of Legitimate Reclamation

EPA is replacing the exclusions at 40 CFR 261.4(a)(24) and (25) for hazardous secondary materials that are transferred from the generator to other persons for the purpose of reclamation with an exclusion for hazardous secondary materials sent for reclamation to a verified recycler. By this change, EPA intends to promote safe and sustainable reclamation of these materials. Under this new exclusion, generators who want to recycle their hazardous secondary materials without having them become hazardous wastes must send their materials to either a RCRA-permitted reclamation facility or to a verified recycler of hazardous secondary materials who has obtained a solid waste variance from EPA or the authorized state. In order to obtain a variance from EPA or the authorized state, the recycler must (1) demonstrate their recycling is legitimate; (2) have financial assurance in place to properly manage the hazardous secondary material when the facility closes; (3) not be subject to a formal enforcement action in the previous three years and not be classified as a significant non-complier under RCRA Subtitle C, or must provide credible evidence that the facility will manage the hazardous secondary materials properly; (4) have the proper equipment and trained personnel, and meet emergency preparedness and response conditions to safely recycle the material; (5) manage the residuals from recycling properly; and (6) take steps to protect nearby communities and reduce risk of potential unpermitted releases of the hazardous secondary material to the environment (*i.e.*, releases that are not covered by a permit (such as a permit to discharge to water or air). Further discussion of the replacement of the transfer-based exclusion with the verified recycler exclusion can be found in section VI of this preamble.

C. Remanufacturing Exclusion

EPA is also finalizing an exclusion from the definition of solid waste for certain higher-value solvents transferred from one manufacturer to another for the purpose of extending the useful life of the solvent by remanufacturing the spent solvent back into the commercial grade solvent. This remanufacturing exclusion will help promote sustainable materials management by extending the productive use of these materials, which reduces the need for raw materials used and the environmental impacts associated with production of these materials. In addition, EPA is also making clear that a rulemaking petition pursuant to 40 CFR 260.20 can be submitted for adding other higher-value hazardous secondary materials that are destined to be remanufactured into similarly higher-value products. Further discussion of this exclusion can be found in section VII of this preamble.

D. Prohibition of Sham Recycling and Revisions to the Definition of Legitimacy

In this final rulemaking, EPA is codifying in its regulations at 40 CFR 261.2(g) the long-standing policy that hazardous secondary materials found to be sham recycled are discarded and solid wastes, thereby prohibiting materials that are sham recycled from being excluded from the definition of solid waste.

In addition, EPA has changed the definition of legitimate recycling in § 260.43 to make clear that all four factors identified in § 260.43 must be met, but also to provide some flexibility in determining legitimacy for certain types of recycling. In particular, in cases where there is no analogous product made from raw materials, EPA has clarified that the product of recycling is still a legitimate product when it meets widely recognized commodity standards (*e.g.*, commodity-grade scrap metal) or when the hazardous secondary material is recycled back into the production process from which it was generated (*e.g.*, closed-loop recycling). In addition, for cases in which the product of the recycling process has levels of hazardous constituents that are not comparable to analogous products, the revised legitimacy standard includes a process that allows the facility to document and certify that the recycling is still legitimate, keep such documentation at the facility, and send a notification to the regulatory authority to that effect. Further discussion of legitimacy can be found in section VIII of this preamble.

E. Revisions to Solid Waste Variances and Non-Waste Determinations

Today's rule finalizes revisions to the solid waste variances and non-waste determinations found in 40 CFR 260.30–260.34 in order to ensure protection of human health and the environment and foster greater consistency on the part of implementing agencies. Revisions include (1) requiring facilities to send a notice to the Administrator (or State Director, if the state is authorized) and

[1] Any provisions promulgated in the 2008 DSW rule that are not addressed in this final rule remain in effect.

potentially re-apply for a variance in the event of a change in circumstances that affects how a hazardous secondary material meets the criteria upon which a solid waste variance has been based; (2) establishing a fixed term not to exceed ten years for variance and non-waste determinations, at the end of which facilities must re-apply for a variance or non-waste determination, (3) requiring facilities to re-notify every two years with updated information; (4) revising the criteria for the partial reclamation variance to clarify when the variance applies and to require, among other things, that all the criteria for this variance must be met; and (5) for the non-waste determinations in 40 CFR 260.34, requiring that petitioners demonstrate why the existing solid waste exclusions would not apply to their hazardous secondary materials. EPA is not finalizing the proposed change to designate the Regional Administrator as the EPA recipient of petitions for all variances and non-waste determinations. Further discussion of these revisions can be found in section IX of this preamble.

F. Deferral on Revisions to Pre-2008 Recycling Exclusions

EPA is not finalizing revisions to the pre-2008 recycling exclusions and exemptions to include the contained standard or to require notification.[2] EPA is instead deferring action until EPA can more adequately address commenters' concerns. For further discussion, see section X for more information.

III. History of the Definition of Solid Waste

A. Background

RCRA gives EPA the authority to regulate hazardous wastes (see 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 6939f. Subtitle C regulations are found at 40 CFR parts 260 through 279. Hazardous wastes are those that, because of their quantity, concentration, physical, or chemical characteristics, may (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed (see RCRA section 1004(5)). Hazardous wastes are a subset of solid wastes.

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 (see 45 FR 33090–95, May 19, 1980; 50 FR 604–656, January 4, 1985 (see in particular pages 616–618)). EPA has offered three arguments in support of this interpretation:

- The statute and the legislative history suggest that Congress expected EPA to regulate certain materials that are destined for recycling as solid and hazardous wastes (see 45 FR 33091, citing numerous sections of the statute and *U.S. Brewers' Association* v. *EPA*, 600 F. 2d 974 (D.C. Cir. 1979); 48 FR 14502–04, April 3, 1983; and 50 FR 616–618, January 4, 1985).
- 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 has 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 160 hazardous material sites listed for potential clean up 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). Additional data (*i.e.*, information on damage incidents occurring after 1982) included in the rulemaking docket for today's rule corroborate the fact that recycling operations can and have resulted 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 materials intended to do with them, which is inconsistent with the RCRA mandate to track hazardous wastes and control them from "cradle to grave."

Hence, RCRA confers on EPA the authority to regulate discarded hazardous secondary materials even if they are destined for recycling and may be beneficially reused. 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 (D.C. Cir. 1998).))

EPA has consistently asserted that hazardous secondary materials are not excluded from regulation as solid wastes merely because of a claim that they will be recycled. EPA has consistently considered hazardous secondary materials intended for "sham recycling" (*i.e.*, disposal performed in the guise of recycling) to be discarded and, hence, to be solid wastes for Subtitle C purposes (see 45 FR 33093, May 19, 1980; 50 FR 638–639, January 4, 1985). The U.S. Court of Appeals for the D.C. 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 (D.C. Cir. 2000)).

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

Because the interpretation of what constitutes a solid waste is the foundation of the hazardous waste regulatory program, there has been quite a bit of litigation over the meaning of "solid waste" under Subtitle C of RCRA. Specifically, industries representing mining and oil refining interests challenged EPA's January 1985 regulatory definition of solid waste. In 1987, the D.C. 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* ("*AMC I*"), 824 F.2d 1177, 1178 (D.C. Cir. 1987)). The Court held that certain materials EPA was seeking to regulate were not "discarded materials" under RCRA section

[2] EPA requested comment on adding these requirements to a list of 32 existing recycling exclusions in the 2011 proposed rule (76 FR 44139, July 22, 2011).

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 held that recycled materials could be regulated as discarded materials. The Court mentioned at least two examples of recycled materials that may be regulated as wastes, 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 may be regulated as solid wastes (824 F. 2d at 1179).

Subsequent decisions by the D.C. Circuit also indicate that some materials destined for recycling may be considered ''discarded.'' 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 (D.C. 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 (D.C. Cir. 1990)).

It also is worth noting that two other Circuits also have held that EPA may regulate as solid wastes under RCRA at least some materials destined for reclamation rather than final discard. The U.S. Court of Appeals for the Eleventh 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 (Eleventh 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 regulated hazardous secondary materials recycled by reclamation within the mineral processing industry, the ''LDR Phase IV rule'' (63 FR 28556, May 26, 1998), under Subtitle C of RCRA. In that rule, EPA promulgated a conditional exclusion for all types of mineral processing hazardous secondary materials destined for reclamation. As a condition of the exclusion, EPA prohibited the land-based storage of these mineral processing secondary materials prior to reclamation because it considered hazardous secondary materials from the mineral processing industry that were stored on the land to be solid wastes (63 FR 28581, May 26, 1998). 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 hazardous secondary materials that are removed from a production process for storage are not ''immediately reused,'' and therefore are ''discarded'' (63 FR 28580, May 26, 1998).

The mining industry challenged the rule, and the D.C. Circuit vacated the provisions that expanded EPA regulation over characteristic by-products and sludges destined for reclamation (*Association of Battery Recyclers* v. *EPA* (''*ABR*''), 208 F.3d 1047 (D.C. Cir. 2000)). The Court held that it had already resolved this issue 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). The Court also did not find that storage before reclamation automatically makes materials discarded. Rather, it repeated that materials reused within an ongoing industrial process are neither disposed of nor abandoned (208 F.3d at 1051–52) and 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). 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).

In its most recent opinion dealing with the definition of solid waste, *Safe Food and Fertilizer* v. *EPA* (''*Safe Food*''), 350 F.3d 1263 (D.C. Cir. 2003), the D.C. Circuit upheld an EPA rule that excludes from the definition of solid waste hazardous secondary materials used to make zinc fertilizers, and the fertilizers themselves, as long as the hazardous secondary 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 such fertilizer have not been discarded. The conditions also 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 excluded 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 held that 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 (also called ''the identity principle'') as reasonable. The Court also 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.

In addition, the Court 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'' constitutes 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 which defined those circumstances under which hazardous secondary materials would be excluded from RCRA's hazardous waste regulations because they are generated and reclaimed in a continuous process within the same industry. In addition, the Agency also clarified in a regulatory context the concept of ''legitimate recycling,'' which has been a key component of RCRA's regulatory program for hazardous material recycling, but which up to that point, had been implemented without specific regulatory criteria (68 FR 61558, October 28, 2003).

In response to the October 2003 DSW proposal, a number of commenters criticized the Agency 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 the mismanagement of these materials and 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 sites listed on the Superfund National Priorities List (NPL).

Other commenters to the 2003 DSW 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 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 that cases of ''historical'' recycling-related environmental damage are not particularly relevant when modifying the current RCRA hazardous waste regulations for hazardous secondary materials recycling.

D. Recycling Studies

In light of these comments on the 2003 DSW proposal, and in deliberating on how to proceed with the rulemaking effort, the Agency decided that additional information on hazardous secondary material recycling would benefit its regulatory decision-making and would provide stakeholders with a clearer picture of the hazardous secondary material recycling industry in this country. Accordingly, the Agency examined three issues that we believed were of particular importance to revising the definition of solid waste:

- 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 since enactment of major waste management statutes, 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 are available in the docket for the 2008 DSW final rule under the following titles:

- *An Assessment of Good Current Practices for Recycling of Hazardous Secondary Materials* (EPA–HQ–RCRA–2002–0031–0354) (''study of successful recycling'')
- *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'')

In the study of successful recycling, 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 manage it responsibly without the risk of releases or other environmental damage. These recycling and waste audits of other companies' facilities are common to those generators that responsibly recycle 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 that can inform a generator that its hazardous secondary material has been properly managed.

The goal of the environmental problems study was to identify and characterize environmental problems associated with some types of hazardous secondary material recycling that are relevant for the purpose of this rulemaking effort. To address commenters' concerns that historic damages are irrelevant to current practices because environmental programs (post-RCRA and -CERCLA implementation) have created strong incentives for proper management of recyclable hazardous secondary materials, EPA only included cases where damages occurred after 1982. 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.[3]

The Agency has determined that the occurrence of certain types of environmental problems associated with post-1982 recycling practices shows that discard has occurred. In particular, instances where hazardous secondary materials were abandoned (*e.g.*, in warehouses) and which required removal, oversight by a government agency and the expenditure of public funds clearly demonstrate that the hazardous secondary material was discarded. Of the 208 damage cases presented in the original damage case study, 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

[3] EPA initially identified over 800 potential damage cases, most of which were not included in the analysis because (1) the damages occurred before 1982, (2) the damages were not caused by recycling, or (3) there was not enough information to determine when the damages occurred or whether recycling contributed to the damages. The cases EPA considered, but did not include, were listed in an appendix to the report to allow the public to comment on whether additional cases should be included in the analysis. As a result of public comment to the 2011 DSW proposal, EPA has updated the damage case information using the same methodology, resulting in a total of 250 damage cases as of 2012. EPA has determined that the new damage case information is consistent with the damage cases previously cited in the study.

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 presented in the original damage case study, 81 cases (40%) primarily resulted from the mismanagement of recyclable hazardous secondary materials, while mismanagement of recycling residuals was the primary cause in 71 cases (34%). Often, in the case of mismanagement of recycling residuals, 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, while the drums were reused or recycled.

The market forces study used accepted economic theory to describe how various market incentives can influence a firm's decision-making process when recycling hazardous secondary materials. This study helps explain some of the possible fundamental economic drivers of both successful and unsuccessful recycling practices.

As pointed out by some commenters to the 2003 DSW 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 used 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 were (1) commercial recycling, where the primary business of the firm is the recycling of hazardous secondary materials that are accepted 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 either use or recycle hazardous secondary materials obtained from other firms, with the objective of reducing the cost of their production inputs. The report also looked at how the outcome from each model is potentially affected by three market characteristics: (1) The value of the recycled product, (2) the price stability of recycling output or inputs, and (3) the net worth of the firm.

An individual firm's decision-making is based on many factors and extrapolating a firm's likely behavior from a few factors could be an over-simplification. However, when used in conjunction with other information, the economic theory can be quite illuminating. For example, according to the market forces study, 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, in certain types of commercial recycling, the product has low value, the prices are unstable, and/or the firm has a low net worth. Facilities in these situations can be more susceptible to environmental problems from the over-accumulation or mishandling of hazardous secondary materials, especially when compared to recycling by a well-capitalized firm that yields a product with high value. In short, commercial recyclers depend on revenue from two sources: (1) Accepting hazardous secondary materials for recycling, and (2) selling the recycled product. When recycled product prices fall, commercial recyclers rely on profits from accepting hazardous waste, which can result in over-accumulation, mismanagement, sham recycling, and abandonment of hazardous secondary materials. Further, because these facilities often have little capital at risk, they can go bankrupt leaving environmental damages behind. These predicted outcomes appear to be supported by the results of the environmental problems study, which showed the vast majority of environmental damages—approximately 94%—occur at off-site commercial recyclers.

However, as shown by the study of successful recycling, generators who could 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, such as through audits 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 more effectively.

Further discussion of the recycling studies, including the methodology and limitations of the studies, can be found in the March 2007 DSW supplemental proposal (72 FR 14178–83) and the October 2008 DSW final rule (73 FR 64673–74), and the studies themselves can be found in the docket for the 2008 DSW final rule (EPA–HQ–RCRA–2002–0031–0355).

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

In March 2007, EPA published a supplemental proposal that provided the public the opportunity to comment on these studies. The Agency also re-structured the proposed rule and proposed (1) 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, and the other exclusion would apply to hazardous secondary materials managed in land-based units) and (2) an exclusion for hazardous secondary materials transferred to another party for reclamation. The Agency also proposed a non-waste determination petition process, and re-proposed the legitimacy criteria, with certain modifications (72 FR 14172, March 26, 2007).

For the exclusions of hazardous secondary materials reclaimed under the control of the generator, EPA described three circumstances under which we believed that discard does not take place and where the potential for environmental releases is low. The three situations involve hazardous secondary materials that are generated and legitimately reclaimed at the generating facility, legitimately reclaimed at a different facility within the same company, or legitimately reclaimed 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 retains control of the hazardous secondary materials, finds value in them, and intends to use them, EPA proposed to exclude these materials from the definition of solid waste and, thus, from regulation under Subtitle C of RCRA, provided the reclamation is legitimate and the

hazardous secondary materials are contained and not speculatively accumulated. In addition, EPA proposed that facilities generating and reclaiming hazardous secondary materials under the control of the generator must submit notification to their regulatory authority.

For the exclusion of hazardous secondary materials transferred to another party for reclamation (referred to as the transfer-based exclusion), the Agency proposed conditions that, when met, would indicate that these hazardous secondary materials were not discarded. Specifically, the generator would need to make reasonable efforts, a form of due diligence, to determine that its hazardous secondary materials would be properly and legitimately recycled (and that the hazardous secondary material would not be discarded). Another condition would require the reclamation facility to have adequate financial assurance (thus demonstrating that the hazardous secondary material would not be abandoned). In addition, EPA proposed that both the generator and reclaimer would be required to maintain shipping records (to demonstrate that the hazardous secondary material was sent for reclamation and was received by the reclaimer). Furthermore, 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). Finally, facilities operating under the transfer-based exclusion must also submit notification to their regulatory authority.

In addition, the 2007 DSW supplemental proposal included a case-by-case non-waste determination petition process that would allow applicants to receive a formal determination from EPA that their hazardous secondary materials were not discarded and therefore were not solid wastes. The case-by-case petition process would allow EPA or the authorized state to take into account the particular fact pattern of the recycling and to determine that the hazardous secondary materials in question were not solid wastes. The petition process for the non-waste determination was the same as that for the variances from the definition of solid waste found at 40 CFR 260.31.

Finally, 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 that the recycling of hazardous secondary materials is not a ''sham'' and thus, does not constitute discard.

F. October 2008 Final Rule To Revise the Definition of Solid Waste

In October 2008, EPA promulgated a final rule largely as proposed in March 2007, with some revisions and clarifications, including (1) clarifying that hazardous secondary materials held at a transfer facility for less than 10 days are considered to be in transport (and therefore such transfer facilities are not considered to be storing the hazardous secondary materials for the purpose of the DSW exclusion), (2) allowing the use of intermediate facilities that store hazardous secondary materials for more than 10 days under the transfer-based exclusion, provided the facilities comply with the same conditions applicable to reclamation facilities, (3) codifying financial assurance language in 40 CFR 261 subpart H for the transfer-based exclusion applicable to intermediate and reclamation facilities without RCRA permits, (4) requiring facilities operating under the generator-controlled and/or the transfer-based exclusion to notify their regulatory authority prior to operating under the exclusion and every other year thereafter, and (5) making legitimacy a condition of the exclusions and the non-waste determinations in that rule, but not finalizing the legitimacy language for all recycling activities.

G. Section 7004 Petition Submitted by the Sierra Club and Industry Response

On January 29, 2009, the Sierra Club submitted an administrative petition under RCRA section 7004(a), 42 U.S.C. 6974(a), to the Administrator of EPA requesting that the Agency repeal the October 2008 revisions to the definition of solid waste rule and stay the implementation of the rule.

The administrative petition was submitted at the same time that the American Petroleum Institute (API) and Sierra Club filed judicial Petitions for Review under RCRA section 7006(a), 42 U.S.C. 6976(a) challenging the rule in the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit). These cases, designated as Docket Nos. 09–1038 and 1041, respectively, are currently before the D.C. Circuit.[4]

The Sierra Club petition argued that the revised regulations are unlawful and that they increase threats to public health and the environment without producing compensatory benefits and, therefore, should be repealed. Among other things, the petition singled out the lack of regulatory definitions for key conditions of the rule and disagreed with the Agency's findings that the rule would have no adverse environmental impacts, including the finding there would be no adverse impact to environmental justice communities or children's health.

On March 6, 2009, a coalition of industry associations (''industry coalition'') submitted a letter to the Administrator of EPA in response to the Sierra Club petition. This letter requested that EPA deny Sierra Club's petition on the grounds that the 2008 DSW final rule comports with court cases construing the scope of the definition of solid waste under RCRA, and that the 2008 DSW final rule achieves significant economic and conservation benefits, while imposing significant controls on the hazardous secondary material recycling industry that are fully protective of the environment. The letter also responds to each of the specific points raised by Sierra Club in its petition.

H. June 2009 Public Meeting and the Draft DSW Environmental Justice Analysis Methodology

In response to Sierra Club's administrative petition and the industry coalition's letter to the Administrator of EPA, a May 27, 2009, **Federal Register** notice (74 FR 25200) was issued describing possible actions and optional paths forward, as well as announcing a public meeting on June 30, 2009, to allow the public and interested stakeholders the opportunity to provide input to the decision-making process.

In the May 27, 2009, **Federal Register** notice announcing the public meeting, EPA described the scope of possible actions, which is governed by the concept of ''discard.'' As stated in RCRA section 1004(27), ''solid waste'' is defined 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

[4] In its lawsuit, API claimed that EPA had improperly decided that certain petroleum catalysts, when recycled are hazardous wastes. See 73 FR 64714 for EPA's decision to defer a decision on the eligibility of those catalysts for the 2008 DSW final rule. API argued, among other things, that these catalysts should be treated the same as other materials that were receiving the transfer-based exclusion. API's challenge proceeded to briefing and argument before the Court of Appeals. By order of June 8, 2012, the Court reconsidered and decided to hold API's challenge in abeyance until EPA issued this rule in final form. Since EPA is removing the transfer-based exclusion and making spent petroleum catalysts eligible for the generator-controlled and verified recycler exclusions, API's challenge that the Agency failed to treat the catalysts as other excluded materials is now moot. See section XI below for further discussion on the effect of this rule on spent petroleum catalysts.

activities.'' The May 2009 public meeting notice said that

[b]ecause the final revisions to the definition of solid waste are closely tied to EPA's interpretation of the concept of ''discard,'' EPA does not plan to repeal the rule in whole or stay its implementation. Such an action could result in hazardous secondary materials that are not discarded being regulated as hazardous waste. In particular, EPA does not expect to repeal either the exclusion for hazardous secondary materials reclaimed under the control of the generator or the non-waste determination petition process. However, EPA believes there may be other opportunities to revise or clarify the definition of solid waste rule, particularly with respect to the definition of legitimacy and the transfer-based exclusion, in ways that could improve implementation and enforcement of the provisions, thus increase environmental protection, while still appropriately defining when a hazardous secondary material being reclaimed is a solid waste and subject to hazardous waste regulation. (74 FR 25203).

Thirty-three people spoke at the public meeting and approximately 4,000 written comments were received, of which the majority were from private citizens who wrote in via a mass email campaign to repeal the rule. The remaining comments came from state and local governments (17), companies that generate hazardous secondary materials that are recycled (*i.e.,* the generating industry) (28), the waste management/recycling industry (15), environmental, public health and community organizations (12), and academics (2). Comments from the generating industry were uniformly in favor of denying the Sierra Club petition to repeal the rule, citing legal issues and the protectiveness of the rule's conditions. Environmental and community organizations, on the other hand, were uniformly in favor of repealing the rule, expressing concerns over the protectiveness, enforceability, and environmental justice and children's health impacts of the rule. Waste management/recycling industry comments were split, with hazardous waste recyclers generally advocating that EPA retain and improve the rule with more stringent standards. Other waste management industry comments, particularly those from companies representing landfills and incinerators, were in favor of repealing the rule. State comments expressed concerns about implementing the rule, particularly given the economic climate, and generally were in favor of repealing or significantly revising the transfer-based exclusion. A copy of the public meeting transcript and the comments submitted in response to the public meeting notice are available in the docket for the public meeting (Docket ID number EPA–HQ–RCRA–2009–0315).

Many of the commenters (including those at the public meeting and those who responded with written comments) expressed strong concerns that the Agency did not adequately address environmental justice in the rulemaking. In response to the concerns over the environmental justice analysis, EPA committed to perform a more rigorous and thorough analysis of the environmental justice impacts of the 2008 DSW final rule. On January 15, 2010, EPA released for public input a draft methodology for conducting the DSW Environmental Justice Analysis. The draft methodology was presented to the National Environmental Justice Advisory Committee (NEJAC) and discussed at three public roundtable meetings, and was used to develop the draft environmental justice analysis for the DSW rulemaking.

I. Settlement Agreement With the Sierra Club

1. Overview of Settlement Agreement

On September 7, 2010, EPA signed a settlement agreement with the Sierra Club under which the Sierra Club agreed to withdraw their administrative petition and EPA agreed to (1) prepare a notice of proposed rulemaking to be signed no later than June 30, 2011,[5] which would address, at a minimum, the issues raised in the Sierra Club's administrative petition and (2) take final administrative action concerning the notice of proposed rulemaking to be signed no later than December 31, 2012. The settlement agreement did not specify the outcome of the final rule or what regulatory changes EPA would propose. The settlement agreement was approved by the court on January 11, 2011. Although EPA was unable to make the settlement agreement deadline for a final administrative action, today's rule does address all issues raised in Sierra Club's administrative petition, including the four issues discussed in the May 27, 2009, public meeting **Federal Register** notice (74 FR 25200). Specifically, the four issues in the settlement agreement are (1) the definition of ''contained'' (which includes the issue of defining ''significant releases'') (addressed in section V of this preamble), (2) notification before operating under the exclusion (also addressed in section V of this preamble), (3) the definition of ''legitimacy'' (addressed in section VIII of this preamble) and (4) the transfer-based exclusion (addressed in section VI of this preamble). Other issues presented in the administrative petition are discussed below.

[5] The proposed rulemaking was signed by the Administrator of EPA on June 30, 2011.

2. Request to Immediately Stay the Implementation of and Revoke the 2008 DSW Rule

The Sierra Club's administrative petition included a request to immediately stay and revoke the 2008 DSW final rule. To support this request, the petition asserted that the damage case study demonstrates that hazardous waste recycling has caused substantial harm to health and the environment and that the 2008 DSW final rule increases the likelihood of greater future harm. The petition also asserted that the 2008 DSW final rule does not account for the possibility that unstable recycling markets or financial conditions increase the risk of hazardous waste abandonment. In addition, the petition asserted that the 2008 DSW final rule will not substantially increase recycling and that the economic benefits are few and will only accrue to deregulated industries. Furthermore, the petition claimed that there would be job losses in the hazardous waste treatment industry and increased worker health problems as a result of the rule.

EPA addressed Sierra Club's request to revoke the 2008 DSW final rule in whole and stay its implementation in the May 27, 2009, public meeting notice, which continues to reflect EPA's current thinking. In that notice, EPA stated at 74 FR 25202:

The scope of possible changes to the definition of solid waste is governed by the concept of ''discard.'' As discussed in the preamble to the DSW final rule, EPA used the concept of discard as the central organizing idea behind the October 2008 revisions to the definition of solid waste. As stated in RCRA section 1004(27), ''solid waste'' is defined 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 activities'' (emphasis added). Therefore, in the context of the DSW final rule, a key issue relates to the circumstances under which a hazardous secondary material that is recycled by reclamation is or is not discarded (73 FR 64675). In exercising its discretion in the DSW final rule to define what constitutes ''discard'' for hazardous secondary materials reclamation, EPA included an explanation of how each provision of the final rule relates to discard (73 FR 64676–64679).

For example, in the DSW final rule, EPA determined that if the generator maintains control over the recycled hazardous secondary material and if the material is legitimately recycled under the standards established in the final rule and 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 reclamation process, the generator ensures that the hazardous secondary materials are not discarded. (See 73 FR 64676.)

Because the final revisions to the definition of solid waste are closely tied to EPA's interpretation of the concept of ''discard,'' EPA does not plan to repeal the rule in whole or stay its implementation. Such an action could result in hazardous secondary materials that are not discarded being regulated as hazardous wastes. In particular, EPA does not expect to repeal either the exclusion for hazardous secondary materials reclaimed under the control of the generator or the non-waste determination petition process.

Today's final rule includes several changes to the generator-controlled exclusion and to the non-waste determination petition process, but, for the reasons stated above, EPA did not stay the rule and is not withdrawing either provision.

3. Adequacy of EPA's Analyses

Finally, the Sierra Club's petition asserted that EPA's conclusion that the 2008 DSW final rule would have no adverse environmental impacts, and therefore would have no disproportional adverse impacts to minority and low-income communities, is unsupported by the administrative record. In response to these comments and similar comments by other stakeholders at the June 2009 public meeting, EPA committed to producing an expanded analysis of the potential disproportionate impacts of the 2008 DSW final rule. A draft methodology for the analysis was shared with the public in January 2010, and three public roundtable discussions were held to discuss the draft methodology and were addressed in the development of the draft DSW environmental justice analysis.[6]

J. Draft DSW Environmental Justice Analysis

As part of the development of the 2011 DSW proposal, EPA conducted a revised environmental justice analysis, following the methodology discussed with stakeholders during the 2010 roundtable discussions. The purpose of the draft DSW environmental justice analysis was two-fold. First, the analysis represents a systematic examination of the potential for an increase in adverse impacts under the 2008 DSW final rule (considered independently from which communities might be impacted). Second, the analysis includes a demographic assessment, characterizing the extent any potential adverse impacts are likely to affect minority and/or low-income communities. The results of this analysis were intended to inform EPA's decision-making on which regulatory options to pursue, within the scope of the Agency's authority to regulate hazardous waste.

The results of the draft DSW environmental justice analysis demonstrate that hazardous secondary material recycling can pose significant potential hazards to human health and the environment, and that it is reasonable to conclude that the potential for hazards from hazardous secondary materials recycling adversely impacting human health and the environment could increase under the 2008 DSW final rule. Of particular concern are (1) the absence of required measures (*e.g.,* weekly inspections, training, contingency plans) at hazardous secondary materials reclaimers to prevent problems (*e.g.,* spills, fires, explosions), (2) the incentives to accumulate larger volumes of hazardous secondary materials due to longer storage time limits, and (3) the reduction in access to information and opportunity for public participation.

Moreover, the analysis demonstrates that some of the communities potentially impacted are minority and low-income communities, and in most cases, the populations potentially impacted are disproportionately minority and/or low income. In particular, the population-level analysis shows a statistically significant potential disproportionate impact to minority and low-income populations. In addition, underlying vulnerabilities traditionally associated with minority and low-income communities can pose the potential to exacerbate potential adverse impacts of the 2008 DSW final rule. The ability of communities to participate in the decision-making process and the potential for multiple and cumulative effects are of particular concern.

The analysis has undergone peer review, and the draft environmental justice analysis and peer review comments were presented for public comment as part of the supporting documentation for the 2011 DSW proposal.

K. July 2011 Proposal To Revise the Definition of Solid Waste

On July 22, 2011, EPA published a proposal to revise the definition of solid waste. Comments were requested, and the comment period was extended until October 20, 2011. In September 2011, EPA held two public meetings to accept public comment on the proposal in Philadelphia, PA and in Chicago, IL. The goal of the 2011 DSW proposal was to re-examine the 2008 DSW final rule to determine if any changes are needed to ensure that the rule, as implemented, protects human health and the environment from the mismanagement of hazardous secondary materials, while at the same time promote sustainability by encouraging the reclamation of such materials. The proposed rule consisted of six possible actions, which are summarized below.

1. Revisions to the Exclusion for Hazardous Secondary Materials Reclaimed Under the Control of the Generator

In the 2011 DSW proposal, EPA proposed to retain the exclusion for hazardous secondary materials reclaimed under the control of the generator found at 40 CFR 261.4(a)(23), with certain revisions. Proposed revisions to the 2008 DSW rule generator-controlled exclusion include (1) adding a regulatory definition of ''contained,'' (2) making notification a condition of the exclusion, (3) adding a recordkeeping requirement for speculative accumulation, and (4) adding a recordkeeping requirement for reclamation under toll manufacturing agreements. In addition, EPA requested comment on other ways to strengthen the generator-controlled exclusion in order to protect human health and the environment.

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

EPA proposed to replace the exclusion for hazardous secondary materials that are transferred from the generator to other persons for the purpose of reclamation found at 40 CFR 261.4(a)(24) and(25) with an alternative Subtitle C regulatory scheme. EPA's analyses of potential hazards posed by the 2008 DSW rule indicate that, when implemented, the transfer-based exclusion may adversely impact human health and the environment from hazardous secondary materials that may become discarded, and that minority and low-income populations may be disproportionately affected by these impacts.

Under the proposed alternative Subtitle C requirements, the hazardous recyclable materials would be managed in accordance with the current RCRA Subtitle C requirements, including

[6] U.S. EPA. *Draft Environmental Justice Methodology for the Definition of Solid Waste Rule,* January 2010, *http://www.epa.gov/epawaste/hazard/dsw/ej.htm.*

manifesting and hazardous waste permits for storage. However, an exception to these proposed requirements would allow generators to accumulate hazardous recyclable materials for up to a year without a RCRA permit if they make advance arrangements for legitimate reclamation and document those arrangements in a reclamation plan.

EPA also requested comment on alternative approaches that would address the concerns regarding the potential risk under the transfer-based exclusion to human health and the environment from discarded hazardous secondary material, such as including additional conditions.

3. Remanufacturing Exclusion

In addition, EPA requested comment on an exclusion from the definition of solid waste for certain types of higher-value solvents sent for remanufacturing into similarly higher-value products. Further, the action requested comment on a petition process for adding other higher-value hazardous secondary materials that are destined to be remanufactured into similarly higher-value products.

4. Proposed Revisions to the Definition of Legitimacy

EPA also proposed revisions to the definition of legitimacy found at 40 CFR 260.43 for the purpose of distinguishing genuine recycling from "sham recycling." Proposed revisions to the 2008 DSW final rule legitimacy definition include (1) applying the codified "legitimacy" definition to all hazardous secondary material recycling activities; (2) making all legitimacy factors mandatory, with a petition process for those instances that a factor is not met even when the recycling is legitimate; and (3) requiring documentation of legitimacy.

5. Proposed Revisions to Solid Waste Variances and Non-Waste Determinations

EPA also proposed revisions to the case-by-case solid waste variances and non-waste determinations found at 40 CFR 260.30–260.34 in order to ensure protection of human health and the environment and foster greater consistency among the implementing agencies. Proposed revisions affect both the non-waste determinations from the 2008 DSW final rule and pre-2008 existing variances. Specific proposed revisions include (1) requiring facilities which were granted a variance to re-apply for the variance in the event of a change in circumstances that affects how that hazardous secondary material meets the criteria for the variance; (2) requiring facilities to re-notify every two years with updated information; (3) revising the criteria for the partial reclamation variance to clarify when the variance applies and to require, among other things, that all the criteria for this variance must be met; (4) revising the criteria for the non-waste determination in 40 CFR 260.34 to require that petitioners demonstrate why the existing solid waste exclusions would not apply to their hazardous secondary materials; and (5) designating the Regional Administrator as the EPA recipient of petitions for variances and non-waste determinations.

6. Request for Comment on Revisions to Other Recycling Exclusions and Exemptions

Finally, EPA requested comment on revisions that would affect other (pre-2008) solid waste exclusions and hazardous waste exemptions for recyclable materials. These possible revisions include (1) recordkeeping for speculative accumulation as applicable; (2) requiring facilities to re-notify every two years with updated information on their operating status under the various exclusions and exemptions; and (3) containment standards for excluded hazardous secondary materials.

IV. When will the final rule become effective?

This final rule is effective on July 13, 2015.

V. Revisions to the Exclusion for Hazardous Secondary Materials That Are Legitimately Reclaimed Under the Control of the Generator

In today's final rule, EPA is retaining and revising the conditional exclusion from the definition of solid waste at 40 CFR 261.4(a)(23) for those hazardous secondary materials that are legitimately reclaimed within the United States or its territories under the control of the generator. Revisions to the generator-controlled exclusion include (1) adding a codified definition of "contained;" (2) adding recordkeeping requirements for same company and toll manufacturing reclamation; (3) making notification a condition of the exclusion; (4) adding a requirement to document that recycling under the exclusion is legitimate; and (5) adding emergency preparedness and response conditions. In addition, we have amended the speculative accumulation provisions to add a recordkeeping requirement. A discussion of the public comments on the July 2011 DSW proposal and the Agency's responses can be found in section XIV of this preamble and the full response to comment document in the docket for this rulemaking.

A. Scope of the Exclusion

The definition of "hazardous secondary material generated and reclaimed under the control of the generator" is found at 40 CFR 261.4(a)(23) for both land-based and non-land-based units, since the requirements for both types of units are the same. 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. Examples of non-land-based units include tanks, containers, and containment buildings.

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

- They are generated and then reclaimed at the generating facility; or
- 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. In addition, the generating and receiving facilities must maintain at their facilities for no less than three years records of hazardous secondary materials sent or received under this exclusion. The records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received. The requirements may be satisfied by routine business records (*e.g.,* financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations); or
- 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. The tolling contractor and the toll manufacturer must maintain at their facilities for no less than three years records of hazardous secondary materials sent or received under this exclusion. The records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received. The requirements may be satisfied by routine business records (*e.g.,* financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations).

Materials subject to material-specific management conditions under the other exclusions of 40 CFR 261.4(a) when reclaimed and spent lead-acid batteries are not eligible for the generator-controlled exclusion at 40 CFR 261.4(a)(23).

In addition, materials managed under the generator-controlled exclusion at 40 CFR 261.4(a)(23) must be contained, may not be speculatively accumulated, and are subject to a notification provision and documentation of legitimacy determinations, which must be maintained on site. Furthermore, the generator must satisfy certain emergency preparedness and response conditions. These conditions and any changes from the 2008 DSW final rule are explained below.

B. EPA's Rationale for Retaining and Revising the Generator-Controlled Exclusion

In the 2008 DSW final rule, EPA determined that if the generator maintains control over the recycled hazardous secondary material, the material is legitimately recycled under the conditions of the exclusion, and the material is not speculatively accumulated within the meaning of EPA's regulations, then the hazardous secondary material is not discarded. Under these circumstances, 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 producers saves them; rather than abandoning them, the producer reuses them.'')) (73 FR 64676–7).

In today's final rule, EPA reaffirms its determination that when a generator legitimately recycles hazardous secondary materials under its control under the conditions of the exclusion, 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.

EPA is however making several revisions to the generator-controlled exclusion, the rationale for each of which is explained below.

1. Contained Definition

Under the generator-controlled exclusion, hazardous secondary materials must be contained pursuant to the definition in 40 CFR 260.10, regardless of whether they are stored in land-based units or non-land-based units. Under that definition, a hazardous secondary material is contained if it is managed in a unit that meets the following criteria: (1) The unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary material, to prevent releases of the hazardous secondary materials to the environment. Unpermitted releases are releases that are not covered by a permit (such as a permit to discharge to water or air) and may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures; (2) the unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and (3) the unit holds hazardous secondary materials that are compatible with other hazardous secondary materials placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions. Hazardous secondary materials in units that meet the applicable requirements of 40 CFR parts 264 or 265 are presumptively contained.

The codification of these regulatory criteria will help regulatory authorities and facilities operating under the exclusion to determine whether a unit adequately controls the movement of hazardous secondary materials. The contained standard is a key provision for determining that a hazardous secondary material is not discarded. Hazardous secondary materials that are not contained and are instead released to the environment are not destined for recycling and are clearly discarded.

In today's final rule, EPA is retaining the ''contained'' condition based on the rationale that hazardous secondary materials released to the environment are not destined for recycling and are clearly discarded, but is adding a regulatory definition of contained to make it easier for implementing agencies and the regulatory community to determine that a material is contained. In the preamble to the 2008 DSW final rule (73 FR 64681), the Agency stated that a hazardous secondary material is ''contained'' if it is placed in a unit that controls the movement of the hazardous secondary materials out of the unit and into the environment. However, EPA did not provide more specific guidance on how an implementing agency or the regulated community would determine if a unit did adequately control the movement of hazardous secondary materials and meet the contained standard.

As EPA noted in the 2011 DSW proposal and as reflected in many of the public comments, of particular concern is the lack of preventative measures in the contained standard in the 2008 DSW final rule. This is noted as a major regulatory gap in EPA's assessment of the potential for adverse impacts from the 2008 DSW final rule, including adverse impacts to minority and low income communities. Given that the contained standard is one of the major requirements for determining that hazardous secondary materials reclaimed under the generator-controlled exclusion are not discarded, this lack of specificity could undermine the exclusion. That is, if the primary or only way to determine that the hazardous secondary material is not contained is to wait until it is released to the environment, then the 2008 DSW final rule increases the likelihood of discard for these materials.

The Agency therefore is adding a regulatory definition of ''contained'' that resolves this uncertainty without sacrificing the flexibility that would allow the implementing authority to take into account a wide variety of case-specific circumstances when necessary. This definition specifies factors which, if met, demonstrate that the hazardous secondary materials in a unit are handled as valuable raw materials, intermediates, or products and thus are not being discarded. We note that the elements of the contained definition are all measures that are used to prevent releases and ensure operation and maintenance of the storage unit in the same manner as a production unit.

If these criteria were not met, the materials remaining in the unit would be considered solid and hazardous wastes and the unit would be subject to the appropriate hazardous waste regulations.

Also, to clarify the regulatory status of units from which releases have occurred, the Agency is also adding to 40 CFR 261.4(a)(23) the following language: (1) A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of reclamation; and (2) hazardous secondary material managed in a unit with leaks or other continuing or intermittent unpermitted releases of the hazardous secondary material to the environment is discarded and a solid waste.

2. Notification as a Condition

Under today's rule, generators, reclaimers, tolling contractors, and toll manufacturers operating under the generator-controlled exclusion at 40 CFR 261.4(a)(23) are required to submit a notification prior to operating under these exclusions and by March 1 of each even-numbered year thereafter to their regulatory authority. Facilities must also notify their regulatory authority within 30 days of stopping management of hazardous secondary materials under the rule. The notification provisions are found at 40 CFR 260.42.

The substance of the notification provisions is essentially the same as that under the 2008 DSW final rule. However, under today's rule, such notification is a condition of the exclusion rather than a requirement. At issue here are not the specifics of the notification in 40 CFR 260.42, but rather the consequences an entity would face for failing to notify. Thus, if notification is a requirement under the authority of RCRA section 3007 (as specified under the 2008 DSW final rule), it means that failure to notify would constitute a violation of the notification regulations. On the other hand, if notification is a condition of the exclusion, it means failure to notify would potentially result in the loss of the exclusion for the hazardous secondary materials (*i.e.,* the hazardous secondary materials may become solid and hazardous wastes and subject to full Subtitle C regulation).

EPA is finalizing the notification provision as a condition of the generator-controlled exclusion because it is the only formal indication of a facility's intent to reclaim a hazardous secondary material under the conditional exclusion rather than to discard it. For example, if during an inspection of a large quantity generator of hazardous waste, EPA were to discover a hazardous secondary material that had been stored on-site for more than 90 days without a RCRA permit (an act that would typically be a violation of the hazardous waste regulations), a previously filed notification would be an indication that the facility was planning to reclaim the hazardous secondary material under the conditions of the exclusion. Absent such a notification, it would be difficult for the facility to justify its true intentions for the hazardous secondary material. Failure to meet the notification provision would be a strong indication that the facility either did not intend to comply with or was unaware of the provisions of the exclusion, since it failed to comply with the first step for claiming the exclusion. In both cases, the lack of notification shows that the hazardous secondary material may be discarded. Making notification a condition of the rule would further discourage facilities from trying to evade enforcement by not notifying because the costs of not notifying could be significantly higher than if notification remains a requirement. Finally, notification is important for informing regulators and the public about hazardous secondary materials activity and, without such notification, regulators are unable to effectively monitor compliance. This notification condition will keep regulators and the public informed about hazardous secondary materials activity and will enable effective compliance monitoring.

3. Recordkeeping for Speculative Accumulation

Under today's rule, all persons subject to the speculative accumulation requirements at 40 CFR 261.1(c)(8) (including, but not limited to, persons operating under the generator-controlled exclusion at § 261.4(a)(23)) must place materials subject to those requirements in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method. This provision will allow inspectors and other regulatory authorities to quickly ascertain how long a facility has been storing an excluded hazardous secondary material, and, therefore, whether that facility is in compliance with the accumulation time limits of § 261.1(c)(8).

EPA notes that the speculative accumulation provision only applies to persons who are accumulating hazardous secondary materials. Processes involving hazardous secondary materials being returned to the original process via pipes are not considered to accumulate hazardous secondary materials and thus the speculative accumulation provision (and recordkeeping therein) would not apply to these scenarios.

4. Other Recordkeeping

Today's exclusion for tolling and ''same-company'' recycling requires recordkeeping for shipments sent and received under the exclusion. The records must contain the name of the transporter, the date of the shipment, and the type and quantity of hazardous secondary material shipped or received. These records may consist of normal business records. Such recordkeeping will facilitate enforcement of the exclusion and will allow tracking of hazardous secondary materials to ensure that these materials remain under the control of the generator and are not discarded.

5. Documentation of Legitimacy Determinations

Persons performing the recycling of hazardous secondary materials under the generator-controlled exclusion of 40 CFR 261.4(a)(23) must maintain documentation of their legitimacy determination on-site. Documentation must be a written description of how the recycling meets all four factors in 40 CFR 260.43(a), except as otherwise noted in 40 CFR 260.43(d). Documentation must be maintained for three years after the recycling operation has ceased.

The Agency has determined that requiring documentation under the generator-controlled exclusion to demonstrate that the hazardous secondary materials are legitimately recycled and not discarded is appropriate because this exclusion is generic and can be used by a wide variety of industries recycling any of a number of hazardous secondary materials.

6. Emergency Preparedness and Response

Many of the environmental and human health damages identified by the environmental problems study were caused by fires and explosions and the lack of specific requirements to prevent and respond to such problems is a significant gap in the 2008 DSW exclusion.[7] Fires and explosions at industrial recyclers can threaten the lives and health of both facility employees and the general public and can cause lasting damage to the local environment. Recent catastrophic chemical accidents in the United States, such as the 2013 fire and explosion in West, Texas, that killed 15 people, the 2010 explosion and fire at Tesoro Refinery in Anacortes, Washington, that killed seven employees, and the 2012 Chevron Refinery hydrocarbon fire in Richmond, California, that affected 15,000 people in the surrounding area, highlight the need for continued improvement in a number of areas related to chemical facility safety. To address these concerns, the President issued Executive Order 13650—Improving Chemical Facility Safety and

[7] Taken together, leaks, spills, fires, explosions, or other accidents caused environmental damage at 19% of the 250 environmental damage sites. U.S. EPA ''*An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials* (Updated)'' December 2014.

Security (EO) on August 1, 2013. The EO directed the Department of Homeland Security, EPA, the Department of Labor, the Department of Justice, the Department of Agriculture, and the Department of Transportation to identify ways to improve operational coordination with state, local, tribal, and territorial partners; enhance federal agency coordination and information sharing; modernize policies, regulations, and standards to enhance safety and security in chemical facilities; and work with stakeholders to identify best practices to reduce safety and security risks in the production and storage of potentially harmful chemicals.

EPA finds that planning and preparing for an emergency demonstrates a generator's intent to not only protect human health and the environment but to reduce potential loss of valuable hazardous secondary materials. In the absence of such requirements, hazardous secondary materials pose a greater risk of being released and discarded to the environment.

Therefore, EPA is adding a condition to the generator-controlled exclusion that generators must follow certain emergency preparedness and response regulations, found in 40 CFR part 261 subpart M, which are dependent on the amount of hazardous secondary material the generator accumulates on site at any time. Under the final rule, generators that accumulate less than or equal to 6,000 kg of hazardous secondary material on site must meet regulations like the emergency preparedness and response regulations currently required for small quantity generators of hazardous waste. Generators that accumulate more than 6,000 kg of hazardous secondary material on site must meet regulations like the emergency preparedness regulations currently required for large quantity generators of hazardous waste. EPA chose to set the threshold at 6,000 kg based on the current hazardous waste generator regulations, which require generators that accumulate greater than 6,000 kg of hazardous waste on site to comply with large quantity generator regulations, including emergency preparedness and response regulations. EPA finds that generators that accumulate greater amounts of hazardous secondary material on site inherently pose greater risk to human health and the environment from a potential release caused by a fire or explosion and thus it is more appropriate for these generators to take additional steps to prepare for such events.

Specifically, EPA is requiring that generators that accumulate less than or equal to 6,000 kg of hazardous secondary material on site comply with the emergency preparedness and response requirements equivalent to those in part 265 subpart C, which discuss maintaining appropriate emergency equipment on site, having access to alarm systems, maintaining needed aisle space, and making arrangements with local emergency authorities. A generator must also have a designated emergency coordinator who must respond to emergencies and must post certain information next to the telephone in the event of an emergency.

For generators that accumulate more than 6,000 kg of hazardous secondary material on site, EPA is requiring that generators comply with requirements equivalent to those in part 265 subparts C and D, which includes all the requirements already discussed above for those accumulating less than or equal to 6,000 kg, as well as requiring a contingency plan and sharing the plan with local emergency responders. EPA recommends that the contingency plan be based on the National Response Team's Integrated Contingency Plan Guidance (One Plan), discussed in the **Federal Register** on June 5, 1996 (61 FR 28642). Under the One Plan Guidance, the generator can develop one contingency plan that meets all the regulatory standards for the various statutory and regulatory provisions for contingency planning, such as EPA's Oil Pollution Prevention Regulation or Risk Management Programs regulations, the U.S. Coast Guard's (USCG) Facility Response Plan regulations, OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations, and several others.

EPA has determined that adding these emergency preparedness and response conditions to the generator-controlled exclusion meets the goals of the Chemical Safety EO and also will ensure that those facilities managing hazardous secondary material under the exclusion will be doing so in a manner that allows them to safely recycle the hazardous secondary material and limit loss of materials that are supposed to be recycled into the environment. These provisions are the common-sense steps that a facility that manages hazardous materials should take to reduce risk to their workers and the public. Additionally, EPA has determined that structuring the emergency preparedness and response conditions of the generator-controlled exclusion after the existing hazardous waste requirements serves to reduce burden on generators, as generators are likely already familiar and complying with this regulations.

VI. Verified Recycler Exclusion Replacing the Exclusion for Hazardous Secondary Materials That Are Transferred for the Purpose of Reclamation

Based on comments received and further assessment, EPA has decided to replace the 2008 DSW exclusion for hazardous secondary materials that are transferred for the purpose of legitimate reclamation (*i.e.,* the transfer-based exclusion) with an exclusion for hazardous secondary materials sent for reclamation at a verified recycler (*i.e.,* the verified recycler exclusion). The verified recycler exclusion is being finalized instead of the proposed Subtitle C alternative recycling standards because EPA has determined that such an exclusion will address the regulatory gaps identified in the 2008 DSW rule in a way that appropriately identifies hazardous secondary materials that will be legitimately recycled and not discarded. Based on the evidence from states currently implementing the transfer-based exclusion, hazardous secondary materials transferred to another party for recycling can be legitimately recycled and not discarded, provided that there is a mechanism for adequate oversight at the recycling facility. Subtitle C regulation of this activity is unnecessary and would result in EPA regulating as hazardous waste some materials that have not been discarded. By adding the condition of requiring the recycler to obtain a solid waste variance or have a RCRA permit, EPA is addressing the potential for future discard while allowing the legitimate recycling activities that are already occurring to continue. (A discussion of the public comments on the July 2011 proposal and the Agency's responses can be found in section XV of this preamble and the full response to comment document is in the docket for this rulemaking.)

A. Summary of Transfer-Based Exclusion

The 2008 exclusion for hazardous secondary materials that are transferred for the purpose of legitimate reclamation, which EPA is withdrawing today and replacing with the verified recycler exclusion, applied 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. This exclusion was found at 40 CFR 261.4(a)(24) and (25).[8]

General conditions for hazardous secondary material generators, reclaimers, and intermediate facilities[9] under this exclusion included the following:

- Entities must submit a notification prior to operating under the exclusion and by March 1 of each even-numbered year thereafter reporting types and quantities of hazardous secondary materials being reclaimed, and
- hazardous secondary materials managed at such facilities must not be speculatively accumulated as defined in § 261.1(c)(8) and must be legitimately reclaimed as specified in § 260.43.

Conditions applicable to generators of hazardous secondary materials included the following:

- Containment of such hazardous secondary materials,
- reasonable efforts, a form of due diligence, to ensure that the intermediate facility or reclaimer intends to properly manage and legitimately recycle the hazardous secondary material, and
- retention of records of off-site shipments for three years.

Conditions applicable to intermediate facilities and reclaimers included the following:

- Containment of hazardous secondary materials,
- transmittal of confirmations of receipt to generators,
- retention of records for hazardous secondary materials received and sent off-site,
- financial assurance equivalent to that required of hazardous waste facilities, and
- (for reclaimers) proper management of any residuals generated from the reclamation activities.

In addition, for any hazardous secondary materials excluded under 40 CFR 261.4(a)(24) 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 per 40 CFR 261.4(a)(25).

B. EPA's Rationale for Requiring Conditions for Transfers of Hazardous Secondary Materials Sent for Reclamation

In the 2008 DSW rule, EPA determined that, absent specific conditions, it is reasonable to conclude that transfers of hazardous secondary materials to third-party recyclers generally involve discard except for instances where EPA has evaluated and promulgated a case-specific exclusion that a hazardous secondary material is not a solid waste. Generators of hazardous secondary materials who do not reclaim these materials themselves often ship these materials to a commercial facility or another manufacturer for reclamation in order to avoid the costs of disposing of the material. Because of the low commercial value and the high potential liability associated with most types of hazardous secondary materials (*i.e.,* spent materials and listed hazardous waste by-products and sludges), generators will typically pay the reclamation facility to accept these hazardous secondary materials or receive a salvage fee that only partially offsets the cost of transporting and managing them. 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 them as a useful product. (Note that this determination is unchanged from the 2008 DSW final rule; see 73 FR 64675.)

Evidence of hazardous secondary materials not being managed as a valuable product is shown in the results of the environmental problems study, found in the docket of the 2008 DSW final rule. Of the 208 damage cases discussed in the 2008 DSW final rule, 195 (or approximately 94%) were from reclamation activities of 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 (73 FR 64673).

In addition, the market forces study in the docket for the 2008 DSW final rule supports the conclusion that the pattern of discard at off-site third-party reclaimers is a result of inherent differences between commercial 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 the receipt of the hazardous secondary materials. Recyclers of hazardous secondary materials in this situation thus respond differently than traditional manufacturers to economic forces and incentives, accumulating more inputs (hazardous secondary materials) than can be processed (reclaimed). In addition, commercial recyclers have less flexibility than in-house recyclers in changing how they manage their hazardous secondary materials (*e.g.,* during price fluctuations, in-house recyclers can more easily switch from recycling to disposal or from recycled inputs to virgin inputs, while commercial recyclers cannot switch to disposal without obtaining a RCRA permit) (73 FR 64674). In other words, third-party recyclers have economic incentives to accumulate waste beyond their ability to deal with it.

C. Regulatory Gaps in the 2008 DSW Rule

The 2008 DSW final rule attempted to address this pattern of adverse impacts to human health and the environment from hazardous secondary materials transferred to a third party for recycling by setting conditions for the transfer-based exclusion. The intent of these conditions was to define when transfers to third-party recyclers would not result in discard. The link between each of the conditions and their ability to prevent discard is discussed in detail in the 2008 DSW final rule preamble at 73 FR 64675–79.

However, EPA failed to take into account how the conditions of the 2008 transfer-based exclusion would work when actually implemented. EPA's analysis of the 2008 DSW final rule was based on the assumption that DSW conditions would be implemented to the same degree as Subtitle C hazardous waste regulations, without taking into consideration whether the 2008 DSW rule would provide EPA and the authorized states the ability for the same level of oversight as the fully applicable Subtitle C hazardous waste regulations, which leads to the second part of EPA's rationale for its 2011 proposal to replace the transfer-based exclusion with an alternative Subtitle C regulatory scheme.

Before excluding hazardous secondary materials that have already been determined to be hazardous wastes when discarded, the Agency needs adequate assurance that the conditional exclusion will not result in discarded hazardous materials posing significant risks to human health and the environment (*e.g.,* fires/explosion, soil and water contamination, air emissions, and abandoned hazardous secondary materials). Because EPA has already evaluated these hazardous secondary materials (for example, during a hazardous waste listing determination) and determined them to be solid and hazardous wastes when discarded, the Agency must be able to reasonably expect that hazardous secondary materials managed under a conditional exclusion will not be discarded.

[8] 40 CFR 261.4(a)(24) is the primary transfer-based exclusion and 40 CFR 261.4(a)(25) contains the export requirements for the transfer-based exclusion.

[9] Intermediate facilities are those facilities that do not reclaim hazardous secondary materials, but store them for more than 10 days.

Over the years, EPA has developed many such conditional exclusions (found in 40 CFR 261.4(a)). In each of these cases, EPA did so by examining the specific hazardous secondary material or the specific recycling practice, or both, before making a determination that the hazardous secondary material is not solid waste. However, unlike these types of specific transfer-based exclusions from the definition of solid waste, the 2008 transfer-based exclusion in 40 CFR 261.4(a)(24) and (25) did not focus on the chemical or physical properties of any particular type of hazardous secondary material or on how it is typically managed. Instead, the transfer-based exclusion is broadly applicable to a wide range of hazardous spent materials and listed by-products and sludges. Thus, while other solid waste exclusions were developed based on EPA's knowledge of the specific hazardous secondary materials, the industries generating them, or the current recycling management practice for those hazardous secondary materials, the 2008 DSW transfer-based exclusion relied entirely on the conditions that were developed by EPA operating as the Agency anticipates they should. The conditions themselves were developed in a reasoned manner,[10] but without evidence that they would work as intended (*i.e.,* would not result in significant risk to human health and the environment from discarded materials).

However, the conditions for the transfer-based exclusion in the 2008 DSW final rule lack several important implementation provisions that the Subtitle C requirements for treatment, storage, and disposal facilities provide. These provisions ensure a greater level of oversight, which ensures that EPA or the state has reviewed a facility's planned operations before management begins and which allows public participation in the environmental decision-making process, thereby increasing the likelihood of compliance and decreasing the potential for risk to human health and the environment from discarded hazardous secondary material. EPA has performed a detailed regulatory comparison of the 2008 DSW final rule with the fully applicable Subtitle C hazardous waste regulations, identifying significant differences that could lead to the potential for an increased likelihood of environmental and public health hazards, including fires/explosion, soil and water contamination, air emissions, and abandoned hazardous secondary materials.[11]

D. Rationale for the Verified Recycler Exclusion

Based on this reconsideration of the DSW transfer-based exclusion conditions, EPA has determined that hazardous secondary materials transferred off-site to third party reclaimers for the purpose of legitimate reclamation are most appropriately covered under a system that allows for oversight and public participation prior to the start of operations to help ensure that (1) the hazardous secondary material will be legitimately reclaimed and not discarded and (2) the potential risk of releases from the facility impacting the surrounding community will be minimized. The need for such additional oversight and public participation is demonstrated by (1) evidence of past damage cases leading to significant risk to human health and the environment from hazardous secondary materials originally intended for recycling and (2) the underlying perverse incentives of the recycling market to over-accumulate such hazardous secondary materials intended for recycling, resulting in discard of the material. In other words, the transfer-based exclusion can exacerbate financial incentives for small and/or inexperienced businesses to take in more hazardous secondary materials than they actually can use, mishandle it, and even go out of business, as shown by the fact that bankruptcies or other types of business failures were associated with 66% of the recycling damage cases, resulting in multi-million dollar cleanups.

At the same time, as EPA noted in the 2011 DSW proposal and as was echoed in the public comments, EPA has also carefully monitored the implementation of the 2008 DSW final rule since it came into effect in December 2008, and to date, no environmental problems have been reported by states related to 2008 transfer-based exclusion. As of April 2014, a total of 65 facilities are operating under the transfer-based exclusion, 56 of which are generators transferring off-site and 7 which are reclamation facilities.[12] All seven reclamation facilities are RCRA permitted. Of the 56 generators operating under the transfer-based exclusion, 32 generators appear to have either started or substantially increased their recycling as a result of the 2008 DSW exclusions. These include generators that had previously reported in their 2007, 2009, or 2011 biennial report that they sent their solvents off site for fuel blending, and then notified that they are sending their spent solvents for reclamation under the 2008 DSW final rule. In addition, in at least five cases, facilities have switched from sending spent pickle liquor to landfilling or deep well injection to recycling under the 2008 DSW rule. In total, the 2008 DSW notifications document that over 57,000 tons of hazardous secondary material were reclaimed under the 2008 DSW rule during 2011.[13]

In addition, it should be noted that the Department of Environmental Protection for the State of Pennsylvania (PA DEP), where 27 of the 65 facilities operating under the transfer-based exclusion are located, commented strongly in favor of keeping the transfer-based exclusion: "PA DEP has experienced no compliance problems or issues of any nature with those generators or reclamation facilities operating under this conditional exclusion, known as the transfer-based exclusion. In addition, under the transfer-based exclusion, large quantities of hazardous solvents have been diverted to reclamation and reuse rather than being burned for energy recovery, resulting in greater resource conservation." [14]

Given that the transfer-based exclusion has been achieving its intended purpose of encourage safe, legitimate recycling, withdrawing the transfer-based exclusion and replacing it with RCRA Subtitle C hazardous waste requirements is unnecessary and would result in hazardous secondary material that is currently being legitimately recycled and not discarded being regulated as hazardous waste. Because Subtitle C regulation would be more stringent that the current exclusion, if EPA were to finalize the alternative Subtitle C standards, Pennsylvania (and other states that have adopted the 2008 DSW rule) would have to regulate this material as hazardous waste, despite the

[10] See Chapter 11, *Regulatory Impact Analysis: EPA's 2008 Final Rule Amendments to the Industrial Recycling Exclusions of the RCRA Definition of Solid Waste,* EPA–HQ–RCRA–2002–0031–0602.

[11] See Chapter 2 and Appendix A of *Potential Adverse Impacts Under the Definition of Solid Waste Exclusions (Including Potential Disproportionate Adverse Impacts to Minority and Low-Income Populations): Volume 1—Hazard Characterization,* available in the docket for today's rule.

[12] Some of these facilities are also managing hazardous secondary materials under the generator-controlled exclusion.

[13] U.S. EPA, *EPA's Evaluation of Data Collected From Notifications Submitted Under the 2008 Definition of Solid Waste Exclusions,* April 11, 2014.

[14] Comment to the docket from Vincent J. Brisini, Acting Deputy Secretary for Waste, Air, Radiation and Remediation, Pennsylvania Department of Environmental Protection, October 20, 2011 (EPA–HQ–RCRA–2010–0742–0271).

fact that according to the state it is currently being legitimately recycled and not discarded.

However, it is important to note that the comments from PA DEP went on to recommend that the transfer-based exclusion be limited to RCRA-permitted facilities. Because all recycling under the transfer-based exclusion has been (to date) performed at RCRA-permitted facilities, EPA is unable to extrapolate what would happen at facilities without RCRA Subtitle C permits if the transfer-based exclusion were fully implemented. Given the evidence of past damage cases leading to significant risk to human health and the environment from hazardous secondary materials originally intended for recycling and the underlying perverse incentives of the recycling market to over-accumulate such hazardous secondary materials intended for recycling, resulting in discard of the material, additional oversight of recycling beyond the self-implementing measures of the transfer-based exclusion is needed to ensure that the hazardous secondary material is legitimately recycled and not discarded.

To address this issue, EPA is requiring as a condition of the new verified recycler exclusion that generators must send their hazardous secondary materials to a RCRA-permitted recycler or intermediate facility [15] or to a verified hazardous secondary materials recycler or intermediate facility who has obtained a solid waste variance from EPA or the authorized state using the procedures found in 40 CFR 260.33. The verified recycler exclusion uses the solid waste variance procedure to determine if a facility will properly manage the hazardous secondary materials as commodities and legitimately recycle rather than discard them. The variance addresses the same criteria currently required for the reasonable efforts environmental audit under the 2008 transfer-based exclusion (see discussion below). However, the variance process would allow EPA or the authorized state to evaluate the facility before it begins recycling hazardous secondary materials and would also give the affected community the opportunity to provide input prior to a decision as to whether the variance should be granted, thus addressing a major regulatory gap in the transfer-based exclusion that could result in significant risk to human health and the environment from discarded hazardous secondary material.

In addition, as described below, the verified recycler exclusion retains those conditions from the 2008 transfer-based exclusion that EPA determined are necessary to properly identify hazardous secondary material that is legitimately recycled and not discarded, and also includes the new conditions that apply to the generator-controlled exclusion being finalized today.

EPA expects that all facilities that are currently recycling hazardous secondary materials under the 2008 transfer-based exclusion will be able to continue to recycle these materials under the verified recycler exclusion, because all recycling under the transfer-based exclusion is being done at RCRA-permitted facilities, which also qualify for the verified recycler exclusion. Moreover, the additional conditions of the verified recycler exclusion address the regulatory gaps EPA identified in the 2011 DSW proposal that could have resulted in significant risk to human health and the environment from discarded material, if the 2008 DSW had been fully implemented to include facilities without RCRA permits or other regulatory oversight prior to beginning recycling.

Finally, EPA notes that facilities managing excluded hazardous secondary materials under the verified recycling exclusion are still potentially subject to RCRA enforcement actions if they fail to meet the conditions of the exclusion. Persons that handle these hazardous secondary materials are responsible for maintaining the exclusion by ensuring that the conditions 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 RCRA Subtitle C purposes.

E. Conditions of the Verified Recycler Exclusion

The conditions discussed below describe EPA's evaluation of each of the conditions under the 2008 transfer-based exclusion that EPA is retaining in the verified recycler exclusion, as well as the additional conditions EPA has determined are necessary to address the regulatory gaps identified in the transfer-based exclusion in order to ensure that the verified recycler exclusion identifies hazardous secondary materials that are legitimately recycled and not discarded. By including these conditions, EPA is identifying those hazardous secondary materials that will be legitimately recycled and not discarded.

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 verified recycler 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.

Furthermore, under today's rule, all persons subject to the speculative accumulation requirements at 40 CFR 261.1(c)(8) (including, but not limited to, persons operating under the verified recycler exclusion at § 261.4(a)(24)) must place materials subject to those requirements in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method.

This provision will allow inspectors and other regulatory authorities to quickly ascertain how long a facility has been storing an excluded hazardous secondary material, and, therefore, whether that facility is in compliance with the accumulation time limits of § 261.1(c)(8).This provision is being retained in the verified recycler exclusion to ensure that the hazardous secondary materials will be recycled rather than discarded through speculative accumulation and abandonment.

Notification. Under today's verified recycler exclusion, as a condition of the exclusion, hazardous secondary

[15] Intermediate facilities are those facilities that do not reclaim hazardous secondary materials, but store them for more than 10 days.

material generators, reclaimers, and intermediate facilities must 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 following:

- 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;
- 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.

This notification condition is the same as the notification condition for the generator-controlled exclusion and is an indication that the facility is planning to legitimately recycle the hazardous secondary materials and not discard them. As with the generator-controlled exclusion, EPA is finalizing the notification provision as a condition of the transfer-based exclusion because it is the only formal indication of a facility's intent to reclaim a hazardous secondary material under the conditional exclusion rather than to discard it. 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 V.B.2 of today's preamble.

Hazardous secondary materials must be contained. Another condition of the verified recycler 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. This provision is the same as the restriction that is being promulgated for the generator-controlled exclusion and helps ensure that the hazardous secondary material remains in the management unit until it is ready to be recycled and is not discarded. 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. For further discussion on the containment provisions, see section V.B.1 of today's preamble.

Emergency preparedness and response. As discussed above under the generator-controlled exclusion, one important cause of environmental and human health damages identified by the environmental problems study is fires, explosions, and accidents, with 19% of the environmental damage cases being associated with leaks, spills, fires, explosions, or other accidents, and the lack of conditions to address these problems is a significant regulatory gap in the 2008 DSW exclusions. In addition, the President recently released an Executive Order to address these types of concerns (EO 13650—Improving Chemical Facility Safety and Security). EPA finds that planning and preparing for an emergency demonstrates a generator's intent to not only protect human health and the environment, but also to reduce potential loss of valuable hazardous secondary materials. In the absence of such requirements, hazardous secondary materials pose a greater risk of being released and discarded to the environment.

Therefore, EPA is requiring that generators must follow certain emergency preparedness and response regulations under the verified recycler exclusion. These regulations are found in 40 CFR part 261 subpart M and are dependent on the amount of hazardous secondary material the generator accumulates on site at any time.[16] Under the final rule, generators that accumulate less than or equal to 6,000 kg of hazardous secondary material on site must meet regulations like the emergency preparedness and response regulations currently required for small quantity generators of hazardous waste. Generators that accumulate more than 6,000 kg of hazardous secondary material on site must meet regulations like the emergency preparedness and response regulations currently required for large quantity generators of hazardous waste. EPA chose to set the threshold at 6,000 kg based on the current hazardous waste generator regulations, which require generators that accumulate greater than 6,000 kg of hazardous waste on site to comply with large quantity generator regulations, including emergency preparedness and response regulations. EPA finds that generators that accumulate greater amounts of hazardous secondary material on site inherently pose greater risk to human health and the environment from a potential release caused by a fire or explosion and thus it is more appropriate for these generators to take additional steps to prepare for such events.

Specifically, EPA is requiring that generators that accumulate less than or equal to 6,000 kg of hazardous secondary material on site comply with the emergency preparedness and response requirements equivalent to those in part 265 subpart C, which discuss maintaining appropriate emergency equipment on site, having access to alarm systems, maintaining needed aisle space, and making arrangements with local emergency authorities. A generator must also have a designated emergency coordinator who must respond to emergencies and must post certain information next to the telephone in the event of an emergency.

For generators that accumulate more than 6,000 kg of hazardous secondary material on site, EPA is requiring that they comply with requirements equivalent to those in part 265 subparts C and D, which includes all the requirements already discussed above for those accumulating less than or equal to 6,000 kg, as well as requiring a contingency plan and sharing the plan with local emergency responders. EPA

[16] Intermediate facilities and reclamation facilities must also follow emergency prepared and response regulations, either through the requirement of their RCRA permit or through the criteria that must be met to obtain a verified recycler variance under 40 CFR 260.31(d).

recommends that the contingency plan be based on the National Response Team's Integrated Contingency Plan Guidance (One Plan), discussed in the **Federal Register** on June 5, 1996 (61 FR 28642). Under the One Plan Guidance, the generator can develop one contingency plan that meets all the regulatory standards for the various statutory and regulatory provisions for contingency planning, such as EPA's Oil Pollution Prevention Regulation or Risk Management Programs regulations, the U.S. Coast Guard's (USCG) Facility Response Plan regulations, OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations, and several others.

EPA has determined that adding these emergency preparedness and response conditions meets the goals of the Chemical Safety EO and also will ensure that those facilities managing hazardous secondary material under the exclusion will be doing so in a manner that allows them to safely recycle the hazardous secondary material and limit loss into the environment of materials that are supposed to be recycled. These provisions are the common-sense steps that a facility that manages hazardous materials should take to reduce risk to their workers and the public. Additionally, structuring the emergency preparedness and response conditions of the verified recycler exclusion after the existing hazardous waste requirements serves to reduce burden on generators, as generators are already familiar and complying with this regulations.

Exclusion is limited to recycling performed within the United States. Because the verified recycler exclusion requires that hazardous secondary materials are sent to a verified reclamation facility (or facilities) that has been granted either a RCRA permit or interim status that addresses the hazardous secondary material or has received a variance from EPA or the authorized state, this exclusion is limited to recycling performed within the United States or its territories. Because hazardous secondary materials that are exported for recycling passes out of the regulatory control of the federal government, it is not possible to verify whether the foreign reclaimer will safely and legitimately recycle the hazardous secondary material and not discard it.

2. Provisions Applicable to the Hazardous Secondary Material Generator

Transport to a Verified Recycler. The hazardous secondary material generator must transport hazardous secondary materials to a verified reclamation facility (or facilities) within the United States or its territories. A verified reclamation facility is a facility that has been granted a variance by EPA or an authorized state under § 260.31(d) or a reclamation facility where the management of the hazardous secondary materials is addressed under a RCRA Part B permit or interim status standards. If the hazardous secondary material will be passing through an intermediate facility, the intermediate facility must have been granted a variance under § 260.31(d) or the management of the hazardous secondary materials at that facility must be addressed under a RCRA Part B permit or interim status standards. The hazardous secondary material generator must also make contractual arrangements with the intermediate facility to ensure that the intermediate facility sends the hazardous secondary material to the verified reclamation facility identified by the hazardous secondary material generator.

Note that in the case of a permitted facility the management of the hazardous secondary materials must be addressed under the RCRA part B permit or interim status standards. In other words, if the permit standards do not extend to the hazardous secondary materials being reclaimed, then the reclamation or intermediate facility is required to either modify the permit to cover those materials or obtain a solid waste variance from EPA or the authorized state before operating under the exclusion.

This condition addresses the major regulatory gap in the transfer-based exclusion of lack of oversight and public participation for hazardous secondary material recycling facilities that do not have RCRA permits. Given the evidence of past damage cases leading to significant risk to human health and the environment from hazardous secondary materials originally intended for recycling and the underlying perverse incentives of the recycling market to over-accumulate such hazardous secondary materials intended for recycling, resulting in discard of the material, additional oversight of recycling beyond the self-implementing measures of the transfer-based exclusion are needed to ensure that the hazardous secondary material is legitimately recycled and not discarded.

This condition replaces the self-implementing "reasonable efforts" environmental audits of the recycling facility required under the 2008 transfer-based exclusion. EPA has determined that it more appropriate for the state or EPA to make the determination that a facility can safely and legitimately recycle hazardous secondary material. While EPA has found that many large companies do conduct environmental audits of recycling facilities, many smaller generators would not have the technical expertise or resources to conduct such an effort.[17] In addition, it is more efficient for the EPA or the authorized state to perform one evaluation of a recycler via the permit or variance process rather than have multiple evaluations of a recycler conducted by each generator using that recycler.

Recordkeeping. EPA is requiring hazardous secondary material generators to maintain at the generating facility certain records that document off-site shipments 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) could 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

[17] *An Assessment of Good Current Practices for Recycling of Hazardous Secondary Materials* (EPA–HQ–RCRA–2002–0031–0354).

reclamation step. In these cases, the recordkeeping condition 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 shipped hazardous secondary materials to one reclaimer for partial reclamation and then arranged for the partially-reclaimed material to be subsequently sent to another reclaimer for ''final'' reclamation, the generator must maintain confirmations of receipt from each reclaimer involved in the reclamation process.

The recordkeeping requirements are the same as those in the 2008 transfer-based exclusion and Agency continues to believe that the recordkeeping requirements in today's rule comprise the minimum information needed to enable effective oversight to ensure the hazardous secondary materials were sent 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. 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. This provision is unchanged from the 2008 transfer-based exclusion and describes the intersection of the RCRA and DOT requirements for these shipments.

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

Recordkeeping. Reclaimers and intermediate facilities who operate under the verified recycler 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, records 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 sent 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) could 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 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. Where there is no analogous raw material, the hazardous secondary material must be contained.

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 demonstrate that the materials are not discarded, but instead are treated valuable commodities which would be used and not lost to the environment.

This condition is the same as the parallel condition in the 2008 transfer-based exclusion and is based on the fact that 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 approximately 40% of the incidents. Accordingly, EPA has determined 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 a manner at least as protective 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 verified recycler 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.

This condition is the same as the parallel condition in the 2008 transfer-based exclusion and 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.

Financial Assurance. The financial assurance condition is another condition that is the same as the parallel condition in the transfer-based exclusion. 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 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 facility 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, or if the facility faces financial difficulties, that funds would have been set aside to address any issues and, therefore, these costs will not be imposed on the U.S. taxpayer.

The financial assurance requirement has been retained in 40 CFR part 261 subpart H because the substance of the requirement is unchanged from the financial assurance requirement for the 2008 DSW transfer-based exclusion. However, the financial assurance condition is now one of the criteria that is evaluated under the verified recycler solid waste variance, allowing the state or EPA to verify that the financial assurance obtained by the reclamation facility or intermediate facility is sufficient and accessible (in contrast, the financial assurance condition in the 2008 DSW transfer-based exclusion was self-implementing and not subject to review by EPA or the authorized state prior to the facility beginning operation).

A detailed discussion of the 40 CFR part 261 subpart H financial assurance provisions can be found in the 2008 DSW final rule at 73 FR 64692–8, October 30, 2008.

Verification of the Recycler. As discussed earlier, the condition requiring verification of the recycler is the one of the major differences between the transfer-based exclusion and the verified recycler exclusion and addresses the major regulatory gap in the transfer-based exclusion of lack of oversight and public participation for hazardous secondary material recycling facilities that do not have RCRA permits. The reclaimer and intermediate facility must have been granted a solid waste variance by EPA or an authorized state under § 260.31(d) or must have a RCRA Part B permit or interim status standards that address the management of the hazardous secondary materials. An intermediate or reclamation facility may apply for a solid waste variance to accept hazardous secondary materials by addressing the substantive criteria of the "reasonable efforts" condition that had previously applied to the hazardous secondary material generator under 40 CFR 261.4(a)(24)(B). In addition, the variance must address the potential for risk to proximate populations from unpermitted releases of the hazardous secondary material to the environment.

Specifically, to qualify for the solid waste variance, the facility must address the following criteria:

(1) The intermediate or reclamation facility must demonstrate that the reclamation process for the hazardous secondary materials is legitimate pursuant to § 260.43;

(2) The intermediate or reclamation facility must satisfy the financial assurance condition in § 261.4(a)(24)(vi)(F);

(3) The intermediate or reclamation facility must not be subject to a formal enforcement action in the previous three years and must not be classified as a significant non-complier under RCRA Subtitle C, or must provide credible evidence that the facility will manage the hazardous secondary materials properly. Credible evidence may include a demonstration that the facility has 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) The intermediate or reclamation facility must have the equipment and trained personnel to safely manage the hazardous secondary material and must meet emergency preparedness and response requirements;

(5) If residuals are generated from the reclamation of the excluded hazardous secondary materials, the reclamation facility must have the permits required (if any) to manage the residuals, have a contract with an appropriately permitted facility to dispose of the residuals, or present credible evidence that the residuals will be managed in a manner that is protective of human health and the environment; and

(6) The intermediate or reclamation facility must address the potential for risk to proximate populations from unpermitted releases of the hazardous secondary material to the environment (including releases that are not covered by a permit, such as a permit to discharge to water or air, and may include, but are not limited to, potential releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures), and must include consideration of potential cumulative risks from other nearby potential stressors.

The rationale for each of these criteria is discussed below.

Criterion (1) is based on the first reasonable efforts question in the 2008

transfer-based exclusion and focuses on whether the reclamation facility receiving hazardous secondary materials from a generator legitimately recycles such materials. Determining whether a recycling operation is legitimate is a fundamental basis for establishing that a generator's hazardous secondary materials will not be discarded. For further discussion of legitimate recycling, see section VIII.

Criterion (2) is based on the second reasonable efforts question in the 2008 transfer-based exclusion and addresses whether 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 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. Note that the second reasonable efforts question also required the generator to verify that the regulatory authority had been notified by the recycler under the 2008 transfer-based exclusion, but under the verified recycler exclusion, the state or EPA can verify that directly, thus, it is not included here.

Criterion (3) is based on the third reasonable efforts question in the transfer-based exclusion and 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). The language of this requirement has been simplified from the corresponding reasonable efforts question because the information is submitted to the regulatory agency who already has access to the pertinent enforcement information, rather than obtained by the generator who would need to rely on publicly-available data. This criterion requires that the facility must either not be subject to a formal enforcement action in the previous three years and not be classified as a significant non-complier under RCRA Subtitle C, or must provide credible evidence that the facility will manage the hazardous secondary materials properly.

''Formal enforcement'' is a written document that mandates compliance and/or initiates a criminal, civil or administrative process, with or without appeal rights before a trial 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 criminal or 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 criminal, 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.*

While a facility being designated as a significant non-complier and/or the subject of a formal enforcement action does not automatically mean that the facility would not reclaim the hazardous secondary materials properly, it does raise questions that we believe the facility requesting the variance should address. 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, the facility must adequately explain 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.

Criterion (4) is based on the fourth reasonable efforts question from the 2008 transfer-based exclusion and addresses 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. This criterion also includes the addition of verifying that the facility meets the new emergency preparedness and response condition discussed earlier.

Criterion (5) is based on the fifth reasonable efforts question in the 2008 transfer-based exclusion and addresses another major cause of environmental problems from recycling hazardous secondary materials: the management of residuals. This criterion 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 discard 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. To address criterion (5), the petitioner would need to demonstrate 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.

Criterion (6) is a new standard not included in the 2008 transfer-based exclusion and is a case-specific performance-based criterion that addresses the risk to proximate populations from unpermitted releases of the hazardous secondary material to the environment (including releases that are not covered by a permit, such as a permit to discharge to water or air, and may include, but are not limited to, potential releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures), and must include consideration of potential cumulative risks from other nearby potential stressors. The purpose of this criterion is to specifically address the differences in the preventative measures between a RCRA-permitted facility as compared to a facility managing excluded hazardous secondary material, including the lack of prescriptive standards for storage and containment (including air emissions standards). In addition, this criterion would address the finding that many of the populations

likely to be proximate to hazardous secondary materials recycling facilities are subject to multiple environmental stressors, including other industrial facilities, landfills, transportation-related air emissions, poor housing conditions (*e.g.*, lead-based paint), leaking underground tanks, pesticides, and incompatible land uses.

The steps the petitioner would take to address this criterion would depend on case-specific circumstances. For example, a facility that is recycling a hazardous secondary material that is not particularly mobile in the environment (*e.g.*, a non-liquid material that does not pose a risk of wind-blown dust) and is not located near population centers would simply need to document these facts in order to meet this criterion. On the other hand, a facility recycling a hazardous secondary material that is volatile, ignitable, or otherwise has a high potential to adversely impact nearby populations in case of a release would need to document the specific steps taken to prevent releases. EPA recommends that the petitioner engage the potentially affected community in developing this document to ensure that they have addressed the concerns expressed by the community.

E. Procedure for Obtaining a Verified Recycler Solid Waste Variance

The process for obtaining a verified recycler solid waste variance is the same as that for the other solid waste variances found in 40 CFR 260.30. In order to obtain a variance, a facility that manages hazardous secondary materials that would otherwise be regulated under 40 CFR part 261 as either a solid waste or a hazardous 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 verified recyclers and intermediate facilities. The application must address the relevant criteria discussed in detail above. The Administrator or authorized state 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 or authorized state will accept comment on the tentative decision for 30 days and may also hold a public hearing. The Administrator or authorized state 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). (Note that today's rule includes several modifications to the variances procedure in 40 CFR 260.33, which would also apply in this case. For further discussion see Section IX of today's preamble).

F. Termination of the Exclusion

As with the generator-controlled exclusion (and the 2008 transfer-based exclusion), units managing hazardous secondary materials excluded under the verified recycler 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, owners and operators of reclamation facilities and intermediate facilities must manage any remaining hazardous secondary materials, including any residues that are not reclaimed, as hazardous waste and remove or decontaminate 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 are 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, 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 of reclamation facilities and intermediate facilities 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.

VII. Remanufacturing Exclusion

Today, EPA is also finalizing an exclusion from the definition of solid waste for higher-value solvents transferred from one manufacturer to another for the purpose of extending the useful life of the original solvent product by keeping such materials in commerce to reproduce a commercial grade of the original solvent product provided that certain conditions are met. For the purpose of this preamble discussion, EPA is defining this process as "remanufacturing." Remanufacturing 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. (A discussion of the public comments on the July 2011 proposal and the Agency's responses can be found in section XVI of this preamble and the full response to comment document is in the docket for the rulemaking.)

A. Purpose of the Remanufacturing Exclusion

In finalizing this conditional exclusion, EPA's objective is to encourage sustainable materials management by identifying specific types of transfers of hazardous secondary materials to third parties, that under appropriate conditions, do not involve discard and can result in extending the useful life of a commercial-grade chemical. Remanufacturing these higher-value hazardous secondary materials can have a significantly lower environmental impact than manufacturing these chemicals for a one-time use and then transferring them for disposal. Thus, remanufacturing allows the hazardous secondary material product to be used again, lowering their life-cycle environmental impacts significantly.

Specifically, EPA has determined that, under appropriate conditions, the potential for discard in inter-company remanufacturing transfers for certain higher-value spent solvents would be low because they will be incorporated into the manufacturing process rather than accumulated or disposed of. Once these solvents are remanufactured to commercial grade, they can be used as replacements for virgin commercial grade solvents. The economic incentive for a company receiving the spent solvents would be to sell or directly use (avoiding purchase of virgin product) the remanufactured solvent products to realize an economic value. The company sending these higher-value spent solvents for remanufacturing is expected to have little economic incentive to pay the receiving company more than a nominal amount of money,

since it would already be transferring something of intrinsic market value (materials that can be easily remanufactured for profit). So, unlike the RCRA-permitted waste handler which can charge a considerable fee for receiving discarded waste, the company receiving these higher-value spent solvents for remanufacturing is expected to realize most of its profit from the sale or use of the remanufactured solvents.

Once remanufacturing processes are in place, EPA expects that solvent remanufacturers would be competitive with other solvent manufacturers even in the event of a downturn in the sizable chemical market. Companies would also have the flexibility to redirect remanufacturing capacity to manufacturing should it ever make economic sense to do so, leaving little economic reason to accumulate unsold or unused remanufactured solvents.

B. Scope and Applicability

1. Designated Solvents

The conditional exclusion for remanufacturing applies to hazardous spent solvents that are currently regulated as hazardous wastes because their recycling involves reclamation. Only the following 18 spent solvents are eligible for the remanufacturing exclusion: Toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform, chloromethane, dichloromethane, methyl isobutyl ketone, NN-dimethylformamide, tetrahydrofuran, n-butyl alcohol, ethanol, and/or methanol.

These 18 solvents are used in large volumes as chemical manufacturing aids, chemical processing aids, and chemical formulation aids (generally referred to as ''processing aids'' for the purpose of this rule). The processing aid solvents assist in the reaction, extraction, purification, and blending of ingredients and reactive products, but are not themselves reacted. These processing aid solvents, once used, can then be remanufactured to commercial grade again. These higher-value solvents were selected because there are existing markets for all these solvents to be remanufactured to serve similar purposes to those of the original commercial-grade materials.

Note that, as explained below, these hazardous spent solvents are only eligible if they are remanufactured to serve certain types of chemical functions, and if their originating use was of a specific type. This restriction limits the exclusion to higher-value materials and processes that resemble manufacturing rather than waste management.

Hazardous spent solvents are particularly appropriate for the remanufacturing exclusion because they are derived from a non-renewable resource (petroleum), and they are manufactured in the industrial chemicals sector, which, according to EPA's report on sustainable materials management, ranks third overall as far as direct adverse overall impact to the environment.[18]

In addition, remanufacturing these spent solvents represents an opportunity for risk reduction. Risk is a function of hazard and exposure, and, from a hazard perspective, all of these chemicals have suspected or recognized hazardous health effects associated with their manufacture, processing, and use.[19] Although EPA and industry have been working to find substitutes for the more hazardous of these solvents, or find ways to use less of them, this has not yet been fully achieved.[20] [21] With respect to the pharmaceutical sector in particular, complex chemical processes already registered with the Food and Drug Administration are involved, and EPA has found this a very challenging area to address.

In addition, some of these solvents are building block and primary intermediate chemicals, making them difficult to replace. Until lower-risk substitutes for these solvents are found, it is appropriate from a health risk standpoint to minimize the volume of solvents manufactured and to limit exposure to those already manufactured. This is the intention of the remanufacturing exclusion.

The exclusion can reduce exposure to these solvents in three ways. First, the exclusion would extend the useful life of existing solvents, which would reduce the health risks associated with their manufacture by slowing the rate at which they are manufactured. Second, the exclusion would reduce exposure to solvents already manufactured by reducing the fuel blending of spent solvents. That is, remanufacturing a spent solvent will eliminate the need for blending it with another spent solvent to satisfy the fuel-ratio requirements of incinerators and cement kilns. This, in turn, will reduce the fugitive emissions associated with unloading and loading containers of volatile solvents at fuel-blending facilities.[22] Third and finally, the exclusion can reduce the potential exposure from any transportation incidents, since it is likely that spent solvents can be transported shorter distances for remanufacturing purposes than they can for disposal purposes.[23]

2. Chemical Functions

After remanufacturing, the continuing use of the solvent is limited to reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions), or using them as ingredients in a product in the pharmaceutical, organic chemical, plastics and resins manufacturing sectors, or the paint and coatings sector. Furthermore, the continuing use of the solvent, after remanufacturing, cannot involve cleaning or degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles.

EPA has selected these chemical functions because the remanufactured chemical product should serve a similar functional purpose as the original commercial-grade material so that it can substitute for virgin product, since it is this substitution that displaces some manufacturing of virgin product and fosters a system where the original solvent remains in commerce and is not discarded. In these functions, the solvents do not get contaminated by substances, such as inks and greases that are difficult to separate, but only get mixed with pure product ingredients, from which they can be separated readily in a commercially feasible manner.

Furthermore, manufacturing and processing operations can be more easily controlled in terms of exposure and releases, whereas the spent solvents from downstream uses, such as degreasing and cleaning operations are of inherently lower-value and these downstream operations result in more widespread exposure and releases and a higher potential for discard.

In addition, more environmental benefits will be obtained by maximizing the number of times a chemical product can be used at high-purity grade as an

[18] U.S. EPA. *2020 Vision Report: Sustainable Materials Management: The Road Ahead*, Table 1, page 25. *.www.epa.gov/waste/inforesources/pubs/vision.htm*. The other top ranked sectors are electric services (#1) and cotton production (#2).

[19] Allen, D., Shonnard, D, *Green Engineering: Environmentally Conscious Design of Chemical Processes, Risk Concepts*, chapter 2, pgs 35–62, Austin, S., US EPA Editor, Published by Prentice-Hall, 2001.

[20] For information on U.S. EPA's Green Chemistry Program, see *http://www.epa.gov/gcc/*.

[21] Information on the American Chemical Society's Green Chemistry Institute's Pharmaceutical Roundtable is available via the ACS Web site *http://portal.acs.org/portal/acs/corg/content*.

[22] All solvents are volatile, and virtually all spent solvents must go through the fuel-blending process prior to disposal (U.S. EPA, *Selection of Industry Sectors, Chemicals and Functions in the Remanufacturing Exclusion*, June 2011).

[23] Id.

aid to chemical manufacturing and processing, before it is used for at lower-purity as a cleaner or degreaser. While it is possible to extend the product life of a used chemical as a cleaner/degreaser, it takes significantly less energy to bring solvents used as chemical manufacturing aids back to commercial grade than to bring solvents used as cleaners and degreasers back to lower grade functionality, making remanufacturing of the higher-value solvents more economically feasible.

3. Manufacturing Sectors

The remanufacturing exclusion is limited to companies whose primary business is manufacturing, rather than waste management, as indicated by particular NAICS codes. Four manufacturing sectors are eligible for the remanufacturing exclusion: Pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and the paints and coatings manufacturing sectors (NAICS 325510). Manufacturers within these four sectors all use one or more of the 18 identified solvents as chemical manufacturing, processing, and formulation aids in high volumes. Based on the Toxics Release Inventory information, these four sectors are also closely associated with the chemical functions identified in the exclusion and currently use a high volume of the solvents for the functional purposes included in this exclusion.[24]

EPA is limiting the remanufacturing exclusion to companies whose business is primarily manufacturing because the nature of the exclusion relies on the fact that the eligible spent solvents are indistinguishable from a risk perspective from the virgin chemicals that manufacturers in these sectors are already accustomed to handling—no special equipment and personal training beyond what the facility already has would be needed. Chemical manufacturers in these sectors are also subject to the Occupational Safety and Health Act (OSHA) and Clean Air Act (CAA) standards that cover the management of these chemicals.

C. Conditions

Facilities operating under the remanufacturing exclusions must meet the following conditions.

1. Notification

Hazardous secondary material generators and remanufacturers must submit a notification prior to operating under the exclusion and by March 1 of each even-numbered year thereafter using EPA form 8700–12 to the EPA Regional Administrator or the State Director, in an authorized state. Additionally, these facilities would have to notify within 30 days of stopping management of hazardous secondary materials under the exclusion.

The intent of the notification condition is to provide basic information to the regulatory agencies about who will be managing the hazardous secondary spent solvents under the remanufacturing exclusion. The specific information included in the notification—that is, the information on EPA form 8700–12—enables regulatory agencies to monitor compliance and to ensure that the hazardous secondary spent solvents are managed in accordance with the exclusion and not discarded.[25]

2. Remanufacturing Plan

A key issue for the remanufacturing exclusion is how the facilities operating under the exclusion would demonstrate that they meet the requirements (*e.g.*, that the hazardous spent solvents, functions, and manufacturing sectors are those identified in the exclusion). A straightforward solution is requiring a remanufacturing plan to be prepared and maintained by both the hazardous secondary material generator and remanufacturer that includes information on the types and expected annual quantities of excluded spent solvents, the processes and industry sectors that generate the spent solvents, and the specific uses and industry sectors—for the remanufactured solvents.

The hazardous secondary material generator is also required to make arrangements with the remanufacturer to jointly develop this plan and to verify the appropriateness of the hazardous spent solvents for the remanufacturing process before claiming the exclusion, thus helping ensure that the hazardous spent solvents will be remanufactured and not discarded.

Finally, to help ensure that the remanufacturer is a legitimate remanufacturer, the plan must include a certification from the remanufacturer stating ''on behalf of [insert remanufacturer facility name], I certify that this facility is a remanufacturer under the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510), and will accept the spent solvent(s) for the sole purpose of remanufacturing into commercial-grade solvent(s) that will be used for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) or for use as product ingredients. I also certify that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with CAA regulations under 40 CFR part 60, part 61 or part 63,[26] or, absent such CAA standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in 40 CFR part 261 subparts AA (vents), BB (equipment) and CC (tank storage).''

One of the issues raised in the comments was concern that the remanufacturing plan would stifle competitiveness by locking the generator into a single remanufacturer for their hazardous spent solvents. That was not the Agency's intention, and EPA would like to clarify that the remanufacturing plan can be updated any time to reflect a new remanufacturer without triggering a re-notification requirement on the part of the generator. (If the new remanufacturer has not notified before, then he would need to do so under the exclusion.) As long as the remanufacturing plan that is kept on-site reflects the current practices, including making sure that there is a remanufacturer that will accept the hazardous spent solvents, the generator would be in compliance with this condition.

3. Record of Shipments and Confirmation of Receipts

Under the remanufacturing exclusion, generators and remanufacturers need to maintain at the facility records of shipments of hazardous spent solvents for a period of three years. Specifically, for each shipment of hazardous spent solvent, the generator and remanufacturer need to maintain documentation of when the shipment occurred, who the transporter was, and the type and quantity of the hazardous spent solvent in the shipment. This recordkeeping requirement may be

[24] U.S. EPA, *Selection of Industry Sectors, Chemicals and Functions in the Remanufacturing Exclusion*, June 2011.

[25] As with the generator-controlled exclusion in 40 CFR 261.4(a)(23), notification is a condition of the remanufacturing exclusion. See section XIV.F for further discussion.

[26] This condition is parallel to the provisions found at 40 CFR 264.1030(e) for AA, 40 CFR 264.1064(m) for BB, and 40 CFR 264.1080(7) for CC.

fulfilled by ordinary business records, such as bills of lading.

In addition, generators must maintain confirmations of receipt for all off-site shipments of hazardous spent solvent in order to verify that the hazardous spent solvent reached their intended destination and were not discarded. These receipts must be maintained at the facility for a period of three years from when they were created. Specifically, the documentation of receipt would include the name and address of the remanufacturer, and the type and quantity of hazardous spent solvents and date that the hazardous spent solvents were received. The Agency is not requiring a specific template or format for confirmation of receipt since routine business records (*e.g.,* financial records, bills of lading, and electronic confirmation of receipt) would contain the appropriate information sufficient for meeting this requirement.

This provision is necessary so all parties responsible for the excluded hazardous spent solvent would be able to demonstrate that the materials were in fact sent for remanufacturing and arrived at the intended facility and were not discarded in transit.

4. Management in Tanks and Containers

Basic good management practices dictate that solvents, whether virgin or spent, are best stored in tanks or containers that possess inherent controls to address issues, such as volatile air emissions, leaks, and fires or explosions. Solvents present particular management challenges associated with the storage of liquids containing volatile organic chemicals and include both halogenated and non-halogenated organic chemicals, which represent a broad range of chemicals and associated hazards.

By focusing on higher-value spent solvents going to remanufacturing, the remanufacturing exclusion reduces the chance of mismanagement of the spent solvents. However, given the history of spent solvent mismanagement, as demonstrated in the damage cases found in environmental problems study, EPA has determined that it is appropriate to make an explicit condition that spent solvents excluded under the remanufacturing exclusion be stored prior to remanufacturing in tanks or containers that are labeled and that meet technical standards that will ensure the hazardous spent solvents will go to remanufacturing and will not be discarded via leaks, spills or explosions.[27]

For ease of implementation, EPA is establishing explicit tank and container standards in 40 CFR part 261 subparts I and J. These technical standards are the same as those found in 40 CFR part 264 subparts I and J, except that the part 261 subparts I and J specify that the material is ''hazardous secondary material'' rather than hazardous waste, omit references to RCRA permitting requirements, and include other minor conforming changes, as discussed below. Although the 40 CFR part 264 tank and container standards were developed for hazardous wastes, an analysis of the full set of technical requirements under subparts I and J shows that they are comparable to product storage standards, including regulations promulgated under OSHA, DOT, and industry standards.[28] In addition to being comparable to product storage standards, technical standards that mirror subparts I and J of 40 CFR part 264 have the benefit of being technical standards that the regulated community is familiar with, and are designed to prevent the spent solvents from being discarded through leaks or explosions.

During remanufacturing and storage prior to remanufacturing, good management practices also include effective controls of hazardous air emissions. Under the remanufacturing exclusion, this is ensured by requiring that the remanufacturer certifies, as part of the remanufacturing plan, that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with CAA regulations under 40 CFR part 60, part 61 or part 63.[29] Absent such CAA standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, then the appropriate standards in 40 CFR part 261 subparts AA (vents), BB (equipment) and CC (tank storage), which are equivalent to the technical standards found in 40 CFR part 264 and 265 subparts AA, BB, and CC, would apply.

The air emission requirements on remanufacturing equipment, vents, and tanks will ensure that the remanufactured solvents do not become discarded through fires and explosions, guard against the volatilization of hazardous spent solvents, and protect workers, handlers and transporters from spent solvent emissions. EPA notes that most manufacturers in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and the paints and coatings manufacturing sectors (NAICS 325510) will already have their solvent management practices covered under the CAA regulations, but for any remanufacturer that is not covered under CAA, 40 CFR part 261 subparts AA, BB, and CC will ensure that they meet good management practices appropriate for solvent management.

In modifying the tank and container standards and the air emission standards to apply specifically to solvents being remanufactured under the remanufacturing exclusion, EPA has made other minor conforming regulatory changes to 40 CFR part 261. These changes include (1) reserving certain subparts, such as subparts K through L and N though Z, in order to maintain the same numbering as is found in part 264 for the tank and container standards and the air emission standards, (2) codifying 40 CFR 261.197 to address termination of the remanufacturing exclusion (rather than closure, as is required in part 264), and (3) deleting references to the uniform hazardous waste manifest in 40 CFR 261.1086 because manifest requirements are not applicable under the remanufacturing exclusion.

5. Prohibition on Speculative Accumulation

In addition to the other conditions, hazardous spent solvents under the remanufacturing exclusion are subject to the speculative accumulation restrictions in 40 CFR 261.1(c)(8). Speculative accumulation ensures that the hazardous spent solvents are remanufactured and not discarded.

D. Closure of Tank Units

Units managing excluded hazardous spent solvent 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 spent solvents that are not remanufactured as hazardous waste and remove or decontaminate all hazardous residues and contaminated containment system components, equipment structures, and soils. These hazardous spent solvents and residues, if no longer

[27] U.S. EPA, *An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials (Updated),* December 2014.

[28] U.S. EPA *Equivalent Containment Standards for the Remanufacturing Exclusion,* June 2011.

[29] This condition is parallel to the provisions found at 40 CFR 264.1030(e) for subpart AA, 40 CFR 264.1064(m) for subpart BB, and 40 CFR 264.1080(7) for subpart CC.

intended for remanufacturing, would also no longer be eligible for the exclusion (which only applies to materials that will be remanufactured) and would therefore be hazardous waste. These systems would be subject to the requirements for product tanks under 40 CFR 261.4(c), which allow 90 days for removal of hazardous material after the unit ceases to be operated for manufacturing.

E. Petition Process for Additional Remanufacturing Exclusions

As EPA noted in the 2011 DSW proposal, it is possible that other hazardous secondary materials, industry sectors, and/or functional uses beyond those being finalized today may also be suitable candidates for the remanufacturing exclusion if they involve the transfer of a higher-value hazardous secondary material from one manufacturer to another, for the purpose of remanufacturing a material with significant commercial value. In the 2011 DSW proposal, EPA requested comment on whether to also include a specific petition process, similar to 40 CFR 260.20, where petitioners may apply to EPA to request a hazardous secondary material, industry sector, and/or functional use be added to the exclusion.

After reviewing the comments, EPA has determined that a separate rulemaking petition process is not necessary and that the current process in 40 CFR 260.20, including the administrative procedure for processing the petition would be the best vehicle for addressing additional hazardous secondary materials, industry sectors, and/or functional uses to the remanufacturing exclusion. Given the variety of hazardous secondary materials, manufacturing processes, and markets for potential remanufactured materials, a general process gives the most flexibility for petitioners to submit information on potential excluded materials.

In addition, the Agency would like to encourage the research, development, and demonstration of innovative recycling processes that could be used to recover higher-value hazardous secondary materials. Therefore EPA encourages companies to explore using the existing regulatory flexibilities, such as treatability study exemptions in 40 CFR 261.4(e) and (f) and research development and demonstration permits allowed under 40 CFR 270.65, to assess and develop recycling technologies to facilitate remanufacturing of higher-value materials.

In submitting a rulemaking petition under 40 CFR 260.20, petitioners must include (1) the petitioner's name and address, (2) a statement of the petitioner's interest in the proposed action, (3) a description of the proposed action, including (where appropriate) suggested regulatory language, and (4) a statement of the need and justification for the proposed action, including any supporting tests, studies, and other information. With respect to the fourth factor, EPA would encourage petitioners to provide any information they believe demonstrates that their hazardous secondary material is suited for a solid waste exclusion under the remanufacturing exclusion. Below are some considerations that may assist petitioners in developing their petitions; however, these are guidelines only and should not constrain suggested rulemaking revisions if the petitioner otherwise has information that the hazardous secondary material should be excluded from regulation.

(1) Is the hazardous secondary material generated from a manufacturing process that results in minimal contamination, and does the hazardous nature of the hazardous secondary material stem chiefly from the inherent nature of the commercial product that is to be recovered, and not from any contamination?

For example, the remanufacturing exclusion being promulgated today is focused on materials that originated from using commercial grade solvents for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing, organic chemical manufacturing, plastics and resins manufacturing, or paint and coatings sector. As a result, the solvents in question are only lightly contaminated, chiefly with other commercial-grade chemicals or minor impurities. Moreover, because the hazardous nature of the material stems from the recycled product (or at least a significant portion of the recycled product) and not from the contamination, the remanufacturing exclusion helps reduce overall risk by keeping hazardous chemicals in commerce, rather than discarding them.

(2) Does the hazardous secondary material present a similar risk profile as an analogous raw material or product and require no special storage or handling beyond what is normally used for the analogous raw material or product?

For example, the spent solvents eligible for the remanufacturing exclusion present the same risk profile as solvent products. The same tanks, containers, and transportation standards that are used for solvent products also work for the spent solvents intended for remanufacturing.

(3) Is there any special equipment or personnel training required for the remanufacturing of the material or for the management of the residuals?

For example, under the remanufacturing exclusion being promulgated today, the same distillation columns used to manufacture solvents from raw materials can be used to remanufacture spent solvents. The still bottoms generated from both processes can be managed in a similar fashion.

(4) Is the market for the remanufactured product stable enough to ensure that neither the hazardous secondary material nor the remanufactured products are over-accumulated?

For example, the remanufacturing exclusion being promulgated today focuses on solvents that are known to be widely used in a variety of industries for the purposes described.

VIII. Revisions to the Definition of Legitimacy and Prohibition of Sham Recycling

EPA 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 rule 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 hazardous wastes, there is an incentive for some handlers to claim they are recycling when, in fact, they are conducting waste treatment and/or disposal.

In this final rulemaking, EPA is codifying in its regulations the requirement that all recycling must be legitimate by adding a prohibition on sham recycling to 40 CFR 261.2(g). In addition, EPA has changed the definition of legitimate recycling in § 260.43. The new definition specifies four factors that must be met for recycling to be legitimate. However, it also provides new ways that a facility can show that it meets factors 3 and 4 of the legitimacy standard.

The four legitimacy factors are as follows:

- Factor 1: Legitimate recycling must involve a hazardous secondary material that

provides a useful contribution to the recycling process or to a product or intermediate of the recycling process.

- Factor 2: The recycling process must produce a valuable product or intermediate.
- Factor 3: The generator and the recycler must manage the hazardous secondary material as a valuable commodity when it is under their control.
- Factor 4: The product of the recycling process must be comparable to a legitimate product or intermediate.

A. Background

Under the RCRA Subtitle C definition of solid waste, many existing hazardous secondary materials are not solid wastes and, thus, are 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 more closely resembles normal industrial manufacturing than waste management. However, since there can be significant cost savings from managing hazardous secondary materials outside the RCRA Subtitle C regulatory system, some handlers may claim that they are recycling, when, in fact, they are conducting waste treatment and/or disposal in the guise of recycling. For example, 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, but continued to accept K061 even though there was no prospect of it being used to produce a product. To guard against practices like these, 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).

The prohibition on sham recycling being finalized in this rulemaking is consistent with the Agency's longstanding policy and interpretation of legitimate recycling that has been expressed in those earlier preamble discussions and policy statements. The January 4, 1985, preamble to the definition of solid waste regulations established EPA's concept of legitimacy and described several indicators of sham recycling.

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 October 2003 and March 2007 DSW proposals and the October 2008 DSW final rule also all include extensive discussions of EPA's legitimacy policy.

In the 2008 DSW final rule, EPA promulgated a codified legitimacy requirement for the specific exclusions in that rulemaking. Today's final rule expands that legitimacy requirement to all hazardous secondary material recycling, as the Agency proposed to do in the July 22, 2011, proposal (76 FR 44094). Section VIII.B discusses these final legitimacy provisions and describes the requirements. Section VIII.C discusses the changes EPA made from the proposed regulations. A discussion of the public comments on the July 2011 proposal and Agency responses can be found in section XVII of this preamble and the full response to comment document is in the docket for the rulemaking.

B. Legitimate Recycling Provisions Being Finalized

This section discusses the rationale and the requirements being finalized in this rulemaking for ensuring that all recycling of hazardous secondary material is legitimate.

1. Legitimacy for All Recycling

In today's final rule, EPA is retaining 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 hazardous secondary material is being discarded and is a solid waste. Today, we are codifying that the legitimate recycling provision applies to all hazardous secondary materials that are excluded or exempted from Subtitle C regulation because they are recycled and that it also applies to recyclable hazardous wastes that remain subject to the hazardous waste regulations. However, instead of changing the language of each recycling exclusion or exemption to include the requirement as we proposed in the 2011 DSW proposal, we have instead added language in § 261.2(g) that specifically prohibits sham recycling to ensure that all recycling, including recycling under the pre-2008 exclusions is legitimate (*i.e.,* real recycling). We have also determined that documentation of legitimacy is not necessary or required for the pre-2008 recycling exclusions and exemptions, except in the rare case where the recycling is legitimate, but does not meet factor 4.

EPA has determined 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 DSW **Federal Register** notices. This policy is well understood throughout the regulated community and among the state implementing agencies. By providing one standard of legitimacy for all recycling, the Agency expects there will be more clarity, consistency, and predictability for making legitimate recycling determinations. Having one standard in the regulations will also lead to increased knowledge and understanding of the basic requirement that any recycling must be legitimate, leading to better implementation and enforcement of the RCRA hazardous waste regulations.

In developing the codified legitimacy language, we did not intend to raise questions about the status of general legitimacy determinations that underlie existing exclusions from the definition of solid waste (*e.g.,* the solid waste exclusions in 40 CFR 261.4(a)), or about case-specific determinations that have already been made by EPA or the states. Current exclusions and other prior solid waste determinations or variances that are based on the hazardous secondary material being legitimately recycled, including determinations made in letters of interpretation and inspection reports, remain in effect.

Some stakeholders have 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 DSW proposal and the March 2007 DSW supplemental 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 legitimacy factors as described in 40 CFR 260.43.

EPA expects that the vast majority of recycling being performed under these existing exclusions is currently being undertaken conscientiously and would be considered legitimate under the new legitimacy provision with no further action required on the part of the company. If a company is meeting the conditions of its exclusion while managing the hazardous secondary material responsibly and using it to make a legitimate product, that company would not have to change any

of its existing business practices or otherwise take action to show that its recycling meets the legitimacy factors. EPA is not requiring documentation of compliance with the four legitimacy factors, except in the case where the recycling does not meet factor 4 on its face, but the facility believes that its recycling operation is nonetheless legitimate. Many of the measures the companies take in order to meet the terms of the conditional exclusions or to follow best management practices are the same actions that indicate that a recycling process is legitimate. These measures and business practices were generally evaluated as part of the original legitimacy determination by the agency, and therefore employment of those or similar practices indicated legitimate recycling as addressed by the original legitimacy determinations.

One example is the regulation for zinc fertilizers made from recycled hazardous secondary materials. If the hazardous secondary material recycled under the exclusion contains recoverable amounts of zinc, which provides a useful contribution to the recycled product (factor 1) and results in a valuable product, *i.e.,* zinc micronutrient fertilizer (factor 2), EPA would consider these legitimacy factors to be met. In addition, under the exclusion, the generator and recycler must manage the zinc-containing hazardous secondary material as a valuable commodity (factor 3), that is, in compliance with 261.4(a)(20)(ii)(B): Store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of non-earthen materials that provide structural support, and must have a floor, walls and a roof that prevent wind dispersal and contact with rainwater. Tanks used for this purpose must be structurally sound and, if outdoors, must have roofs or covers that prevent contact with wind and rain. Containers used for this purpose must be kept closed except when it is necessary to add or remove material, and must be in sound condition. Containers that are stored outdoors must be managed within storage areas that: (*1*) Have containment structures or systems sufficiently impervious to contain leaks, spills and accumulated precipitation; and (*2*) provide for effective drainage and removal of leaks, spills and accumulated precipitation; and (*3*) prevent run-on into the containment system. Finally, 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 at 40 CFR 261.4(a)(21). If the zinc fertilizer product meets these concentrations, the product would meet factor 4 (assuming other hazardous secondary contaminants have not been added to the product).

Another example is shredded circuit boards excluded under 40 CFR 261.4(a)(14). Shredded circuit boards that contain recoverable metals that provide a useful contribution to the product of the recycling process (factor 1) and go to a recycling process that produces a valuable metal product (factor 2) would meet these legitimacy factors. In addition, under the exclusion, the shredded circuit boards must be stored in containers sufficient to prevent a release to the environment prior to recovery (factor 3) and must be free of mercury switches, mercury relays and nickel-cadmium and lithium batteries (factor 4).

Another example is hazardous secondary materials recycled in a ''closed-loop'' production process under 40 CFR 261.4(a)(8). Under this exclusion, the hazardous secondary material is reused within the production process from which it came, thus providing a useful contribution to the product (factor 1) and also producing a valuable product or intermediate (factor 2) (assuming that the production process is, by definition, producing a product). Since the closed-loop exclusion requires tank storage and that the entire process through completion of reclamation is closed by being entirely connected with pipes and other comparable enclosed means of conveyance, this management would be considered to meet factor 3, management of the hazardous secondary material as a valuable commodity. The product of this type of recycling process would be comparable to a legitimate product or intermediate because the hazardous secondary materials being recycled are returned to the original process from which they were generated to be reused (factor 4).

Another example is spent wood preserving solutions and wastewaters that have been reclaimed and reused onsite in the production process for their original intended purpose under § 261.4(a)(9). Reclaimed wood preservatives that are used to treat wood would be making a useful contribution to the product (factor 1) and would produce a valuable product (factor 2). The conditions of the exclusion include a requirement that they are managed to prevent releases, and include specific standards for drip pads that manage the material (factor 3). The product of this type of recycling process would be comparable to a legitimate product or intermediate because the hazardous secondary materials being recycled are returned to the original process from which they were generated to be reused (factor 4).

Another example is the long-standing exclusion for excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled (40 CFR 261.4(a)(13)). Excluded scrap metal that contains recoverable metals would provide a useful contribution to the product of the recycling process (factor 1) and, as long as the recycling process produces a valuable metal product (factor 2), the recycling would meet the first two legitimacy factors. If the recycler uses appropriate handling and good management practices to store and manage the excluded scrap metal to prevent releases of hazardous secondary materials to the environment, the recycler would generally meet factor 3 for managing the scrap metal as a valuable commodity.

EPA notes that managing scrap metal as a valuable commodity can include situations where it is stored on the ground. Scrap metal stored on the ground is subject to occasional precipitation runoff that consists essentially of water, with trace amounts of hazardous constituents. As long as the hazardous secondary material itself is not swept away by the runoff, this transport via precipitation runoff would not generally be a concern. However, if metal dust, debris and pieces of scrap metal were released into the environment, for example, by metal falling into a waterway (as has happened in one damage case documented by EPA), this would not be considered managed as a valuable commodity. Finally, as long as the recovered metal meets widely-recognized commodity standards/specifications for the metal product, factor 4 would be satisfied.

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.

In the 2011 DSW proposal, EPA explicitly did not reopen comment on any substantive provisions of the previous recycling exclusions or exemptions and facilities with pre-2008 exclusions can generally follow the normal good business practices that were considered when the exclusions were granted and still be considered to be legitimate recycling. If the facility is complying with the terms of the exclusion and following industry best practices to engage in legitimate recycling activity, this would generally not raise questions as to its legitimacy. All these examples support EPA's determination that most current recycling under existing exclusions is legitimate, and that companies complying with the conditions of exclusions would generally not need to take action to show that their recycling meets the legitimacy factors.

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. Regarding the existing exclusions in the regulations, EPA acknowledges that, in establishing a specific exclusion, we have already determined in the rulemaking record that the specific recycling practice is excluded from the definition of solid waste provided all the conditions of the rule are met. However, the Agency has always enforced its rules on the basis that any recycling must be legitimate (See *U.S.* v. *Self,* 2 F. 3d 1071, 1079 (10th Cir. 1993); *U.S.* v. *Marine Shale Processors,* 81 F. 3d 1361, 1366 (5th Cir. 1996): *Marine Shale Processors* v. *EPA,* 81 F. 3d 1371, 1381–83 (5th Cir. 1996)). This is meant to prevent a company from claiming to be operating under an existing exclusion and simply using that as a way to avoid full RCRA Subtitle C regulation.

For example, under EPA's historic guidance, 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 and the legitimacy provision prevents hazardous waste from being discarded into purported fertilizer in the name of recycling when the hazardous secondary material provides 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 in the historic legitimacy guidance, even if the management conditions and 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 K061, and, after 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. Even if the recycler were to claim that the material may be recycled at some point in the future, the material was being speculatively accumulated and thus, a solid and hazardous waste at that point.

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 known throughout the regulated community and the implementing state regulatory agencies. To reinforce that concept and make it clear in the regulations, we are today codifying our policy that hazardous secondary materials being sham recycled are discarded and thus, are solid waste. To do this, EPA has decided to codify the following statement in § 261.2 (the definition of solid waste) instead of adding a reference to legitimacy in each of the recycling exclusions and exemptions (as was suggested in the proposed rule): ''A hazardous secondary material found to be sham recycled is considered discarded and a solid waste. Sham recycling is recycling that is not legitimate recycling as defined in § 260.43.''

For persons interested in an in-depth analysis of the evolution of EPA's concept of legitimate recycling from policy and preamble statements to regulations, EPA provided this analysis in the 2008 DSW final rule that described how the promulgated legitimacy factors compare to the previous primary guidance on legitimacy and the Lowrance Memo. EPA continues to maintain that the legitimate recycling provision 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 factors. For a detailed explanation of how each of the four factors is derived from the Lowrance Memo and other existing policy statements, see 73 FR 64708 –64710, October 30, 2008.

2. All Factors Mandatory

The structure of the legitimacy standard codified in the 2008 DSW final rule (specifically for the exclusions promulgated in that rulemaking) had two parts. The first part included a requirement that hazardous secondary materials being recycled must 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 must be valuable. At the time, EPA considered those two factors to make up the core of legitimacy and, therefore, a process that did not conform to them could not be a legitimate recycling process, but would be considered sham recycling. The second part of legitimacy in the 2008 DSW final rule included two factors that must be considered, but not necessarily met, when a recycler is making a legitimacy determination. In this final rule, the Agency is changing the structure and the application of the legitimate recycling provision so that all four factors are written as mandatory requirements that must be met, except as otherwise noted. The Agency has determined that this action will improve the effectiveness and protectiveness of the legitimacy provision. The Agency's experience with implementing the legitimate recycling structure finalized in the 2008 DSW final rule has led us to this realization. Even though we stressed the importance of considering each factor in the 2008 DSW final rule, some stakeholders continue to be under the mistaken impression that the factors defined as ''to be considered'' were actually optional and could be ignored. We made it clear in the 2008 DSW final rule that failing to meet a ''non-mandatory'' factor could, in some cases, be enough to determine that a recycling process is not legitimate. We did not intend for the ''to-be-considered'' factors

to be less important and thus, have determined that the only way to correct this perception and give these factors the proper weight is to make them requirements that must be met, except as otherwise noted, on equal footing with the other legitimacy factors.

However, to address concerns raised, both factor 3 (managed as a valuable commodity) and factor 4 (products must have comparable levels of hazardous constituents) have been revised from the 2008 DSW final rule to add flexibility to address situations where the recycling is legitimate, but the specific situation might not meet the legitimacy factor . For example, under factor 3, we proposed and are finalizing the following language to more closely reflect the intent of the provision: ''Where there is an analogous raw material, the hazardous secondary material, must be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner.'' Thus, a generator or recycler would meet this factor if their hazardous secondary material is stored in a different manner than the analogous raw material, as long as that storage is as protective as the way the analogous raw material is stored.

Under factor 4, we have also added more explanation and flexibility for situations where there is no analogous product to compare to the product made from hazardous secondary materials. For example, in some cases, the Agency will consider a product of a recycling process that meets widely-recognized commodity standards/specifications, such as scrap metal, to meet factor 4. Within factor 4, the Agency is also creating a provision for hazardous secondary materials that are recycled by being returned to the original process from which they were generated, such as in a closed-loop recycling process, to meet the factor. The specific changes to factor 3 and factor 4 are described in greater detail below.

In making all legitimacy factors mandatory requirements, the first sentence of the regulatory language of both factors was revised to indicate that these factors must be met. For factor 3, the first sentence now reads as follows: ''The generator and the recycler must manage the hazardous secondary material as a valuable commodity when it is under their control.'' For factor 4, the first sentence now reads as follows: ''The product of the recycling process must be comparable to a legitimate product or intermediate.''

In the 2011 DSW proposal, we proposed a petition process for facilities that believe their recycling is legitimate despite not meeting one or both of these two factors. After review and consideration of the public comment on this issue, the Agency has decided that instead of a petition process, facilities that do not meet factor 4 and yet are still legitimately recycling must notify the Regional Administrator (or State Director, if the state is authorized) and keep documentation and a certification in their files explaining how the recycling is still legitimate.[30] See section VIII.B.6 below for a full discussion of the documentation and notification process under factor 4.

3. Factor 1: Useful Contribution—§ 260.43(a)(1)

(1) Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product or intermediate 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.

This factor expresses the principle that hazardous secondary materials must contribute value to the recycling process. Providing a useful contribution is an essential element to legitimate recycling because real or legitimate recycling is not occurring if the hazardous secondary material being added or recovered does not add to the process. This factor is intended to prevent the practice of adding a hazardous secondary material to a recycling process simply as a means of disposing of it, or recovering only small amounts of a constituent, which EPA would consider sham recycling.

Paragraphs (i) through (v) of § 260.43(a)(1) list five ways that a hazardous secondary material can provide a useful contribution: (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. Any one of these can demonstrate that the hazardous secondary material provides a useful contribution.

An important note in applying this factor is that not every constituent or component of the hazardous secondary material has to make a contribution to the recycling activity to meet the useful contribution factor. 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. However, in cases where the hazardous component is not being used or recycled, the Agency stresses that the recycler is responsible for the proper 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, but are added to that process in much greater amounts than 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

[30] As noted above, and as described in more detail in Section VIII.B.6, products of a recycling process that meet widely-recognized commodity standards/specifications and hazardous secondary materials that are recycled by being returned to the original process from which they were generated are considered to meet factor 4 of the legitimacy standard.

recovered, but is being disposed of in the residuals, this would be a possible indicator of not meeting this factor and thus, could be sham recycling. However, this consideration must take the actual process being considered into account as 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 (*e.g.,* 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).

When evaluating a hazardous secondary material's useful contribution, the process can be compared 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.

4. Factor 2: Valuable Product or Intermediate—§ 260.43(a)(2)

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.

This factor expresses the principle that the product or intermediate coming out 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. Legitimate recycling is not occurring if the product or intermediate from the 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 production 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.

For the purpose of this factor, a recyclable product may be considered "valuable" if it can be shown to have either economic value or 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 determine that the recycling process yields a valuable product would be if the product of the recycling process is sold to a third party. 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 should be able to demonstrate how the product is clearly valuable to the purchaser.

EPA also knows that many recycling processes produce outputs that are not sold or traded 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 it might be less straightforward in this situation to demonstrate value if it is necessary to do so. 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 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.

5. Factor 3: Managed as a Valuable Commodity—§ 260.43(a)(3)

The generator and the recycler must manage the hazardous secondary material as a valuable commodity when it is under their control. Where there is an analogous raw material, the hazardous secondary material must be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material, the hazardous secondary material must be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded.

This factor 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, the hazardous secondary materials might not be recycled, but rather released into the environment and discarded, thereby indicating sham recycling.

This factor may be particularly important 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 could 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, or in an equally protective manner.

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 valuable raw materials would otherwise be handled if used in the process. ''Analogous raw material'' 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.

EPA proposed and is finalizing an addition to the language of this factor as compared to the 2008 DSW final rule to include the words ''or in an equally protective manner.'' This change means that a recycling process would meet this factor if the hazardous secondary material is stored in a different manner than the analogous raw material as long as that storage was as protective as the way the analogous raw material was stored.

For example, a hazardous secondary material in powder form that is shipped in a woven super sack in good condition (*i.e.,* that does not leak or spill) and stored in an indoor containment area would be considered managed ''in an equally protective manner'' as an analogous raw material that is shipped and stored in drums.

In addition, managing a hazardous secondary material in a manner consistent with the management of an analogous raw material can include situations where the raw material and the hazardous secondary material (*e.g.,* scrap metal) are both stored on the ground.

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. The term ''contained'' as discussed in section V of this preamble, means that the unit in which the material is stored is in good condition, with no leaks or releases to the environment, and that the unit is designed to prevent such releases. In addition, to meet the contained standard, the unit must be labeled or have a system to identify the hazardous secondary material in it and must not hold incompatible materials or pose a risk of fires. Hazardous secondary materials in units that meet the applicable requirements of 40 CFR parts 264 or 265 are presumed to be contained. Land-based units can meet the definition of contained.

The requirement that a hazardous secondary material be contained when there is no analogous raw material to compare it to is consistent with the idea that normal manufacturing would ensure that the valuable material inputs are managed properly, rather than allow them to be released into the environment.

An example of when this provision would be used would be if a manufacturer decided to replace a 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, like a dry material might. Instead, the liquid would have to be contained (for example, in a tank or container).

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 are not recovered immediately are discarded. Valuable feedstocks or products should not be allowed to escape into the environment through poor management and this factor clarifies that those hazardous secondary materials that are released (and are not immediately recovered) are clearly discarded and a solid waste. 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 indicate sham recycling. 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 on factor 3 must be made on a case-by-case basis, however.

In EPA's 2008 DSW final rule, this factor was one of the two factors that was ''to be considered'' rather than one of the two mandatory factors because EPA believed that there may be some situations in which this factor was not met, but the recycling was still legitimate. With the addition of the language clarifying that the materials can be managed in a different way than the analogous raw material as long as that management system is equally protective, EPA has determined that there is no reason that a facility that is legitimately using a hazardous secondary material that has value to them in a recycling process would not meet this factor. 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, 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.

6. Factor 4: Comparison of Toxics in the Product—§ 260.43(a)(4)

The product of the recycling process must be comparable to a legitimate product or intermediate:

(i) Where there is an analogous product or intermediate, the product of the recycling process is comparable to a legitimate product or intermediate if:

(A) The product of the recycling process does not exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit, and

(B) The concentrations of any hazardous constituents found in Appendix VIII of part 261 of this chapter that are in the product or

intermediate are at levels that are comparable to or lower than those found in analogous products or at levels that meet widely-recognized commodity standards and specifications, in the case where the commodity standards and specifications include levels that specifically address those hazardous constituents.

(ii) Where there is no analogous product, the product of the recycling process is comparable to a legitimate product or intermediate if:

(A) The product of the recycling process is a commodity that meets widely recognized commodity standards and specifications (*e.g.,* commodity specification grades for common metals), or

(B) The hazardous secondary materials being recycled are returned to the original process or processes from which they were generated to be reused (*e.g.,* closed loop recycling).

(iii) If the product of the recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate per subparagraphs (i) or (ii) of this paragraph, the recycling still may be shown to be legitimate, if it meets the requirements specified below. The person performing the recycling must conduct the necessary assessment and prepare documentation showing why the recycling is, in fact, still legitimate. The recycling can be shown to be legitimate based on lack of exposure from toxics in the product, lack of the bioavailability of the toxics in the product, or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk. The documentation must include a certification statement that the recycling is legitimate and must be maintained on-site for three years after the recycling operation has ceased. The person performing the recycling must notify the Regional Administrator of this activity using EPA Form 8700–12.

This factor requires that those making a legitimacy determination look at the concentrations of the hazardous constituents found in the product made from hazardous secondary materials and, except where otherwise specified, compare them to the concentrations of hazardous constituents in analogous products. A product that contains high levels of hazardous constituents that originate in a hazardous secondary material feedstock could indicate that the recycler incorporated hazardous constituents into the final product when they were not needed to make that product effective as a way to avoid proper disposal of that material, which would be sham recycling. This factor, therefore, is designed to determine when toxics that are ''along for the ride'' are discarded in a final product and the hazardous secondary material is not being legitimately recycled.

As proposed, factor 4 was unsatisfactory to many of the stakeholders of this rulemaking. Many representatives from the industrial sector argued that they would not be able to meet factor 4 or would not be able to easily know if they met factor 4. EPA had expected that a small number of facilities would have this concern and had proposed a petition process to address this problem, but many commenters argued that petitions would take a long time to be processed, creating uncertainty in the industrial sector, and that a petition process would be a drain on state and industry resources.

As a result of comments received on the proposal, EPA has made some revisions to this factor to ensure that long-standing legitimate recycling processes will still be considered legitimate under this factor. The requirements that are being promulgated today are described in full below and include different requirements for when there is an analogous product and when there is not, provisions for using widely-recognized commodity standards and specifications to meet this factor, a provision to address recycling that includes hazardous secondary materials being put back into the process from which they came, and a documentation, certification and notification process for facilities that cannot meet these requirements, but still believe their recycling is legitimate. A full description of how the requirement being finalized differs from what was proposed in the 2011 DSW proposal can be found in section VIII.C.3 of the preamble.

In addition to these changes, EPA has also retained the proposed language of this factor that states that the concentrations of hazardous constituents in the product of the recycling process must be ''comparable to'' or lower than those found in analogous products. This is a change from the 2008 DSW final rule, which used language stating that the concentrations of hazardous constituents should not be ''significantly higher'' than concentrations in analogous products.

Factor 4 starts with the statement that the product of the recycling process made from hazardous secondary materials must be comparable to a legitimate product or intermediate. It is important to note that the comparison that EPA is requiring here involves the product that comes out of a recycling process. That is, 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 produces 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.

However, 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 contains concentrations of hazardous constituents that are comparable to or lower than the concentrations in the raw material feedstock, then the end product of the recycling process would not contain excess hazardous constituents ''along for the ride'' either. This method of showing that the product meets factor 4 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. Note, however, that EPA is allowing other ways to make the comparable demonstration in cases where there is no analogous product, as described below in section VIII.B.6.b.

a. Factor 4 when there is an analogous product. Paragraph 260.43(a)(4)(i) describes how a facility can meet factor 4 when the recycled product can be compared to an analogous product that is made without the use of hazardous secondary material as a feedstock. First, the product of the recycling process cannot exhibit any of the hazardous characteristics that analogous products do not exhibit. Most issues associated with ''toxics along for the ride'' involve the presence of hazardous constituents rather than the characteristics of hazardous waste. It is possible, however, 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 hazardous characteristics are found in 40 CFR part 261 subpart C and are used to identify those materials that are hazardous wastes, but that EPA has not specifically listed in part 261 subpart D. The characteristics are ignitability, corrosivity, reactivity, and toxicity. The toxicity characteristic includes a list of 40 contaminants and the levels at which the material would be considered hazardous waste when tested using the Toxicity Characteristic Leaching Procedure. If a product produced with hazardous secondary material exhibited a characteristic of hazardous waste that an analogous product did not exhibit, this would be an indication that sham recycling could be occurring as a significant hazardous constituent or characteristic would be in the product only as a result of the recycling of the hazardous secondary material. This requirement is in § 260.43(a)(4)(i)(A). In most cases, a recycler will be familiar enough with the material it is producing to be able to easily determine whether it would meet any of these characteristics, but if there are any questions, the methods for testing for the characteristics are found in 40 CFR part 261 subpart C.

In addition to this requirement, the product of the recycling process must also meet § 260.43(a)(4)(i)(B). This paragraph can be met in two ways. The first way is if the concentrations of any hazardous constituent (as defined by Appendix VIII to part 261) that is in the recycled product is comparable to or lower than those found in analogous products. This provision is what EPA proposed in the 2011 DSW proposal, which included a discussion of how meeting product specifications could indicate that a recycling process is legitimate, as well as a request for comments on how EPA should determine what ''comparable'' levels of hazardous constituents are when determining the legitimacy of a recycling process. In response to comments received on this point, EPA has added to this paragraph that the product of the recycling process would be comparable if it meets widely-recognized commodity standards that include levels that specifically address the hazardous constituents that are in the product.

As stated above, the first part of § 260.43(a)(4)(i)(B) is similar to the provision that EPA proposed in the 2011 DSW proposal. In this provision, EPA has decided to finalize language replacing the terms ''significant'' and ''significantly elevated,'' which were promulgated in the 2008 DSW final rule, with the phrase ''comparable to or lower'' because it more clearly reflects the intent of this factor. ''Comparable to or lower than'' means that any contaminants present in the product made from hazardous secondary materials are present at levels at or lower than the levels contained in an analogous product, or if higher, would be within a small acceptable range. This language is consistent with the Identification of Non-Hazardous Secondary Materials that are Solid Wastes final rule (76 FR 15456, March 21, 2011). However, we are not changing the basic meaning of this factor. Operationally, the terms ''comparable'' and ''not significant'' or ''not significantly elevated'' are the same for hazardous secondary materials recycling and the examples the Agency provided in the 2008 DSW final rule preamble that explained how the Agency envisions this factor working are still appropriate. Those examples are repeated here.

- 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 though the recycling process and discarded in the product. Thus, the levels of cadmium would not be considered ''comparable'' and the paint would fail this legitimacy factor, unless the recycler can conduct the necessary analysis and prepare documentation stating why the recycling is still legitimate. In addition, the recycler would need to certify and provide notice to the implementing agency of this activity.
- 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 significantly higher levels of lead may indicate that the recycled product is not comparable to an analogous product and, thus, the recycling process is really a sham. Alternatively, the recycler may be able to demonstrate the recycling is still legitimate even though it does not contain lead at comparable levels by, for example, showing the toxics are not bioavailable. If this is the case, the recycler would need to document the analysis and certify the legitimacy of the recycling practice, as well as provide notice to the implementing agency.
- If zinc galvanizing metal made from hazardous secondary materials that are reclaimed contains 500 parts per million (ppm) of lead, while the same zinc product made from raw materials typically contains 475 ppm, the levels would be considered comparable since they are within a small acceptable range and, thus, the product would meet this factor. If, on the other hand, the lead levels in the zinc product made from reclaimed hazardous secondary materials were considerably higher, these levels may not be comparable, and would require the recycler to look more closely at this factor since it may indicate that the product was being used to illegally dispose of the lead and that the activity is sham recycling, unless the recycler can conduct the necessary assessment and prepare documentation stating why the recycling is still legitimate. In addition, the recycler would need to certify and provide notice to the implementing agency of this activity.
- 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 would likely be considered comparable.

The second part of § 260.43(a)(4)(i)(B) relies not on a comparison of levels of hazardous constituents between a product of the recycling process and an analogous product, but on the product of the recycling process meeting widely-recognized commodity standards and specifications. In this case, meeting a widely-recognized standard and specification would indicate that the recycling is legitimate if that standard and specification includes levels for the hazardous constituents that are found in the product of the recycling process.

EPA decided that using a product's ability to meet product specifications as an indicator of legitimate recycling would make the determination of legitimate recycling straight-forward in many cases where the product of the recycling is clearly a commodity in wide use in commerce. Although not spelled out in the regulatory language used in the 2008 DSW final rule, consideration of whether the product of a recycling process meets quality specifications has been part of the legitimacy determination since the Lowrance Memo in 1989, which included several questions to this effect as part of its determination of whether there is a guaranteed market for the product (*i.e.*, Are there industry recognized product specifications for the product? Is it listed in industry news letters? Is the reclaimed product a recognized commodity?). Including this provision on product specifications as part of this final rulemaking will limit uncertainty from recyclers about whether their processes are legitimate.

However, despite the value of product standards, EPA did not want to state that meeting any product specification was an indicator of legitimacy because any recycler could design its own specification and point to that as a way to circumvent the requirement. Therefore, this requirement requires that the commodity standards being met be widely-recognized. By ''widely-recognized commodity standard,'' EPA

means a standard that is used throughout an industry to describe a certain product and that is widely-available to anyone producing the product. A specific example of such a widely-recognized standard agency would be ASTM International, which has standards covering a wide variety of manufactured goods.[31] However, for specialty batch chemical manufacturers or other types of specialty manufacturing where widely-recognized commodity standards are not available, customer specifications would be sufficient.

In addition, for this part of factor 4, the commodity standards and specifications being referenced must specifically address those hazardous constituents that may be different between the analogous product and the product generated from using the hazardous secondary material in the recycling process. EPA is making this explicit in the regulations to avoid a situation in which a product from a process that is recycling hazardous secondary materials meets a widely-recognized product specification, but does not include any levels for the hazardous constituents that are in the hazardous secondary material. A product specification could have been developed without any thought that the feedstock for that product might include some hazardous constituents that could be toxic to human health and the environment and, therefore, not include them. We are concerned with the potential that the analogous product could be substituted with the recycled product without full disclosure of potential toxics that may be in the recycled product. Using a standard or specification that does not address the hazardous constituents of concern to demonstrate meeting factor 4 of the legitimacy requirements where there is an analogous product would ignore the primary concern of this factor and would allow elevated levels of toxics from the hazardous secondary material into the final product.

b. Factor 4 when there is no analogous product. Commenters on EPA's 2011 DSW proposal expressed concern that, in many cases of hazardous secondary materials recycling, there may not be an analogous product with which a facility can compare the product of the recycling process. Commenters described recycling processes that were designed to use a specific hazardous secondary material to make a useful product and processes that always incorporated a hazardous secondary material back into the generating process during manufacturing. Paragraph 260.43(a)(4)(ii) describes how a facility can meet factor 4 in these situations.

EPA had not previously identified a separate methodology for meeting factor 4 in the situation where there is no analogous product, but the support in the comments in response to EPA's request for input on the use of product specifications made it clear that this approach could be effective in the case where there is no analogous product. Therefore, EPA is stating in § 260.43(a)(4)(ii)(A) that a product of the recycling process is comparable to a legitimate product or intermediate when "the product of the recycling process is a commodity that meets widely-recognized commodity standards and specifications." EPA gives the example in the regulatory text of commodity specification grades for common metals, which would be relevant to scrap metal recyclers, among other metal recyclers.

As stated above for paragraph (A), EPA decided that using a product's ability to meet product standards and specifications as an indicator of legitimate recycling would make the determination of legitimate recycling more straight-forward in many cases where the product of the recycling is clearly a commodity in wide use in commerce. This would limit uncertainty from recyclers about whether their processes are legitimate.

However, despite the value of product standards and specifications, EPA did not want to state that meeting any product standard or specification was an indicator of legitimacy because any recycler could design its own specification and point to that as a way to circumvent the requirement. Therefore, this requirement requires that the commodity standards and specifications being met be widely-recognized. By "widely-recognized commodity standard and specification," EPA means a standard or specification that is used throughout an industry to describe a certain product and that is widely-available to anyone producing the product. A specific example of such a widely-recognized standard agency would be ASTM International, which has standards covering a wide variety of manufactured goods. Note, for this part of factor 4, the commodity standard or specification must be widely recognized, but would not necessarily address a specific hazardous constituent, since there is no analogous product to compare it to. EPA has determined that recycled products that do not have analogous products can "stand alone" in that they are not substitutes for virgin products and thus, either succeed or fail based on their inherent characteristics, including any hazardous constituents contained therein. Therefore, EPA has determined that market forces appropriately dictate whether these types of recycled products meet the technical provisions of factor 4.

EPA also wanted to address the situation in which a manufacturing process produces a hazardous secondary material that is then recycled back into the process from which they were generated. In some cases, the product is always manufactured using this kind of feedback loop and, therefore, there is no analogous product with which it can be compared. EPA has included in today's final rule a provision that states that when "hazardous secondary materials being recycled are returned to the original process or processes from which there were generated to be reused, the product of the recycling process is comparable to a legitimate product or intermediate." That is, in those situations, the recycling process meets factor 4.

Recycling that takes place under EPA's closed loop recycling exclusion at § 261.4(a)(8) would be an example of manufacturing that would consistently include the hazardous secondary material being returned to the original process from which it was generated and that would meet the legitimacy factors being discussed here. Another situation about which commenters expressed concern was mineral processing to produce primary metals, because these processes always include materials looping back into the process to ensure that all the valuable metals that can be extracted from the ore are being collected for use. For example, in precious metals production, hazardous secondary materials from various stages in the process contain concentrations of both precious metals and hazardous constituents that are higher than concentrations in ore. The concentrations of hazardous constituents and precious metals in these hazardous secondary materials vary depending on the makeup of the ore from which they came. In order to glean the most valuable product from processing the ore, these hazardous secondary materials are routinely put back into the production units that process the virgin materials and are put

[31] ASTM International, formerly known as the American Society for Testing and Materials (ASTM), develops and delivers international voluntary consensus standards. Its Web site states that 12,000 ASTM standards are used around the world to improve product quality, enhance safety, facilitate market access and trade, and build consumer confidence. *http://www.astm.org/ABOUT/aboutASTM.html.*

through the process again. Commenters from the precious metals industry argued in their comments that they consider this legitimate recycling of secondary materials (that may be hazardous) and that because of the variation in the makeup of the materials going back into the process, determining whether factor 4 has been met would be difficult. Thus, EPA has determined that the recycling process in these situations—that is, in which the hazardous secondary material is returned to the original production process, or the processes from which it was generated—would meet factor 4.

EPA has determined that recycling hazardous secondary materials in this manner is not a concern as far as ''toxics along for the ride'' are concerned because the hazardous secondary materials came out of the very same process and contain the same hazardous constituents that are already in the manufacturing process. These hazardous constituents originated in the raw materials of the process that are being used with or without the recycling loop. Prohibiting the recycling of hazardous secondary materials in these situations because of factor 4 would not be changing the amount or nature of hazardous constituents in the product that comes out of the manufacturing process. In addition, that kind of prohibition would be misguided from a resource conservation perspective because it could limit the recycling of these materials back into a process, which leads to a more efficient process and therefore conserves the use of raw materials in manufacturing.

c. Documentation, certification and notice process for factor 4. EPA designed the provisions above to make it more clear how a material can meet factor 4. In addition, they provide additional flexibility to this factor, where it makes environmental and economic sense. These added provisions address most of the comments that EPA received stating that a particular sector or industry would have trouble meeting factor 4.

EPA recognizes, however, that despite these changes, there may still be instances where recycling is legitimate, but is unable to meet the technical provisions of factor 4 as it is written because the product of the recycling process has levels that are not comparable to analogous products or because the product of the recycling process cannot be compared to an analogous product, but does not fit under § 260.43(a)(4)(ii).[32]

It is critical that the legitimacy regulations be flexible enough to allow for situations like this, particularly with the regulations applying to all recycling. In this final rulemaking, EPA has replaced the petition process that it proposed in the 2011 DSW proposal with a documentation, certification and notice process for factor 4.

Specifically, when a recycling facility has determined that it must take advantage of the documentation, certification and notice process, either because the product of the recycling process has levels that are not comparable to analogous products or because the product of the recycling process cannot be compared to an analogous product (and § 260.43(a)(4)(ii) does not apply), it must determine that its recycling process is legitimate despite the levels of hazardous constituents in the product. The regulatory text for this provision explains that in doing this analysis, the facility making the determination can consider ''lack of exposure from toxics in the product, lack of the bioavailability of the toxics in the product, or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk.''

A consideration of lack of exposure from the toxics in a product would involve an assessment of the process to determine if the hazardous constituents are likely to come into contact with humans or the environment in a way that will harm them. For example, a product that is more of an intermediate in a recycling process and stays within an industrial setting where it is contained and where everyone coming into contact with it is familiar with any hazards that it poses could be considered a candidate for this certification because there is limited exposure to human health and the environment from the product. A consumer product, on the other hand, that will be leaving an industrial setting and entering the market where certain hazardous constituents may not be expected and may not have limited exposure to human health and the environment is unlikely to be eligible for this exception to factor 4.

For example, as previously explained in the 2008 DSW final rule and the 2011 DSW proposed rule, EPA has determined that the 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 using a non-thermal reclamation process 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, even though the levels of hazardous constituents in the sands may not be comparable to the analogous product. 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.

An assessment of lack of the bioavailability of toxics in the product could be a more complicated analysis that would examine whether the hazardous constituents in the final product are bound up with the other constituents in such a way that they would not be released when coming into contact with humans or the environment over the lifetime of the product. Although this would be a sophisticated assessment, a facility wishing to perform this kind of analysis to inform a legitimacy determination under this certification process can do so.

EPA has included the phrase ''other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk'' in the regulation to account for other situations that may arise. An example that was submitted in the comments to the proposal that could be an ''other relevant consideration'' in making this determination is when the reclaimed product contains compounds that are not in analogous products, but the products exhibit similar physical and chemical risk profiles and therefore are not posing an increased risk. There may be other considerations regarding factor 4 like these that could also be relevant to the legitimacy of a recycling process; however, the Agency thinks these are limited.

After determining that its process is still legitimate, the recycling facility would prepare documentation explaining its assessment. This should take the form of a description of the process in question and an explanation of the analysis performed to determine legitimacy, including any relevant diagrams and flow charts, as well as any

[32] Note that a recycling facility can also compare the hazardous constituents in the hazardous secondary material to an analogous feedstock, if that approach works better for a particular recycling process.

relevant sampling data. In addition, the documentation must include a certification statement that states that recycling is legitimate and that is signed by the responsible official at the recycling facility. The language for the certification is not mandated in the regulations, but an acceptable example would be "I certify that the hazardous secondary recycling process described in these pages is a legitimate recycling process."

The documentation and certification of legitimate recycling would have to be maintained or available on-site for as long as the recycling process is operating at the site and for three years after the recycling operation has ceased.

In addition to preparing and maintaining this documentation, the recycling facility would notify its Regional Administrator (or State Director, in authorized states) that it is taking advantage of this provision by reporting the type of hazardous secondary material and the recycling process being used to produce a product with elevated levels of hazardous constituents (or a product that has no widely-known commodity standards for the hazardous constituents) through EPA Form 8700–12, otherwise known as the Site ID form.[33] When a facility documents, certifies, and submits notice under factor 4, it is addressing factor 4 for the purposes of the introductory language of § 260.43, which requires that all requirements of the paragraph be addressed.

EPA has decided to finalize this self-implementing certification process rather than the proposed petition process to reduce burden on facilities who are taking advantage of this provision, as well as on the regulatory agencies implementing the regulations. Because this requirement for documentation and a certification that must be maintained on-site does not include an approval process, facilities do not have to wait for any decisions from their implementing agencies about whether their recycling is legitimate.

However, the notification aspect of the legitimacy regulations being finalized today adds some limited, but important, oversight to a process that would otherwise be taking place out of sight of the regulating agencies all together, that is, the decision that a recycling process that does not meet factor 4 is still legitimate. The notification gives EPA and the authorized states information about which recycling facilities are producing products from recycled hazardous secondary materials that have elevated levels of hazardous constituents when compared to non-recycled products (or are producing recycled products that have no non-recycled analogue and no widely recognized commodity specifications). This notification facilitates oversight and inspections of the recycling facility concerning the legitimacy of the recycling process, allowing EPA and authorized states to continue to use existing authorities to determine whether the recycling is legitimate.

EPA has chosen this approach because it maintains the self-implementing nature of the regulations, while providing enough information to EPA and the authorized states to gather the necessary information. In these ways, this approach addresses the main concerns raised by the stakeholders in the comments to this rulemaking.

A facility that claims to be operating a recycling process that is legitimate under this provision could be subject to an enforcement action if the Agency determines that the recycling is sham. As always, a facility with questions about the regulated status of its hazardous secondary material can contact its implementing agency for assistance in making a waste determination.

C. Changes From the Proposal

1. Prohibition of Sham Recycling

In today's final rule, EPA is codifying the requirement that all hazardous secondary material recycling must be legitimate. However, instead of amending the text of each recycling exemption and exclusion, we are instead codifying a provision in § 261.2(g) that states that any hazardous secondary material found to be sham recycled is discarded and thus, a solid waste. This more clearly reflects our intent and our long-standing policy that only those facilities truly recycling should be eligible for an exclusion based on recycling the hazardous secondary materials. We did not intend to cause facilities that are legitimately recycling to revisit their practices or for state agencies to revisit past legitimacy determinations. However, we do want to make clear that sham recycling is not real recycling and thus, any hazardous secondary material being sham recycled is a solid and potentially a hazardous waste. By making a clear statement in the definition of solid waste, the Agency is placing the appropriate emphasis on this issue, that is, that sham recycling is discard.

2. Documentation

When the Agency codified the legitimacy standard in the 2008 DSW final rule, we did not require specific documentation regarding the legitimacy determination, although the regulatory language stated that persons claiming to be excluded from hazardous waste regulation because they are engaged in reclamation must be able to demonstrate that the recycling is legitimate. In the 2011 DSW proposal, we proposed to require that persons who perform recycling include documentation in their paperwork to explain how their hazardous secondary materials are legitimately recycled.

After reviewing the public comments, we have decided that, as a general matter, documentation of legitimacy is not necessary for most hazardous secondary materials recycling. Instead, we will continue to rely on the current provision in § 261.2(f) that requires respondents to demonstrate that the material is not a waste. Section 261.2(f) requires persons claiming that materials are not solid waste or are conditionally exempt from RCRA Subtitle C regulation to provide appropriate documentation of these claims.

However, we are finalizing two exceptions to the general case where documentation of legitimate recycling is not required. The first is that we are finalizing a requirement for facilities reclaiming hazardous secondary materials under the control of the generator, that is, any facility claiming the exclusion at § 261.4(a)(23), to document the legitimacy of the reclamation process. We have determined that it is important for those facilities to document the legitimacy of their recycling process, given the wide variety of hazardous secondary materials and industrial processes that can claim to be operating under the generator-controlled exclusion with relatively few conditions. After implementing the DSW exclusions in several states since its promulgation in October 2008, we have determined that documentation of legitimacy for this particular exclusion is important in ensuring compliance and will make oversight and enforcement more effective. We are therefore requiring that persons who perform reclamation under the control of the generator to include documentation and explain how their hazardous secondary materials are legitimately reclaimed. We expect this documentation to be a narrative description, which could include photographs or other illustrations or process diagrams of how the reclamation of their hazardous

[33] EPA will revise EPA form 8700–12 to incorporate this notification. In the interim, persons may notify using the "Comments" box on the form.

secondary materials meets the legitimacy factors. Reclaimers of hazardous secondary materials will need to maintain this documentation on-site where the reclamation occurs for the duration of the reclamation operations and for three years after the reclamation operations cease. Written documentation will provide an easily available explanation of the facility's rationale for the legitimacy of its process that is available to the implementing agency on regular inspections or as part of compliance assistance.

The other exception where documentation is required is for those facilities whose product made from recycled hazardous secondary materials does not meet factor 4, but would still be considered a legitimately recycled product. Those facilities would need to maintain documentation as to why, in fact, the recycling is still legitimate as it relates to factor 4. For a more detailed explanation of that documentation requirement, refer to section VIII.B.6 above.

3. Factor 4

In the 2011 DSW proposal, EPA's proposed factor 4 contained two main requirements to ensure that hazardous constituents were not "along for the ride" and being discarded in a final product under the guise of recycling. The proposed regulation stated that the product of the recycling process would have to have concentrations of hazardous constituents that are at levels comparable to or lower than those found in analogous products. In addition, the proposal stated that the product of the recycling process could not exhibit a hazardous characteristic that analogous products did not also exhibit.[34] EPA recognized that there would be some legitimate recycling operations that may not meet this requirement, and so proposed to address this situation through a petition process in which a facility that did not meet factor 4 could petition its implementing agency, whether that be a state environmental agency or an EPA Region, and get agreement from that agency that its operations were legitimate.

Although this approach would provide a way for operations that are legitimate, but don't meet factor 4 to still operate, commenters from both the industrial sector, as well as from state regulatory agencies, commented that this approach was not ideal. Commenters from industry suggested that there would be more petitioners under this provision than EPA had anticipated because certain large sectors of industry would likely be uncertain about whether their recycling would meet the factor as written and would be compelled to petition their implementing agencies. Commenters provided some real world examples to illustrate their concerns with factor 4 that EPA closely examined when redrafting the language for this provision.

Commenters also were concerned that the petition process itself might take too long if the implementing agencies receive petitions from many facilities and that the response time might end up being very lengthy. Several of the states that could be responsible for replying to these petitions also commented that they were not in favor of a petition process because the resources that would be required to respond to the petitions are not available in the state program offices.

EPA made several changes to factor 4 in response to these comments and has determined that factor 4, as we are finalizing it today, better addresses the wide variety of industrial recycling processes. There are four main changes to the final language of factor 4 as compared to the 2011 DSW proposed regulation.

First, instead of the two basic proposed provisions that depend on a comparison with an analogous product, factor 4 as finalized acknowledges that sometimes there is no analogous product available for a comparison. Subparagraph (i) covers how a recycling process meets the factor if there is an analogous product whereas subparagraph (ii), which was not part of the proposed regulatory language, covers how a product with no analogous product can meet factor 4.

Secondly, the finalized regulatory language has provisions for how widely-recognized industry standards and specifications can be used to meet factor 4. EPA took comment on the usefulness of specifications for evaluating hazardous constituents in the product and has determined that as long as the standards and specifications being relied upon are widely recognized industry wide standards and specifications for a product (and in the case of (i), that they address the hazardous constituents in question), meeting them would be appropriate to show that hazardous constituents are not being discarded under the guise of recycling. This should make determinations regarding factor 4 simpler for a wide range of industries producing common industrial commodities. EPA did not intend to interfere with long-standing legitimate recycling in these industries and this addition to the regulatory language should clarify for those industries that when they are meeting the extensive commodity standards and specifications for their products, they meet factor 4 as well.

The third change is the addition under § 260.43(a)(4)(ii)(B) of language that states that hazardous secondary materials that are being recycled by being returned to the original process(es) from which they were generated meet factor 4. In closed loop recycling and in several other kinds of recycling, such as in mining and mineral processing, hazardous secondary materials generated from an industrial process are regularly returned to that same process to remove more of the valuable constituent from them. The hazardous constituents in the secondary material are no different than what is already in the process and returning them makes the entire manufacturing process more efficient since it requires fewer raw materials.

EPA has stated in the past that it would not consider this practice a concern from the perspective of factor 4 because the comparison in question is supposed to be between final products, but it was clear from the comments to the proposal that this question was still a concern to many facilities. When adding subparagraph (ii) for situations where there is no analogous product for a comparison, EPA also added this language to make it clear that processes in which the hazardous secondary materials are returned to the original process do meet factor 4.

Collectively, these changes to the language of factor 4 are an improvement from EPA's 2011 proposal as the changes clarify when factor 4 is met for a wide variety of industrial processes. Furthermore, a generator can use its knowledge of the materials it uses and of the recycling process to make legitimacy determinations under factor 4. Thus, testing would be rarely required for a recycler to meet this factor because it would only be necessary when the product of the recycling does not meet widely-recognized specifications, is not an in-process material, and when the recycler does not sufficiently know what is in their final product to make a determination using generator knowledge.

Finally, EPA has changed proposed factor 4 to require any facility that does not meet the technical provisions of this

[34] The language in the proposed regulatory text for this paragraph mistakenly included an "or" instead of an "and" between these two requirements of factor 4 although the preamble discussion on page 76 FR 44124, column 2, correctly used "and." Several commenters pointed this error out to the Agency in their comments.

factor and yet is still legitimately recycling to document, certify, and provide notice that even though the recycling process does not meet the technical provisions of this factor, the recycling process is nevertheless legitimate. This requirement replaces the proposed petition process. The comments EPA received on the petition process expressed concern that the process would be expensive for facilities who wanted to take advantage of it and would place too much of a burden on implementing agencies. Comments also argued that EPA's estimate of the number of facilities that would be likely to submit petitions was overly conservative. Although the changes to factor 4 described here will address the concerns of many of the facilities who stated that they would have to submit a petition, the Agency also determined that a self-implementing process to allow those recyclers to address factor 4 would be more in keeping with the existing policy on legitimacy.

The certification process requires that a facility go through the same thought process and assessment about hazardous constituents that are incorporated into the final product that would have been required by the petition process (and that is currently consistent with the Agency's legitimacy policy in the Lowrance Memo). However, instead of having to submit a petition to an implementing agency when the process is legitimate despite not meeting the technical provisions of factor 4, the facility can document and certify the assessment that it has done and submit a notification on the Site ID form. This is a minimal burden, particularly as the Site ID form is a form that many of these facilities are already submitting to EPA for other reasons. In addition, these facilities are not left waiting for a response from an agency as they may have had to under the proposed petition procedure.

All in all, these changes to factor 4 will make this part of the legitimacy requirement consistent with the current policy in the Lowrance Memo and **Federal Register** preamble discussions and allow for all four legitimacy factors to be requirements that must be met without adversely affecting existing legitimate recycling.

IX. Revisions to Solid Waste Variances and Non-Waste Determinations

The Agency is finalizing today several modifications to the regulation of solid waste variances and non-waste determinations at 40 CFR 260.31(c), 40 CFR 260.33, and 40 CFR 260.34 to ensure protection of human health and the environment and foster greater consistency on the part of implementing agencies. These final revisions include:

(1) Revise 40 CFR 260.33(c) to require facilities to send a notice to the Administrator (or the State Director, if the state is authorized) in the event of a change in circumstances that affects how a hazardous secondary material meets the relevant criteria upon which a variance or non-waste determination has been based. The Administrator may issue a determination that the hazardous secondary material continues to meet the relevant criteria of the variance or non-waste determination or may require the facility to re-apply for the variance or non-waste determination;

(2) Include a provision at 40 CFR 260.33(d) that variances and non-waste determinations shall be effective for a fixed term not to exceed ten years. No later than six months prior to the end of this term, facilities must re-apply if they want to maintain the variance or non-waste determination;

(3) Include a provision at 40 CFR 260.33(e) stating that facilities receiving a variance or non-waste determination must provide notification as required by 40 CFR 260.42;

(4) Revise the criteria for the partial reclamation variance in 40 CFR 260.31(c) to clarify when the variance applies and to require, among other things, that the all criteria for this variance must met; and

(5) Revise the criteria for the non-waste determination in 40 CFR 260.34 to require that petitioners explain or demonstrate why their hazardous secondary materials cannot meet, or should not have to meet, the existing DSW exclusions under 40 CFR 261.2 or 261.4.

A discussion of the public comments on the 2011 DSW proposal and Agency responses can be found in section XVIII of this preamble and the full response to comment document is in the docket for the rulemaking.

A. Revisions to Procedures for Variances and Non-Waste Determinations in 40 CFR 260.33

Under the current regulatory framework, 40 CFR 260.30 provides the Administrator with the authority to grant a variance from the definition of solid waste or a non-waste determination on a case-by-case basis if the hazardous secondary materials are recycled in a particular manner. The practical effect of both the solid waste variances and the non-waste determinations is the same; once a petition is granted by EPA, or the authorized state, the hazardous secondary material is not regulated as a solid or hazardous waste. The procedures for these variances and non-waste determinations are found in 40 CFR 260.33.

In today's rule, EPA is finalizing three changes to 40 CFR 260.33. First, EPA is requiring in 40 CFR 260.33(c) that facilities send a notice to the Administrator (or the State Director, if the state is authorized) in the event of a change in circumstances that affect how a hazardous secondary material meets the relevant criteria upon which a variance or non-waste determination has been based. Second, EPA is establishing in 40 CFR 260.33(d) an effective term limit of ten years for variances and non-waste determinations unless the petitioner re-applies to the Agency to have the variance or non-waste determination renewed. Third, EPA is requiring in 40 CFR 260.33(e) that facilities re-notify every two years under 40 CFR 260.42.

1. Requirement That an Applicant Send Notice in the Event the Material No Longer Meets the Relevant Criteria

EPA is modifying 40 CFR 260.33(c) to require, in the event of a change in circumstances that affects how a hazardous secondary material meets the relevant criteria contained in 40 CFR 260.31, 260.32, or 260.34 upon which a variance or non-waste determination has been based, the applicant must send a description of the change in circumstances to the Administrator (or the State Director, if the state is authorized). The Administrator then may issue a determination that the hazardous secondary material continues to meet the relevant criteria of the variance or non-waste determination or may require the facility to re-apply for the variance or non-waste determination.

The requirement that the hazardous secondary materials must continue to meet the relevant criteria of a solid waste variance or non-waste determination is inherent in the regulations. Failure to meet the criteria could indicate that the hazardous secondary materials are discarded and a solid waste and would trigger the need to re-examine the circumstances of the recycling. EPA is codifying this change to 40 CFR 260.33(c) to ensure that if there are changes that may impact how the hazardous secondary material meets the relevant criteria, that such changes be considered by the regulatory authority to ensure that those criteria continue to be met. This requirement will ensure clarity and consistency by providing an administrative procedure for reconsidering a variance or non-waste determination in the event that

the hazardous secondary material no longer meets the relative criteria.

In some cases, a full re-application for a variance or non-waste determination may not be necessary. Under today's final rule, in the event of a change, the facility must send a description of the change in circumstances to the regulatory authority and it is the regulatory authority that will determine whether the facility must re-apply for a variance or non-waste determination. This change in procedure allows the regulatory authority to avoid spending unnecessary resources re-reviewing petitions where the change in circumstances is found to be of no consequence to the original variance or non-waste determination the regulatory authority has granted.

2. Term Limit on Variances and Non-Waste Determinations

EPA is adding a provision to 40 CFR 260.33(d) that solid waste variances and non-waste determinations shall be effective for a fixed term not to exceed ten years. No later than six months prior to the end of this term, facilities must re-apply for a variance or non-waste determination if they want to maintain the variance or non-waste determination. A facility may continue to operate under an expired variance or non-waste determination if they have submitted an application for a new variance or non-waste determination six months prior to the end of the term limit and have not yet received a final decision on that application from their regulatory authority.

Variances and non-waste determinations are granted based on the case-by-case circumstances of a particular hazardous secondary material being recycled. Many of the variance and non-waste determination criteria specifically consider factors such as, the manner in which the hazardous secondary material is recycled, the market factors of the recycling process, the value of the hazardous secondary material, and contractual arrangements. However, these factors do not remain static and, instead, tend to change and evolve over time. It is therefore prudent that regulatory authorities periodically review these case-by-case situations to ensure that the hazardous secondary material continues to meet the criteria of the variance or non-waste determination.

Variances and non-waste determinations are granted for a fixed term not to exceed ten years from the date the facility is granted a variance or non-waste determination. If, for example, due to a change in circumstances, a facility is required to re-apply for a variance or non-waste determination within the 10-year time limit of its initial petition, then an automatic re-application would not be initiated until ten years after its second variance or non-waste determination is granted, unless otherwise specified by the regulatory authority. Additionally, regulators may stipulate time limits of less than 10 years, if warranted.

3. Re-Notification Requirement

EPA is adding a provision to 40 CFR 260.33(e) to require facilities receiving variances or non-waste determinations to send a notification of this activity prior to operating under the regulatory provision and by March 1 of each even-numbered year thereafter to the Regional Administrator (or State Director, if the state is authorized) using EPA Form 8700–12 in compliance with 40 CFR 260.42. Additionally, these facilities must notify within 30 days of stopping management of hazardous secondary materials under the variance or non-waste determination.

The intent of the notification is to enable variances and non-waste determinations to be tracked nationally and over time, which facilitates state-to-state consistency in determinations. Additionally, notifications enable effective oversight of facilities receiving variances and non-waste determinations because it provides regulatory authorities with a mechanism for receiving regularly updated information (such as information regarding quantities of hazardous secondary materials managed under the determination). Additionally, this information can be used to identify facilities which may have undergone changes to their reclamation process significant enough to trigger a review of the determination under 40 CFR 260.33(c).

EPA finds that the notification requirement under 40 CFR 260.42 has worked well in enabling regulatory authorities to monitor compliance of facilities operating under the 2008 DSW final rule. Regulatory authorities receive information on the name and location of the facilities operating under the exclusion and the types and quantities of hazardous secondary materials the facility is managing, which allows the regulatory authority to prioritize inspections, as well as create a list of facilities that would benefit from training and compliance assistance on the rule. Additionally, notification has allowed regulatory authorities to identify problems so as to intervene early to prevent potential mismanagement. EPA is convinced of the value of the notification provision in ensuring proper implementation of its rules. Therefore, notification for variances and non-waste determinations will increase transparency and oversight of facilities receiving a variance or non-waste determination.

B. Revisions to Partial Reclamation Variance in 40 CFR 260.30(c)

The "partial reclamation" variance in 40 CFR 260.30(c) applies to hazardous secondary materials that have been reclaimed, but must be reclaimed further before the materials are completely recovered (*i.e.,* "partial reclamation"). In turn, 40 CFR 260.31(c) provides the specific standards that a partially-reclaimed material must meet in order to be eligible for a variance from classification from solid waste.

In this final rule, EPA is revising the partial reclamation variance provision of 40 CFR 260.31(c) to clarify when partially-reclaimed materials are not solid waste because they are commodity-like. The objectives of the revisions are to clarify the regulatory language, foster consistent application of the variance criteria, and emphasize that the variance should be granted only when partial reclamation has produced a commodity-like material. EPA's modifications to 40 CFR 260.31(c) include: (1) Revising the introductory text to clarify when the variance applies; (2) revising the introductory text to require that all of the decision criteria must be met; (3) revising the language of all of the decision criteria to provide greater clarity; and (4) eliminating the sixth criterion, "other relevant factors."

1. Purpose of Revisions to Partial Reclamation Variance

When the partial reclamation variance was promulgated in 1985, EPA's original intent was to provide a mechanism for determining if a hazardous secondary material had undergone sufficient reclamation (a type of processing) to produce a material that was more like a commodity than a solid waste. The variance would be applicable if the material was commodity-like, even though some further reclamation was required before the material became a commercial product. EPA intended that the variance would be applied at the point that the commodity-like material was produced. After that point, the material would be managed as a commodity rather than as a solid and hazardous waste. Prior to the point that partial reclamation produced a commodity-like material, the material would have to be managed as a hazardous waste.

However, EPA has become aware that authorized states across the country have applied the variance provision differently in similar circumstances. These differences may be due to: (1) The wide discretion allowed to the regulatory authority to weigh any or all of the decision criteria in any way it sees fit; (2) lack of clarity in the decision criteria themselves; or (3) the general sixth criterion ''other relevant factors.''

As a result, variances have been granted under 40 CFR 260.31(c) for some materials that are not commodity-like. Therefore, EPA is finalizing revisions to the variance criteria to address the inconsistency among authorized states, remove ambiguities, and clearly convey the intent of the partial reclamation variance that only partially reclaimed hazardous secondary materials that have produced commodity-like materials are eligible for a variance from classification as solid waste. Consistent and appropriate application of the partial reclamation variance is necessary so that the hazardous waste program provides the level of protection of human health and the environment required by the RCRA statute in all communities in all areas of the country.

An illustration of how the revised variance provision would be applied to a commonly reclaimed hazardous waste example is included in the ''Background Document: Providing Context—The Example of F006 Electroplating Sludges,''[35] which is included in the docket for this rulemaking. This document includes a detailed description of how the revised variance provision would be used to make determinations about whether a variance would be appropriate for the listed hazardous waste F006 (wastewater treatment sludges from electroplating operations) at various steps in the reclamation process.

2. Revisions to Introductory Text of 40 CFR 260.31(c)

EPA revised the introductory text of 40 CFR 260.31(c) to clarify when a partial reclamation variance is applicable and to identify what factors must be used to make a determination that a partially-reclaimed material is commodity-like. The revised text states:

> The Administrator may grant requests for a variance from classifying as a solid waste those hazardous secondary materials that have been partially reclaimed, but must be reclaimed further before recovery is completed, if the partial reclamation has produced a commodity-like material. A determination that a partially-reclaimed material for which the variance is sought is commodity-like will be based on whether the hazardous secondary material is legitimately recycled as specified in § 260.43 of this part and on whether all of the following decision criteria are satisfied:

As noted above, the revised text replaces the word ''reclaimed'' with ''partially-reclaimed'' and clarifies that the variance is applicable at the point that partial reclamation ''has produced a commodity-like material.'' These changes clarify and reflect EPA's intent that the variance applies only after partial reclamation has produced a commodity-like material and does not apply prior to producing a commodity-like material.

To make a determination that a partially-reclaimed material is commodity-like, EPA revised the introductory text to require that such a determination will be based on whether the hazardous secondary material is legitimately recycled and whether all the decision criteria are satisfied.

3. Revisions to Criteria for Partial Reclamation Variance

Each criterion under 40 CFR 260.31(c) has been revised to begin with the word ''whether'' to require that the regulatory authority must make a yes or no determination as to whether the material meets each criterion. In addition, each criterion has been revised to clarify and incorporate the characteristics of a commodity-like material.

The first criterion in 40 CFR 260.31(c)(1) asks whether the degree of partial reclamation the material has undergone is substantial as demonstrated by using a partial reclamation process other than the process that generated the hazardous waste. By using a partial reclamation process other than the process that generated the hazardous waste, the more likely that the material will be commodity-like. Changes from the original language of the criterion include (1) replacing the general word ''processing'' with the words ''partial reclamation''; and (2) removing from the criterion ambiguity that could lead a regulatory authority to apply the variance after the initial partial reclamation process when a commodity-like material is not produced until completion of further reclamation.

The second criterion in 40 CFR 261.31(c)(2) asks whether the partially-reclaimed material has sufficient economic value that it will be purchased for further reclamation. Changes from the original language of the criteria include: (1) Adding the word ''partially-'' before the word ''reclaimed'' to clarify that the criterion applies to the partially-reclaimed material, not the fully-reclaimed material produced later in the process; and (2) revising the wording to reflect the fundamental characteristic that a commodity-like material has sufficient economic value that it will be purchased for further reclamation. EPA notes that the value of a material produced at a later stage of reclamation cannot be used to justify a variance for the partially-reclaimed material produced earlier in the process. In other words, the criterion must be applied to the ''partially-reclaimed'' material at the specific point in the reclamation process where application of the variance is requested. Evidence to support this criterion may include sales information; demand for the materials; and business contracts, such as contracts specifying quantities of material sold, details of the transaction, and the effective price paid for the partially-reclaimed material by purchasers. The price paid for the partially-reclaimed material should be calculated after subtracting transportation costs and any other goods or services rendered in exchange for the material purchased.

The third criterion in 40 CFR 260.31(c)(3) asks whether the partially-reclaimed material is a viable substitute for a product or intermediate produced from virgin or raw materials and which is used in subsequent production steps. Changes from the original language of the criteria include (1) adding the word ''partially-'' before the word ''reclaimed'' to clarify that the criterion applies to the partially-reclaimed material, not the fully-reclaimed material produced later in the process; and (2) replacing the phrase ''is like an analogous raw material'' with the phrase ''is a viable substitute for a product or intermediate produced from virgin or raw materials which is used in subsequent production steps.'' This revision is intended to demonstrate that a partially-reclaimed, commodity-like material is one that will be used as a viable substitute for a product or intermediate in production. Evidence to support this criterion would include a comparison of the physical and chemical characteristics of the partially-reclaimed material being considered for the variance to those of products or intermediates produced from virgin raw materials.

The fourth criterion in 40 CFR 260.31(c)(4) asks whether there is a market for the partially-reclaimed material as demonstrated by known customer(s) who are further reclaiming the material (*e.g.*, records of sales and/or contracts and evidence of subsequent

[35] Docket ID: EPA–HQ–RCRA–2010–0742–0016.

use, such as bills of lading). Changes from the original language of the criteria include (1) adding the word ''partially-'' before the word ''reclaimed'' to clarify that the criterion applies to the partially-reclaimed material, not the fully-reclaimed material produced later in the process; (2) deleting the word ''guaranteed'' since markets are often unpredictable; (3) deleting the word ''end'' prior to the word ''market'' since the partially-reclaimed material could be sold to another reclaimer before it is sold to a final manufacturer or final reclaimer; and (4) adding the phrase, ''as demonstrated by known customer(s) who are further reclaiming the material (*e.g.* record of sales and/or contracts, and evidence of subsequent use, such as bills of lading),'' to clarify how a facility may demonstrate a market for the partially-reclaimed material. Additionally, this change ensures that the partially-reclaimed material is being shipped for further reclamation rather than being potentially stockpiled by the partial reclaimer. Evidence to support this criterion may include the material's value as an input to a production process; traditional usage of quantities of the partially-reclaimed material; and the likely stability of markets for the material. A market for further reclaimed material produced at a later stage of reclamation cannot be used to justify a variance for a partially-reclaimed material. For example, if a facility requests a variance for an incoming partially-reclaimed hazardous waste, the market that would have to be evaluated is the market for the incoming partially-reclaimed hazardous waste itself, not the final product.

The fifth criterion in 40 CFR 260.31(c)(5) asks whether the partially-reclaimed material is handled to minimize loss. Changes from the original language of the criteria includes adding the word ''partially-'' before the word ''reclaimed'' to clarify that the criterion applies to the partially-reclaimed material, not the fully-reclaimed material produced later in the process. Specifically, this criterion requires evaluation of how the partially-reclaimed material is handled before it is further reclaimed. Handling a partially-reclaimed material to minimize loss indicates that the material is commodity-like. Generally, persons handling hazardous secondary materials with little or no economic value do not have the same incentives to minimize loss as persons handling commodities. The management of materials produced at later stages of the reclamation process is not relevant to whether the partially-reclaimed material is eligible for a variance. Evidence to support this criterion may include documentation of facility procedures used to minimize loss (*e.g.,* inspections, training) and storage and management equipment designed to minimize loss.

Finally, in today's final rule, EPA is removing the sixth criterion in 40 CFR 260.31(c)(6), which allowed the regulatory authority to consider other relevant factors when deciding whether a partially-reclaimed materials is commodity-like. When the partial reclamation variance was promulgated in 1985, EPA believed that this criterion could help determine whether a material is commodity-like. However, based on experience with the variance provision, EPA has learned that this criterion may have contributed to different determinations of whether the same partially-reclaimed material is commodity-like. Accordingly, EPA has determined that the appropriate and complete set of criteria to consider when determining whether a partially-reclaimed material is commodity-like are criteria (1)–(5).

C. Revisions to Non-Waste Determinations Found in 40 CFR 260.34

In today's final rule, EPA is adding a criterion to non-waste determinations in 40 CFR 260.34 that require facilities applying for a non-waste determination to explain or demonstrate why they cannot meet, or should not have to meet, the existing DSW exclusions under 40 CFR 261.2 or 261.4.[36] Commenters to the 2009 DSW public meeting notice have argued that the non-waste determinations may be burdensome to states, and thus, requiring applicants to formally consider and explain why they are not eligible for an existing DSW exclusion will reduce the burden on states in two ways: (1) It requires facilities to consider existing exclusions and standards first, before pursuing a non-waste determination, which can, in turn, lead to facilities discovering that their intended recycling fits under an existing exclusion and therefore a non-waste determination petition is not needed; and (2) this criterion informs the regulatory authority why a facility believes it cannot meet an existing exclusion, which is likely to be the regulatory authority's first question before evaluating a non-waste determination petition. Petitioners also would be allowed to seek a non-waste determination if they could demonstrate that they should not have to meet the conditions of another exclusion, but rather should be allowed to operate under a non-waste determination with fewer or different conditions. However, if EPA or the authorized state determines that an applicant may, in fact, use an existing solid waste exclusion under 40 CFR 261.2 or 261.4, this may be grounds for denying a non-waste determination on the basis that regulatory relief has already been provided.

[36] The two types of non-waste determinations are (1) a determination for hazardous secondary materials reclaimed in a continuous industrial process and (2) a determination for hazardous secondary materials that are indistinguishable in all relevant aspects from a product or intermediate.

X. Effect on Facilities Currently Operating Under Solid Waste Exclusions

A. Effect on Pre-2008 Solid Waste Exclusions

The final rule does not supersede any of the pre-2008 solid waste 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 remains in effect, unless the authorized state 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 Bevill exclusion in 40 CFR 261.4(b)(7)—the regulatory status of that material will not be affected by today's rule.

However, there are two revisions to the regulations that, while they do not directly affect the regulatory status of excluded hazardous secondary materials, may impact facilities' responsibilities under an existing exclusion. These two revisions are (1) a new recordkeeping requirement for speculative accumulation; and (2) a documentation, certification, and notification requirement for recycling processes which are legitimate despite having levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product. These requirements must be met by the effective date of the rule, which is July 13, 2015.

1. Revised Speculative Accumulation Requirement

Under the revised speculative accumulation requirement in § 261.1(c)(8), all persons subject to the speculative accumulation requirements (for example, persons reclaiming characteristic by-products and sludges under 40 CFR 261.2(c)(3) and persons reclaiming hazardous secondary

materials under a definition of solid waste exclusion under 40 CFR 261.4(a), such as the sulfuric acid exclusion at § 261.4(a)(7) or the generator-controlled exclusion at § 261.4(a)(23)) must label their storage unit(s) by indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method.

2. Prohibition of Sham Recycling and Definition of Legitimate Recycling

The codification of the prohibition of sham recycling (§ 261.2(g)), and the definition of legitimate recycling (§ 260.43) being finalized today will not impose any new requirements on persons recycling under the pre-2008 recycling exclusions, except in the case where the product of the recycling process (1) has levels of hazardous constituents that are not comparable to or lower than those in a legitimate product (*i.e.,* are significantly elevated) or (2) is unable to be compared to a legitimate product and the product of the recycling process is not a widely recognized commodity (*e.g.,* scrap metal) and is not returned to the original production process (*e.g.,* closed loop recycling).

In this case, the person performing the recycling must conduct the necessary analysis and prepare documentation stating why the recycling is still legitimate. Persons may consider exposure from toxics in the product, the bioavailability of the toxics in the product, and other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk. The documentation must include a certification statement that the recycling is legitimate and must be maintained on-site. The person performing the recycling must also notify his Regional Administrator (or State Director, if the state is authorized) of this activity using EPA Form 8700–12.

B. Effect on Facilities Operating Under the 2008 Solid Waste Exclusions

1. Facilities Operating Under Generator-Controlled Exclusion (40 CFR 261.2(a)(2)(ii) or 261.4(a)(23)) [37]

Because today's rule includes more stringent standards for the generator-controlled exclusion at 40 CFR 261.4(a)(23), facilities that are currently managing hazardous secondary materials under these provisions must ensure they are complying with the more stringent standards by the effective date of the rule, which is July 13, 2015 (or in an authorized state, by the effective date in that state). The new provisions include (1) complying with the regulatory definition of "contained" found in 40 CFR 260.10; (2) maintaining shipping records for reclamation under same-company and toll manufacturing agreements; (3) (for the person performing the recycling) documenting how the recycling meets all four factors of the legitimacy definition in 40 CFR 260.43,[38] and (4) meeting the new emergency preparedness and response conditions.

Under the new regulatory definition of contained, a hazardous secondary material is contained if it is managed in a unit (which can include a land-based unit such as a pile) that meets the following criteria: (1) The unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary material, to prevent releases of the hazardous secondary material to the environment. Unpermitted releases are releases that are not covered by a permit (such as a permit to discharge to water or air) and may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures; (2) the unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and (3) the unit holds hazardous secondary materials that are compatible with other hazardous secondary materials placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions. Hazardous secondary materials in units that meet the applicable requirements of 40 CFR part 264 or 265 (*e.g.,* tanks and containers) are presumptively contained.

Under the new requirements to document shipments for reclamation performed under the same-company and toll manufacturing provisions of the generator-controlled exclusion at 40 CFR 261.4(a)(23), generating and receiving facilities must maintain records of hazardous secondary materials sent or received under this exclusion at their facilities for no less than three years. The records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received. The requirements may be satisfied by routine business records (*e.g.,* financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations).

Persons performing the recycling of hazardous secondary materials under the generator-controlled exclusion of 40 CFR 261.4(a)(23) must also maintain documentation of their legitimacy determination on-site. Documentation must be a written description of how the recycling meets all four factors in 40 CFR 260.43(a). Documentation must be maintained for three years after the recycling operation has ceased.

The Agency is not requiring any particular format for the documentation of legitimacy; however, we expect that the recycler would have written documentation describing the recycling process and how it meets each legitimacy factor. For example:

- Useful contribution legitimacy factor—the recycler would document how the hazardous secondary material(s) provides a useful contribution to the recycling process or to the product or intermediate of the recycling process. The regulatory text for this factor provides five ways in which a useful contribution can be achieved. The recycler would need to document how the hazardous secondary material(s) add value and/or are useful to the recycling process in one or more of these ways: (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. For example, if the hazardous secondary material is a source of a valuable constituent, such as a precious metal, the document would explain the specific precious metal(s) recovered and their value to the process.
- Valuable product or intermediate legitimacy factor—the recycler would explain how the product or intermediate made from hazardous secondary material is valuable, either in a monetary sense or through its intrinsic value. If the product made from hazardous secondary material is sold, the

[37] Today's rule consolidates the 2008 generator-controlled exclusion at 40 CFR 261.2(a)(2)(ii) and 40 CFR 261.4(a)(23) into one exclusion at 40 CFR 261.4(a)(23).

[38] As part of the requirement of meeting 40 CFR 260.43, if the product of recycling contains levels of hazardous constituents that are not comparable to or are unable to be compared to a legitimate product, the person performing the recycling must document, certify and notify the appropriate Regional Administrator of why the recycling is still legitimate. Where there is no analogous product made from virgin materials, the product of the recycling process is comparable to a legitimate product or intermediate if the product of the recycling process is a commodity that meets widely recognized commodity standards and specifications, or the hazardous secondary materials being recycled are returned to the original process or processes from which they were generated to be reused.

documentation of sale could be proof of the value of the material to a third party. Such documentation could be in the form of a selection of receipts or contracts and agreements that establish the terms of the sale or transaction. A recycler that has not yet arranged for the sale also could demonstrate value by showing that the product or intermediate can replace another product or intermediate that is available in the marketplace. Demonstrating intrinsic value may be less straightforward than demonstrating the value of products that are sold in the marketplace, but could involve an explanation of the industrial process that shows how the product of the recycling process or intermediate replaces an alternative product that would otherwise have to be purchased.

• Managed as a valuable commodity legitimacy factor—the recycler would include a description of how the hazardous secondary material is managed and explain how this management is similar or provides equivalent protection to the management of an analogous raw material. That is, the documentation would describe how the hazardous secondary material is stored and handled prior to being inserted into the recycling process. Where there is no analogous raw material, the recycler would explain how the management of the hazardous secondary material ensures that the material is contained as discussed in 40 CFR 260.10.

Comparison of comparability of the product of recycling to a legitimate product factor—the recycler would include any data or information that shows that (1) the levels of hazardous constituents in the product are comparable to or lower than those found in analogous products, or are comparable to levels that meet widely-recognized commodity standards (in the case where the commodity standards include levels that specifically address those hazardous constituents), or (2) if there is no analogous product, that the product meets widely recognized commodity standards, or that hazardous secondary materials being recycled are returned to the original process or processes from which they were generated to be reused. If the product of the recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product, but the recycling is still legitimate, the person performing the recycling must conduct the necessary analysis and prepare documentation stating why the recycling is, in fact, still legitimate. Persons can consider exposure from toxics in the product, the bioavailability of the toxics in the product, and other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk. The documentation must include a certification statement that the recycling is legitimate and must be maintained on-site. In addition, the person performing the recycling must notify his Regional Administrator (or the State Director, if the state is authorized) of this activity using EPA Form 8700–12.

Finally, under the new standards for emergency preparedness and response found in 40 CFR part 261 subpart M, generators that accumulate less than or equal to 6,000 kg of hazardous secondary material on site must comply with the emergency preparedness and response requirements equivalent to those in part 265 subpart C, which discuss maintaining appropriate emergency equipment on site, having access to alarm systems, maintaining needed aisle space, and making arrangements with local emergency authorities. A generator must also have a designated emergency coordinator who must respond to emergencies and must post certain information next to the telephone in the event of an emergency. For generators that accumulate more than 6,000 kg of hazardous secondary material on site, EPA is requiring that generators comply with requirements equivalent to those in part 265 subparts C and D, which includes all the requirements already discussed above for those accumulating less than or equal to 6,000 kg, as well as requiring a contingency plan and sharing the plan with local emergency responders.

2. Facilities Operating Under Transfer-Based Exclusion (40 CFR 261.4(a)(24) or (25))

Because today's rule replaces the transfer-based exclusion at 40 CFR 261.4(a)(24) and (25) with a verified recycler exclusion, facilities that are currently managing hazardous secondary materials under the transfer-based exclusion at 40 CFR 261.4(a)(24) must meet the terms of the verified recycler exclusion by the effective date of the rule, which is July 13, 2015 (or in an authorized state, by the effective date in that state). That is, facilities operating under the transfer-based exclusion who wish to continue operating under the verified recycler exclusion must send in a new notification form and meet the additional conditions in the verified recycler exclusion, including the emergency preparedness and response condition. In addition, any reclamation facility or intermediate facility that does not have a RCRA permit or is not operating under interim status must stop managing the hazardous secondary material under the transfer-based exclusion until they apply for and receive a variance from either EPA or the authorized state under the verified recycling exclusion. (As of February 2014, there were no facilities without a RCRA Subtitle C permit recycling under the transfer-based exclusion, so EPA does not expect this impact to occur).

Because the verified recycler exclusion is limited to recycling in the United States, facilities exporting hazardous secondary material under 40 CFR 261.4(a)(25) must cease operating under this exclusion by the effective date of the rule. The facility must notify his Regional Administrator (or State Director, if the state is authorized) using EPA Form 8700–12 that they have stopped managing hazardous secondary materials under the exclusion in accordance with 40 CFR 260.42(b). Facilities must submit this notification within 30 days of stopping management of hazardous secondary materials under this exclusion. Note that facilities that manage hazardous secondary materials under both the export exclusion at 40 CFR 261.4(a)(25) and the transfer-based exclusion at 40 CFR 261.4(a)(24) and/or and the generator-controlled exclusion at 40 CFR 261.4(a)(23) would not notify that they have stopped managing hazardous secondary materials, but would instead update their notification to make it clear they are no longer using the export exclusion at 40 CFR 261.4(a)(25).

XI. Effect on Spent Petroleum Catalysts

In the 2008 DSW final rule, EPA deferred the question of whether spent petroleum catalysts should be eligible for the exclusions pending further consideration of the pyrophoric properties of the spent petroleum catalysts (73 FR 64714). EPA noted that the Agency was planning to propose—in a separate rulemaking from the 2008 DSW final rule—an amendment to 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. 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 properties (*i.e.,* can ignite spontaneously in contact with air).

It was largely because of these pyrophoric properties that the spent petroleum catalysts exhibit that EPA deferred the question of whether spent petroleum catalysts should be included in the 2008 DSW final rule exclusions. While spent petroleum catalysts can be a valuable source of recoverable metals, the risk of these hazardous secondary materials spontaneously igniting when in contact with air is not a property that most metal recyclers would be expected to address, and thus, present additional risks that are not presented by other types of metal-bearing hazardous secondary materials and therefore may be most appropriately managed as hazardous waste when recycled.

Under today's final rule, EPA has added a regulatory definition of the ''contained'' standard as it applied to the generator controlled exclusion (40 CFR 261.4(a)(23)) and to the verified recycler exclusion (40 CFR 261.4(a)(24)). This new definition includes a requirement to address the risk of fires and explosions. This provision addresses the pyrophoric properties of the spent petroleum catalysts (as well as other types of ignitibility or reactivity) for the purposes of the generator-controlled exclusion and the verified recycler exclusion. Therefore, EPA has revised the generator-controlled exclusion to allow spent petroleum catalysts to be eligible for that exclusion, and is also allowing spent petroleum catalysts to be eligible for the verified recycler exclusion.

XII. Effect on CERCLA

A primary purpose of today's final rule is to encourage the safe, beneficial reclamation of hazardous secondary materials. In 1999, Congress enacted the Superfund Recycling Equity Act (SREA), explicitly defining those hazardous substance recycling activities that may be exempted from liability under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (CERCLA section 127). Today's final rule does not change the universe of recycling activities that could be exempted from CERCLA liability pursuant to CERCLA section 127. Today's final rule only changes the definition of solid waste for purposes of the RCRA Subtitle C requirements. The final rule also does not limit or otherwise affect EPA's ability to pursue potentially responsible persons under section 107 of CERCLA for releases or threatened releases of hazardous substances.

XIII. General Comments on the 2011 Proposed Revisions to the Definition of Solid Waste

EPA received hundreds of comments on the July 2011 DSW proposal, most of which were quite detailed and raised multiple issues. Below is an overview of some of the major comments on general aspects of the proposals and a summary of EPA's responses to those comments. For a complete discussion of all the comments and EPA's responses to those comments, please see *2014 Revisions to the Definition of Solid Waste Final Rule Response to Comment Document* found in the docket for today's rulemaking.

A. EPA's Legal Authority To Regulate Hazardous Waste Recycling

Comments: EPA's Authority

EPA received many comments that asserted that EPA has no authority to regulate legitimate recycling, because commenters believe that hazardous secondary materials sent for recycling are not discarded and therefore, are not solid wastes. The comments state that EPA has misread the intent of Congress, citing previous court cases, noting the ''analysis of the statute reveals clear Congressional intent to extend EPA's authority only to materials that are truly discarded, disposed of, thrown away, or abandoned'' (*AMC I,* 824 F.2d at 1190). They go on to argue that materials being recycled do not fall into one of these enumerated activities.

Specifically, many of the comments cite the *ABR* decision (which in turn cites earlier court decisions), where the court noted that EPA's authority is ''limited to materials that are 'discarded' by virtue of being disposed of, abandoned, or thrown away'' and that ''[s]econdary materials destined for recycling are obviously not of that sort. Rather than throwing them away, the producer saves them, rather than abandoning them, the producer reuses them'' (*ABR* 208 F.3d at 1051). The court also noted that ''To say that when something is saved it is thrown away is an extraordinary distortion of the English language'' (Id. at 1053).

Many commenters took issue with EPA's decision to withdraw the transfer-based exclusion. These comments criticize EPA's rationale that ''subsequent activities are more likely to involve discard, given that the generator has relinquished control of the hazardous secondary material'' (72 FR 14178). In particular, commenters cited Safe Food and Fertilizer, stating that the D.C. Circuit addressed an argument by the petitioners in the case that ''material that is transferred to another firm or industry for subsequent recycling'' is discarded and subject to RCRA regulation. 350 F.3d 1263, 1268 (D.C. Cir. 2003). The court said:

> [W]e have never said that RCRA compels the conclusion that material destined for recycling in another industry is necessarily 'discarded.' . . . Although ordinary language seems inconsistent with treating immediate reuse within an industry's ongoing industrial process as a 'discard' . . . the converse is not true. As firms have ample reasons to avoid complete vertical integration . . . firm-to-firm transfers are hardly good indicia of a 'discard' as the term is ordinarily understood. Id.

EPA's Response: EPA's Authority

EPA disagrees with the comments that Congress did not intend to give EPA the authority to regulate hazardous waste recycling. As EPA noted in the July 2011 DSW proposal, the RCRA 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* 76 FR 44097, citing numerous sections of the statute and *U.S. Brewers' Association* v. *EPA,* 600 F. 2d 974 (D.C. Cir. 1979); 48 FR 14502–04, April 3, 1983; and 50 FR 616–618). Moreover, the case law discussed above clearly shows instances where EPA properly regulated the recycling of solid and hazardous wastes.

EPA also disagrees with comments that EPA cannot consider the fact that the generator has relinquished control of the hazardous secondary material (along with other factors that indicate discard) in deciding to withdraw the transfer-based exclusion. EPA's authority to regulate such transfers is clear: As the Court noted in *Safe Food,* ''materials destined for future recycling by another industry *may* be considered 'discarded'; the statutory definition does not preclude application of RCRA to such materials if they can reasonably be considered part of the waste disposal problem'' (350 F.3d at 1268).

EPA's record for today's rulemaking demonstrates that third-party recycling of hazardous secondary materials has been and continues to be part of the waste disposal problem. As noted in the July 2011 DSW proposal, EPA has already evaluated these hazardous

secondary materials (for example, during a hazardous waste listing determination) and determined them to be solid and hazardous wastes. (76 FR 44109) Therefore, a conditional exclusion must reasonably be expected not to result in the excluded hazardous secondary material being discarded. Of the 250 damage cases evaluated in the 2014 environmental problems study, 229 (or approximately 92%) were from reclamation activities of 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.[39]

In addition, the market forces study in the docket for the 2008 DSW final rule supports the conclusion that the pattern of discard at off-site, third-party reclaimers is a result of inherent differences between commercial 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 the receipt of the hazardous secondary materials. 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 third-party recyclers have less flexibility than in-house recyclers in changing how they manage their hazardous secondary materials (*e.g.,* during price fluctuations, in-house recyclers can more easily switch from recycling to disposal or from recycled inputs to virgin inputs, while commercial third-party recyclers cannot switch to disposal without obtaining a RCRA permit) (73 FR 64674).

B. Supporting Record

Comments: Environmental Problems Study

Many commenters raised issues with EPA's use of the environmental problems study as part of the record for today's rule.[40] Some commenters argued that EPA should not use 1982 as the cut-off year for investigating ''relatively recent'' damage cases. These commenters said that, given that the first major set of Subtitle C regulations were promulgated in 1980, going back to 1982 unfairly and inappropriately stacks the deck in favor of finding a higher number of damage cases because it took many years for companies to figure out who was subject to the RCRA Subtitle C regulations. Additionally, these commenters noted that the vast majority of damage cases began operation prior to 1982 and thus contamination on these sites was likely the result of historic poor management during a period of little to no oversight. Commenters believed that the early 1990s would be a more appropriate cut-off date than 1982. One of the commenters also argued that the damage cases are not reliable, either from a lack of information, because they reflect outdated and inapplicable management practices, or have been greatly mischaracterized and should not be used to support any of the proposed changes to the DSW rule.

Other commenters argued that the large majority of damage cases identified by EPA were caused by either a lack of knowledge of RCRA, blatant disregard for the law, or unavoidable accidents. These commenters noted that many of the damage cases involved civil or criminal violations, indicating that the problem was non-compliance with the regulations, not from a lack of regulations.

Another commenter disagreed with EPA's negative portrayal of the waste management industry and argued that EPA should have conducted more research to obtain an understanding of the necessary and positive role of the hazardous waste management industry.

EPA's Response: Environmental Problems Study

The Agency maintains that the scope of the environmental problems study is appropriate for the purpose of the DSW rulemaking effort. Specifically, we continue to find that 1982 is an appropriate cut-off year for the damage case study as it best reflects the point where companies became aware of their responsibilities and liabilities for safe management of their hazardous secondary materials intended for recycling.[41] While the CERCLA statute and the initial RCRA hazardous waste regulations became effective in 1980, there was an initial ''phase in'' period during which industry and other affected entities began to change their practices with regard to hazardous material recycling, and during which federal and state agencies were developing guidelines and procedures for implementing these new authorities. Thus, we deliberately did not include a number of recycling damage cases that occurred during the early 1980s that appeared to have been caused by companies and individuals who were not cognizant of their new responsibilities and potential liabilities under RCRA and CERCLA.

As to the issue that there are facilities in the report that began operations prior to 1982, we agree that the facilities themselves may have begun operating earlier than the timeframe. However, the methodology for the analysis only includes facilities where the recycling operations occurred after 1982, and the environmental damages associated with those operations occurred after 1982. As a result, more than 600 damage cases were removed from consideration, leaving only those cases that EPA was confident have a clear link between post-1982 recycling practices and environmental damage.

Of the damage cases that met our criteria, we agree that for certain types of damage, such as groundwater or soil contamination, determining when exactly the damage occurred and which property owner caused the damage is difficult. However, in general, the damage cases include multiple types of damage and certain damage, such as abandonment of materials or observed violations of proper storage and containment, can be easily attributed to current facility owners and to post-1982 activities. For example, Alco Pacific, a lead recycling facility may have started operations in 1954, but it was 1990 when the company abandoned 98 drums and left over 1,300 cubic yards of lead-contaminated rubber debris and sand with no containment to prevent dispersal from wind or rainwater. Additionally, it was 1989 when Myers Drum, a drum reconditioning facility, was found to be storing 95% of their 20,000 drums on their side and that spillage, sump overflows, and structural failures were observed. In 1986, Continental Steel, which manufactured wire and rod products from scrap metal, abandoned their facility leaving 220 drums of product material and 50 containers of lead-cadmium batteries on-site. These damages occurred well after RCRA and CERCLA became effective.

Regarding the lack of information in some of its damage cases, as EPA stated in its 2007 environmental problem

[39] U.S. EPA, *An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials* (Updated) December 2014.

[40] *An Assessment of Environmental Problems Associated With Recycling of Hazardous Secondary Materials* (EPA–HQ–RCRA–2002–0031–0355).

[41] We would note, however, that even if EPA changed the date to the 1990's, EPA still identified dozens of damage cases, and thus, changing the cut-off date, as some commenters suggest, would not impact the study's overall findings.

study, many of the cases that were investigated were well documented. This was the case, for example, for many of the Superfund National Priority List (NPL) sites. However, in many other cases, it was not possible given the limitations of the study to document all facts. Often, there was considerable technical information as to the nature and extent of the contamination at the site, but relatively little information regarding the activities and circumstances that originally caused it. For some of the sites, we were able to collect only very basic information. However, for each site that was identified in the environmental problems study, we had sufficient information to determine that the damage resulted from recycling operations. Thus, we continue to maintain that the environmental problems study is appropriate to use in the development of the final rule.

EPA also disagrees with the commenter who argued that the environmental problems study only demonstrates non-compliance of existing regulations and therefore does not justify the promulgation of tighter requirements under today's final rule. On the contrary, the frequency of the damage cases, including violations of regulations demonstrates the need for greater, not less, oversight.

Furthermore, as part of a separate analysis, EPA has considered whether recycling of hazardous secondary materials under the 2008 DSW final rule could result in increased risk to human health and the environment and determined it is a complex issue because of the interactions between how the regulations are written and how they are implemented. Under the 2008 DSW final rule, EPA presumed that the conditions of the rule would prevent any increase in risk. However, what the 2008 DSW analysis failed to take into account was whether the conditions of the rule would operate as effectively in the real world as the more detailed requirements of the RCRA hazardous waste regulations.

A more detailed comparative analysis of the regulatory requirements under the 2008 DSW final rule with the hazardous waste regulations reveals potentially significant gaps in environmental protection under the 2008 DSW final rule. Examples of these gaps include the absence of measures to ensure compliance, incentives to accumulate larger volumes of hazardous secondary materials, the potential for increased releases, such as during storage and transportation of the hazardous secondary materials, the lack of prescriptive standards for storage and containment, potential issues associated with the interstate transport of hazardous secondary materials for recycling, and reduction in access to information and the opportunity for public participation. RCRA is a preventative statute and by design seeks to prevent damage before it occurs; relying solely on enforcement without addressing the root causes of the damage could needlessly increase the frequency, severity, and cost of damage cases. Therefore, EPA has chosen to finalize the changes to the 2008 DSW final rule being promulgated today.

Finally, EPA disagrees with comments stating we have not considered the positive role of the hazardous waste management industry. In development of the DSW rulemakings, the Agency specifically conducted a study of successful recycling that examined how responsible generators and recyclers of hazardous secondary materials ensures that recycling is done in an environmentally safe manner.[42] However, as EPA noted in the 2008 DSW final rule, 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. However, 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. (73 FR 64683)

Comments: Correlation of Recycling Damage Cases With Regulatory Exclusions, Exemptions or Alternative Standards

Although at least one commenter supported the analysis titled "Correlation of Recycling Damage Cases with Regulatory Exclusions, Exemptions, or Alternative Standards,"[43] which is included in the docket for this rulemaking. However, most commenters argued that this analysis was flawed and that EPA should gather information in a more responsible manner, such as with an information collection request (ICR).

Many commenters pointed out that EPA only identified seven exclusions that were "likely" correlated to some damage cases, yet EPA in its 2011 DSW proposal considered adding requirements to 32 exclusions. These commenters argued that this record was insufficient for justifying additional conditions.

Some commenters also took issue with how EPA assigned regulatory exclusions to certain damage cases. For example, a few commenters said that none of the five damage cases correlated to precious metals involved recycling of in-process secondary materials as part of precious metals mining and primary mineral processing, but rather involved off-site entities that were attempting to recover precious metals from photographic film, circuit boards, and other secondary materials generated by industry.

One commenter said that EPA identifies 35 cases that allegedly involve spent batteries; however, two of these involve non-lead batteries and thus are irrelevant and a third involves printed circuit boards. This commenter goes on to say that, of the remaining 32 lead-acid battery-related facilities for which EPA has identified known dates of operation, none began business operations after the 1982 and 1985 adoption of the RCRA regulations that control lead-acid battery collection and recycling. This commenter believed that the primary contamination at these sites almost certainly pre-dated RCRA and thus EPA cannot use these cases to support changes to 40 CFR 266.80. Another commenter said that none of the environmental damage associated with 52 damage cases could be shown to be the result of companies "likely" operating under the 261.4(a)(13) scrap metal exclusion and/or the 261.6(a)(3)(ii) scrap metal recycling exemption.

A few commenters argued that EPA has not compared the number of damage cases to the total number of recyclers and thus we do not know what percentage of all facilities the damage cases represent. Another commenter noted that the 132 damage cases that EPA correlated to the pre-2008 recycling exclusions makes up only 2.5% of the 5,321 facilities that EPA estimates are using the exclusions (a total number which this commenter believes EPA underestimates).

[42] U.S. EPA, *An Assessment of Good Current Practices for Recycling of Hazardous Secondary Materials*, November 2006 (EPA–HQ–RCRA–2002–0031–0354).

[43] Docket ID: EPA–HQ–RCRA–2010–0742–0010.

EPA's Response: Correlation of Recycling Damage Cases With Regulatory Exclusions, Exemptions or Alternative Standards

The goal of EPA's analysis to correlate damage cases with existing exclusions was to assess whether certain hazardous secondary material recycling exclusions, exemptions, or alternate standards are adequately protecting human health and the environment. Because the majority of exclusions, exemptions, and alternative standards do not include notification requirements, EPA does not have precise data regarding which and how many facilities are recycling hazardous secondary materials under reduced regulation. This lack of data hinders EPA's ability to collect information regarding what regulations a specific facility was operating under when damage occurred. Because this information is limited, the Agency had developed a methodology that correlates the type of hazardous secondary materials identified in the damage cases to regulations that likely governed the management of the hazardous secondary material. EPA used this methodology to identify patterns related to the types of hazardous secondary material involved in damage cases and whether those materials were likely to be managed under an exclusion, exemption, or alternate standard.

EPA understands commenters' concerns regarding the limitations of this analysis, including that EPA could only correlate with confidence 7 of the 32 recycling exclusions to damage cases in its environmental problems study. This result is more a lack of precision in the data and less that some recycling exclusions have no damage cases. For example, because notification is not required for these exclusions, we can only conservatively identify damage case correlations where the type of hazardous secondary material very clearly matches to an exclusion (*e.g.*, scrap metal). We lack information to make inferences for broadly applicable exclusions, (*e.g.*, use/reuse) or for broadly defined hazardous secondary materials (*e.g.*, metal-bearing wastes). Therefore, by virtue of some exclusions' broad applicability, we were unable to correlate them to specific damage cases. Additionally, due to the lack of data, it is difficult to analyze current trends in damage cases, and thus even more difficult to accurately project what the number of future damage cases might be under different scenarios. However, although it is difficult to assign specific damage cases to certain exclusions, we note that in the environmental problems study only nine of the damage cases were operating under a RCRA permit at the time of damage. Thus, EPA can generally conclude that the majority of the damage cases at third party recyclers were operating outside of RCRA, inferring these facilities were either operating illegally or operating under an exclusion, exemption, or alternate standard, or no standard.

Regarding other comments on the analysis, including comments on specific damage case-to-exclusion pairings and on comparing the number of damage cases to the total number of affected entities, EPA agrees with commenters that more information is needed prior to taking final action on specific conditions of the pre-2008 recycling provisions. EPA finds it may need to consider each exclusion in terms of evaluating specific regulatory gaps and whether additional conditions are needed to ensure protection of human health and the environment. Therefore, we are not finalizing specific conditions for the pre-2008 recycling provisions in today's rule and are instead deferring action until EPA can more adequately address commenters' concerns, including comments on the record. Before the Agency would take any such action, the Agency would provide the regulated community, as well as other stakeholders the opportunity for notice and comment.

XIV. Major Comments on the Exclusion for Hazardous Secondary Materials Legitimately Reclaimed Under the Control of the Generator and Recordkeeping for Speculative Accumulation

A. Proposed Changes to 2008 Final Rule

In its July 2011 DSW proposal, EPA proposed or solicited comment on certain changes to the 2008 DSW exclusion from the definition of solid waste for hazardous secondary materials legitimately reclaimed under the control of the generator. The first change was adding a regulatory definition of "contained" for units storing hazardous secondary materials. The definition included factors which, if met, would demonstrate that the unit was contained. Under the proposal, a storage unit is contained if it is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary material to the environment, and is designed, as appropriate for the hazardous secondary materials to prevent releases of hazardous secondary material to the environment. Such releases may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures. The unit must also be properly labeled or otherwise have a system (such as a log) to immediately identify the hazardous secondary materials in the unit. Finally, the unit must not hold incompatible materials and must address any potential risks of fires or explosions. The definition also stated that hazardous secondary materials stored in units that meet the applicable requirements of 40 CFR parts 264 or 265 are considered to be contained.

The second change concerned new recordkeeping requirements for speculative accumulation, "same-company" recycling, and recycling under certain tolling arrangements. With respect to speculative accumulation, EPA proposed to require generators and reclaimers operating under the generator-controlled exclusion to post accumulation start dates to allow inspectors and other regulatory authorities to quickly ascertain how long hazardous secondary materials had been in storage. If placing a label on the storage unit is not practicable, the first date that the excluded hazardous secondary material began to be accumulated must be entered in an inventory log. We also solicited comment on whether to add the proposed recordkeeping requirement to the general speculative accumulation provision at 40 CFR 261.1(c)(8), thereby extending the requirement to all recyclers subject to that provision. We also proposed a recordkeeping requirement for tolling contractors and toll manufacturers operating under the tolling exclusion, which would require maintaining records of hazardous secondary materials sent or received pursuant to the tolling contract. We also solicited comment on whether to add a similar recordkeeping requirement to generators and reclaimers operating under the "same-company" exclusion.

The third change concerned making notification a condition rather than a requirement of the exclusions. In addition, we proposed two structural changes. These were (1) placing the requirements for land-based units and non-land-based units in one regulatory provision (40 CFR 261.4(a)(23)), since the requirements for both types of units are the same; and (2) placing most definitions applicable to the generator-controlled exclusion in 40 CFR 261.4(a)(23) (together with the requirements) instead of in 40 CFR 260.10.

Comments: Authority for Proposed Changes

Many commenters supported all or some of these changes, either as proposed or with suggested modifications. Their comments are discussed below in reference to the specific changes that the Agency proposed. Some commenters, however, stated that EPA did not have the authority to impose conditions (particularly the ''contained'' standard) on hazardous secondary materials recycled under the control of the generator. These commenters generally believed that materials recycled under these exclusions are not discarded, and that EPA provided no new evidence that would justify the proposed changes. According to these commenters, the proposed changes are tantamount to treating the materials as wastes instead of valuable commodities, and are inconsistent with the ABR decision. One commenter noted that generators already have incentives to prevent releases of hazardous secondary materials because of potential liability, corporate values of stewardship and environmental responsibility, and public relations.

EPA's Response: Authority for Proposed Changes

The Agency has determined that the conditions proposed in our July 2011 DSW proposal are needed in order to ensure that the exclusion operates as intended and does not result in discarded hazardous secondary material posing significant risk to human health and the environment. We agree that generators and reclaimers operating under the generator-controlled exclusion have incentives to ensure that the hazardous secondary materials are safely managed. Nevertheless, the conditions we proposed are needed to ensure that the generator-controlled exclusion will correctly function to exclude only hazardous secondary material that is not discarded.

Specifically, the proposed ''contained'' requirement is a key provision for determining whether a hazardous secondary material is being managed as a valuable commodity. Such materials that are not contained and are instead released to the environment are not destined for recycling and are clearly discarded. The proposed definition specifies factors which, if met, demonstrate that the hazardous secondary materials in a unit are handled as valuable raw materials, intermediates, or products and thus are not discarded. We note that the criteria in proposed 40 CFR 261.4(a)(23)(i) are all performance measures, as opposed to specific technical standards, suggested by commenters in response to the June 2009 public meeting on the 2008 DSW final rule. These criteria also exemplify practices discussed in the preamble to the 2008 DSW final rule regarding containment of hazardous secondary materials, such as ways to prevent releases and operation and maintenance of the storage unit in the same manner as a production unit.

The proposed recordkeeping requirement for speculative accumulation (which would require posting of accumulation start dates on the storage unit or in an inventory log) would allow inspectors and other regulatory authorities to quickly ascertain how long a facility has been storing an excluded hazardous secondary material, and whether the storage time exceeds existing limits under 40 CFR 261.1(c)(8). If such limits have been exceeded, the material would be discarded. The proposed recordkeeping requirement for the tolling exclusion (which would require records of shipments sent and received under tolling contracts) would also aid regulatory agencies in determining if tolling contractors and manufacturers are in compliance with the requirements for the exclusion and whether the hazardous secondary materials in question have been properly accounted for. A similar requirement to keep records of shipments sent and received under ''same-company'' recycling (for which the Agency solicited comment in the July 2011 DSW proposal) would serve the same purpose. Finally, submitting a notification to EPA is the only formal indication of a facility's prospective intent to reclaim a hazardous secondary material under this exclusion. For these reasons, EPA has determined that its proposed changes to the generator-controlled exclusion are necessary to demonstrate that hazardous secondary materials have not been discarded. The changes are therefore within the Agency's RCRA authority.

Comments: Scope of Proposed Changes

One commenter noted that the proposed rule would allow lead-acid battery recyclers to operate under the generator-controlled exclusion instead of the requirements in 40 CFR 266.80(b). This commenter believed that the latter requirements, specifically tailored to battery recyclers, are more appropriate for these facilities.

EPA's Response: Scope of Proposed Changes

In response to this comment, it was not the Agency's intent that spent lead-acid batteries be managed under the generator-controlled exclusion. The 2008 DSW final rule contained a provision (40 CFR 261.2(c)(4)(iv)) stating that spent lead-acid batteries were not eligible for the generator-controlled exclusion (nor were materials subject to material-specific standards under 261.4(a) or the listed hazardous wastes K171 or K172). The omission of this provision from the July 2011 DSW proposal as related to spent lead-acid batteries and material-specific standards was inadvertent, and EPA is therefore retaining it in this final rule (see 40 CFR 261.4(a)(23)(ii)(E)). However, for reasons discussed in section XI of this preamble, listed hazardous wastes K171 and K172 should be eligible for the generator-controlled exclusion; therefore, we are not including those wastes in this provision.

Comments: Exports

Another commenter noted that the text of proposed 40 CFR 261.4(a)(23)(i)(B) could initially be read to suggest that hazardous secondary materials may be transferred to a location outside the United States or its territories as long as the foreign receiving facility is under the control of the generator. It is not until one reads proposed 40 CFR 261.4(a)(23)(ii)(A) that the reader learns that the receiving facility must be in the United States or its territories. This commenter suggested revising the introductory text of 40 CFR 261.4(a)(23) to refer to recycling within the United States or its territories and deleting the subsequent condition.

EPA's Response: Exports

EPA agrees with this commenter who suggested modifying the introductory text of the generator-controlled exclusion to include a reference to the requirement that hazardous secondary materials legitimately reclaimed under the exclusions must be recycled within the United States or its territories. We have therefore revised 40 CFR 261.4(a)(23) to read as follows: ''Hazardous secondary material generated and legitimately reclaimed within the United States or its territories and under the control of the generator, provided that the material complies with paragraphs (a)(23)(i) and (ii) of this section.'' We have also deleted the condition in proposed CFR 261.4(a)(23)(ii)(A) and renumbered the following subparagraphs.

B. Exclusion for Materials Recycled On-Site

Comments: On-Site Exclusion

In the 2008 DSW final rule, EPA promulgated an exclusion from the definition of solid waste for hazardous secondary materials that are generated and legitimately reclaimed at the generating facility. In the July 2011 DSW proposal, the Agency did not propose any changes to the scope of this exclusion. Commenters on the proposal generally supported excluding on-site recycling from the definition of solid waste, stating that such recycling did not involve discard and was not likely to pose environmental risks. However, one commenter argued that the exclusion for hazardous secondary materials recycled under the control of the generator was too broad and should be narrowed to materials recycled under a ''continuous industrial process,'' *i.e.*, recycled in the same process of which they are a byproduct, by the same generator, and at the same generating facility. If the exclusion was narrowed to this extent, it would preclude ''same-company'' or tolling recycling from being eligible for the exclusions. It would presumably also preclude certain types of on-site recycling that might involve different processes from being excluded under the definition of solid waste.

EPA's Response: On-Site Exclusion

EPA has determined that if hazardous secondary materials are generated and legitimately reclaimed at the generating facility (as well as a facility within the same company) under the conditions specified in today's rule, these materials have not been discarded. We do not agree with the comment that the exclusion should be limited to recycling of hazardous secondary materials under a ''continuous industrial process,'' *i.e.*, it takes place in the same process of which the materials are a byproduct, by the same generator and at the same generating facility. If hazardous secondary materials are recycled on-site at the generating facility using different processes, this circumstance does not mean that the generator has relinquished control of the materials or that they have been discarded. We are therefore finalizing this provision as proposed at 40 CFR 261.4(23)(i)(A).

C. Exclusion for Materials Recycled by the Same Company

In the 2008 DSW final rule, EPA promulgated an exclusion from the definition of solid waste for hazardous secondary materials that were generated and legitimately reclaimed off-site by the same ''person'' as defined in 40 CFR 260.10, if the generator performed one of two certifications. Under the first certification, the generating facility certified that it controlled the reclaiming facility; under the second certification, the generating facility certified that it was under common control with the reclaiming facility. In the July 2011 DSW proposal, the Agency solicited comment on whether to add a recordkeeping requirement to this exclusion that would require both the generating and reclaiming facilities to retain records for no less than three years of all hazardous secondary material shipped under the exclusion. The records would have to contain information which could be satisfied by routine business records (*e.g.*, financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations). There was general support for this condition from those commenters who addressed it.

Comments: Same-Company Exclusion

Some commenters supported this exclusion. They believed that generators using the exclusion have strong incentives to ensure that hazardous secondary materials are not discarded by maintaining control over, and potential liability for, the reclamation process. However, other commenters believed that any off-site transport of hazardous secondary materials involved environmental risks that should be addressed by (at the least) requiring a hazardous waste manifest or by subjecting ''same-company'' off-site recycling to the proposed alternative Subtitle C standards for hazardous secondary materials that are transferred for the purpose of reclamation. Some commenters said that when hazardous secondary materials are transported off-site, the generator has little de facto control over such materials.

One commenter noted that proposed 40 CFR 261.4(a)(23)(i)(B) omitted the alternative certification for same-company recycling that occurs when the generating facility and the reclaiming facility are under common control. This certification was included in the 2008 DSW final rule.

EPA's Response: Same-Company Exclusion

The Agency continues to find that same-company recycling does not involve discard since it occurs under the control of the generator. Such control means that both the generating facility and the reclamation facility are 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 sufficiently strong to greatly reduce the risks of transport, thus rendering unnecessary the use of the hazardous waste manifest or requiring the hazardous secondary materials to be reclaimed under the verified recycling exclusion. However, as noted above, the Agency solicited comment in its July 2011 DSW proposal on a recordkeeping requirement that would require both the generating and reclaiming facilities to retain records for no less than three years of all hazardous secondary material shipped under the exclusion. The records would have to contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received under the exclusion. This requirement could be satisfied by routine business records (*e.g.*, financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations). Such a provision would facilitate enforcement of the same-company exclusion and would allow tracking of all hazardous secondary materials recycled under the exclusion to ensure that such materials were properly accounted for. EPA agrees with the commenters who supported this requirement and finds that adding this recordkeeping requirement to the same-company exclusion is sufficient to address any risks involved in off-site transport of hazardous secondary materials. We are therefore finalizing the same company exclusion to include this requirement (see 40 CFR 261.4(a)(23)(i)(B)).

The Agency also agrees with the commenter who suggested that the alternative certification for facilities under common control that was included in the 2008 DSW final rule should be added to the exclusion. The omission of this provision from the July 2011 DSW proposal was inadvertent and the Agency will therefore simply retain the alternative certification in the regulations (see 40 CFR 261.4(a)(23)(i)(B)).

D. Tolling Exclusion

In its July 2011 DSW proposal, EPA proposed to add a recordkeeping requirement to the exclusion for hazardous secondary materials legitimately reclaimed under certain contractual tolling arrangements. Specifically, we proposed to require the tolling contractor to maintain at its facility for no less than three years records of all hazardous secondary materials received pursuant to the

written contract with the tolling manufacturer. It would also require the tolling manufacturer to maintain at its facility for no less than three years records of materials shipped pursuant to its written contract with the tolling contractor. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received pursuant to the written contract. These requirements may be satisfied by routine business records (*e.g.*, financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations). EPA solicited comment on whether the proposed requirement would make the exclusion easier to enforce. We also solicited comment on whether the tolling exclusion should be retained or eliminated. We noted that no facilities appeared to be operating under the tolling exclusion as of the date of the proposed rule, and that the definitions and certifications involved in this exclusion were complicated. However, we also noted that if the tolling exclusion were eliminated, the tolling contractor conducting the reclamation might need to obtain a RCRA storage permit. This necessity could discourage recycling under tolling arrangements and prevent sustainable reclamation practices.

Comments: Tolling Exclusion

Those commenters who addressed the proposed recordkeeping requirement generally supported it, but many commenters believed that the tolling exclusion should be eliminated and that tolling should be regulated under EPA's proposed alternative Subtitle C regulatory standards for hazardous recyclable materials. Another commenter argued that if the Agency retained the tolling exclusion, we should require use of the hazardous waste manifest, financial assurance, and other Subtitle C requirements. Some of these commenters emphasized the absence of utilization of the tolling exclusion and said that federal regulations should address activities of national importance. One commenter noted that the exclusion could result in an inefficient use of enforcement resources as regulators would have to be trained and familiar with a regulatory concept with which they are not familiar. Another commenter argued that the assumption of liability for mismanagement by the tolling contractor was unlikely and could result in litigation. Other commenters emphasized environmental concerns with the tolling exclusion. These commenters doubted that recycling under tolling arrangements was actually under the "control" of the tolling contractor, given that a different corporate entity at a different physical location operates the production process. Some commenters raised similar concerns with the risks involved in off-site transportation of hazardous secondary materials that were raised in connection with "same-company" recycling.

Some commenters, on the other hand, urged EPA to retain the exclusion for tolling contracts. These commenters argued that hazardous secondary materials legitimately reclaimed under the tolling exclusion are managed as valuable products and not discarded. They also said that utilization of the exclusion could increase with time, particularly if more states picked up EPA's revisions to the definition of solid waste and if regulatory uncertainty were avoided. One commenter noted that the economic incentives under tolling contracts are such that there is no incentive for discard, since the tolling manufacturer is paid when it returns the hazardous secondary material to the contractor. Some commenters indicated that eliminating the tolling exclusion, by requiring tolling contractors to obtain RCRA storage permits, would operate as a severe disincentive to reclamation under tolling arrangements.

EPA's Response: Tolling Exclusion

EPA generally agrees with the commenters who supported retention of the tolling exclusion. We find that hazardous secondary materials are not discarded if they are legitimately reclaimed under the conditions specified in our tolling exclusion, particularly since participants in tolling contracts have strong incentives to handle such materials as valuable commodities rather than mismanage them. We also have determined that the conditions of the generator-controlled tolling exclusion, including the recordkeeping requirement for hazardous secondary materials sent and received under tolling contracts, are sufficient to prevent discard, thus rendering unnecessary the use of the hazardous waste manifest or other RCRA permit requirements for reclaimers. We have also concluded that retention or elimination of this exclusion should not depend on how frequently the exclusion is currently utilized, because determining frequency of utilization in the future is necessarily speculative. Additional states could pick up EPA's revisions to the definition of solid waste, and tolling arrangements could become more common due to increases in certain kinds of manufacturing or other technological developments. Regulatory authorities would then become more familiar with implementation of the provision. We are also concerned that eliminating the tolling exclusion could discourage the reclamation of valuable hazardous secondary materials that might otherwise be destroyed by incineration. This result would be inconsistent with our goal of encouraging the sustainable management of hazardous secondary materials. For these reasons, we are retaining the tolling exclusion in this final rule and finalizing the proposed recordkeeping requirement for this exclusion (see 40 CFR 261.4(a)(23)(i)(C)).

E. The Contained Standard

In its July 2011 DSW proposal, EPA proposed a regulatory definition of the contained standard. Under this proposed definition, a unit storing hazardous secondary materials is "contained" if it is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment. Such releases may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures. The unit must also be properly labeled or otherwise have a system (such as a log) to immediately identify the hazardous secondary materials in the unit. Finally, the unit must not hold incompatible materials and must address any potential risks of fires or explosions. Hazardous secondary materials stored in units that meet the applicable requirements of 40 CFR parts 264 or 265 are considered to be contained.

In addition, the Agency also proposed placing the requirements for land-based units and non-land-based units in one regulatory provision (40 CFR 261.4(a)(23)), since the requirements for both types of units are the same. To clarify the regulatory status of units from which releases have occurred, the Agency also proposed a provision stating that: (1) A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of reclamation and (2) hazardous secondary material managed in a unit with leaks or other continuing or intermittent releases of the hazardous

secondary material to the environment is discarded and a solid waste.

Comments: Codification of the Contained Standard

Many commenters (particularly states) supported the codification of the contained standard. Under the 2008 DSW final rule, these commenters argued the only definitive way to determine whether a material was contained was an evaluation after a release had already occurred. They believed that codifying a definition of ''contained'' would make it easier for regulatory authorities and the regulated community to decide whether a unit meets the standard. Some commenters, however, believed that a regulatory definition of ''contained'' was not needed because the concept of what is contained was self-evident: To the extent clarification is needed, it could be provided in guidance.

EPA's Response: Codification of the Contained Standard

EPA agrees with those commenters who argued that codification of the contained standard is desirable. Based on comments and inquiries received from regulatory authorities and the regulated community after promulgation of the 2008 DSW final rule, we have determined that merely requiring that a unit be ''contained'' (without providing a regulatory definition) does not give regulatory certainty about how to comply with the standard. The number of comments and inquiries to this effect would seem to refute the idea that the concept of contained is self-evident. It was never the Agency's intent that violation of the standard could be addressed only after a significant release and subsequent environmental damage had occurred. More detailed regulatory criteria, such as those proposed in our July 2011 DSW proposal, will help all affected parties determine whether a unit adequately controls the movement of hazardous secondary materials. Such determinations will be of great benefit to regulatory authorities and to facilities operating under the generator-controlled exclusion. We are therefore retaining the codification of contained in this final rule.

Comments: Land-Based Storage

Some commenters believed that storage in land-based units should be prohibited completely under the generator-controlled exclusion. Other commenters supported allowing land-based units, but only if the Agency required periodic inspections, groundwater monitoring, or other measures. Other commenters emphasized that the Agency had no jurisdiction over land-based production units, and requested that EPA clarify in the preamble that we do not regulate such units.

EPA's Response: Land-Based Storage

EPA does not agree that land-based units should be categorically prohibited under the generator-controlled exclusion. We have determined that hazardous secondary materials, if they are stored in land-based units that meet the conditions specified in today's rule, have not been discarded. That is, if they are legitimately reclaimed as specified in today's rule, if they are contained and not speculatively accumulated, and if they have submitted the required notification, they are being managed as valuable commodities, rather than wastes. Indeed, the ABR decision expressed criticism of EPA for prohibiting any land placement, even ''for a few minutes''. 208 F.3rd at 1051. EPA interprets the court's discussion as a warning to the Agency to examine all factors, not just one (*e.g.*, land placement), when deciding whether a material is a waste. For the same reason, we do not find that it is necessary or appropriate to require groundwater monitoring, inspections at specified intervals, or other Subtitle C controls for hazardous secondary materials that are legitimately reclaimed under the control of the generator under these conditions, even for land-based units. These hazardous secondary materials are being managed under the control of the generator; 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. We also note that the definition of ''land-based unit'' in 40 CFR 260.10 means an area where hazardous secondary materials are placed in or on the land before recycling, but the definition explicitly excludes land-based production units. Examples of land-based units include surface impoundments and piles.

Comments: Requirements for Non-Land-Based Units

Some commenters believed that the proposed standard was still too imprecise, or not sufficiently protective. These commenters generally suggested that EPA require storage units to meet the standards of 40 CFR 262.34(a)(1), or parts 264 or 265 for tanks, containers, or containment buildings. Some of these commenters argued that since hazardous secondary materials sent for reclamation were identical in composition to analogous materials sent for disposal, the storage standards should be the same for both disposal and recycling. Another commenter noted that EPA was considering tank standards for solvents under the proposed remanufacturing exclusion, and said that standards at least as stringent should be considered for other hazardous secondary materials sent for reclamation. Commenters also emphasized the ease of enforceability and implementation of standards with which the regulatory authorities and the regulated community are already familiar.

EPA's Response: Requirements for Non-Land-Based Units

In response to those commenters who suggested Subtitle C requirements for non-land-based units (such as tanks, containers and containment buildings) that store hazardous secondary materials under the generator-controlled exclusion, the Agency also finds that imposing these requirements is unnecessary for such materials meeting the conditions of the exclusion promulgated today. EPA is aware that implementation of program requirements would be simpler if units storing hazardous waste and those storing hazardous secondary materials were subject to the same requirements, and we are also aware that the chemical composition of hazardous secondary materials sent for disposal can be similar to that of hazardous secondary materials sent for legitimate recycling. Nevertheless, hazardous secondary materials that are legitimately reclaimed under the control of the generator have not been discarded, and such materials have value that provides generators with strong incentives to maintain safe management and handling. Imposing the Subtitle C requirements on these hazardous secondary materials could discourage legitimate reclamation, encourage disposal, and would be inconsistent with EPA's goal of fostering sustainable materials management. In response to the commenter who suggested that such requirements should be imposed because the Agency was considering them for the remanufacturing exclusion, we note that the generator-controlled exclusion covers a wide variety of hazardous secondary materials, rather than the solvents covered by the remanufacturing exclusion, for which tanks or container standards are appropriate for reasons described in section VII of this preamble.

Comments: Releases

Some commenters believed that the proposed regulatory definition of

"contained" constituted a "no-leak" standard (including storm water runoff or fugitive air emissions) and that even a single release that was immediately recovered could lead to the hazardous secondary material remaining in the unit being considered discarded and a solid waste. Other commenters, however, said that all units will suffer a release at some point and that it would be unreasonable to categorically classify any release of whatever nature as discard.

In the preamble to the 2011 DSW proposal, EPA stated that certain units may be subject to occasional precipitation runoff that consists essentially of water, with trace amounts of hazardous constituents. The Agency noted that as long as such runoff does not contain hazardous secondary materials (*e.g.,* it is essentially rainwater with trace amounts of metals), it would not be considered a "release of a hazardous secondary material." On the other hand, if the hazardous secondary material itself is swept away by the runoff (*e.g.,* if the hazardous secondary material consists of fine particulate matter, such as electric arc furnace dust), this transport via precipitation runoff could be considered a "release of a hazardous secondary material" and that pile may not be considered contained. Some commenters argued that even trace amounts of hazardous substances (such as through stormwater runoff) should be considered illegal releases from storage units. One of these commenters objected to our regulatory definition partly because it would allow releases that were not "continuing" or "intermittent."

Another commenter, however, argued that the existence of stormwater runoff (regulated under the Clean Water Act) or fugitive air emissions and dust (regulated under the Clean Air Act) does not mean that materials are not being managed as a valuable commodity and so cannot be used to justify a determination that a hazardous secondary material is subject to the fully applicable Subtitle C RCRA requirements. This interpretation would amount to an illegal expansion of RCRA authority, according to the commenter. The commenter also noted that EPA's distinction between runoff containing hazardous constituents and runoff containing the waste itself was irrelevant and that EPA should return to the "significant release" standard of the 2008 DSW final rule. Another commenter suggested that the Agency specify what concentration of hazardous secondary material would need to be detected to constitute a release.

EPA's Response: Releases

EPA does not agree with those commenters who argued that the proposed definition of "contained" imposed a strict, categorical, and impracticable "no leaks" standard, either for land-based units or non-land-based units. We note that the language of the proposed definition reads that the unit must be in good condition, "with no leaks or *other continuing or intermittent unpermitted releases* of hazardous secondary materials to the environment. . ." (emphasis added). This language clearly does not mean that any single release of whatever nature would automatically place the hazardous secondary materials remaining in the unit under Subtitle C regulation. In fact, we agree with those commenters who argue that most units will suffer a release at some point and that it would be unreasonable to categorically classify any release of whatever nature as discard.

Nor does EPA agree with those commenters who appeared to believe that any release should lead to loss of the generator-controlled exclusion and full regulation under RCRA Subtitle C. A single release that is quickly cleaned up would not generally affect the regulatory status of the hazardous secondary materials still contained in the unit. For example, sometimes a hazardous secondary material may escape from primary containment and may be captured by secondary containment or some other mechanism that would prevent the hazardous secondary materials from being released to the environment or would allow immediate recovery of the materials. In that case, the unit would not be subject to the RCRA hazardous waste regulations 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 and not immediately recovered would be considered discarded.

With respect to precipitation runoff, the Agency does not agree with those commenters who said that even trace amounts of hazardous substances (such as through stormwater runoff) should be considered illegal releases from storage units. Some units are inevitably subject to occasional precipitation runoff that consists essentially of water, with trace amounts of hazardous constituents. As long as the hazardous secondary material itself is not swept away by the runoff, this transport via precipitation runoff would not be a release of such a material and the unit could be considered contained. A contrary interpretation could place all such units under Subtitle C regulation and eliminate their eligibility for the generator-controlled exclusion, which is not the Agency's intent. EPA has determined that hazardous secondary materials placed in such units that are destined for legitimate recycling have not been discarded if they meet the conditions of these exclusions. EPA also agrees with the commenter who said that the existence of stormwater runoff (regulated under the Clean Water Act) and fugitive air emissions and dust (regulated under the Clean Air Act) does not automatically mean that materials are not being managed as a valuable commodity.

EPA also does not agree with the commenter who suggested that the Agency should return to the "significance" criterion for determining whether a release has occurred (in part to distinguish between runoff containing hazardous constituents and runoff containing the hazardous secondary material itself). The Agency does not agree that using this criterion, without further definition, would clarify this distinction. We also do not find that it is practicable to establish a concentration of hazardous secondary materials that could be used to determine whether a release has occurred, since such appropriate concentrations would vary for different materials and a single concentration limit would not be flexible enough to allow an accurate determination of "contained" for the wide variety of hazardous secondary materials.

Comments: Other "Contained" Issues

A few commenters suggested that EPA establish a petition process or a site-specific variance for facilities to demonstrate the appropriateness of site-specific alternative storage standards for their units (including land-based units). Some commenters believed that our reference to 40 CFR parts 264 and 265 meant that units were required to comply with those provisions. One of these commenters suggested that we specify that units meeting the requirements of 40 CFR parts 264 or 265 are "presumptively" contained. Other commenters said that the proposed definition of "contained" seemed more appropriate for hazardous secondary materials in flowable form, but not for solid materials such as scrap metal, for which a container is not necessarily needed. One of these commenters suggested that we clarify that a "unit" may include a designated location.

A few commenters suggested editorial revisions to the definition of contained. One commenter said that EPA should

clarify this provision to better indicate that the unit must not contain materials that are incompatible with the other wastes or materials placed in the unit or the materials of construction that comprise the unit. Another commenter said the examples of release should include soil contamination because contamination should not be allowed to pass through the soil to the groundwater before it is considered a release. Two commenters said the proposed text at 40 CFR 261.4(a)(23)(ii)(B) uses the word ''recycling'' in place of ''reclamation'' and omits the phrase ''or intermittent unpermitted,'' which does not comport with the preamble language.

EPA's Response: Other ''Contained'' Issues

In response to those commenters who suggested a mechanism (such as a petition process or variance) to provide alternative or site-specific containment requirements for certain facilities, such a mechanism is unnecessary because the definition of ''contained' in today's rule establishes minimum requirements that all units storing hazardous secondary materials should be able to meet. We have designed the ''contained'' criteria to be flexible enough to cover a wide range of units.

In response to comments that suggested the reference to 40 CFR parts 264 and 265 means that units were required to comply with those provisions, EPA did not intend to imply that meeting such standards was required. In response to the commenter who suggested stating that units meeting the applicable requirements of 40 CFR parts 264 or 265 are ''presumptively'' contained, EPA agrees that this language better reflects EPA's intent than the proposed language and is changing the proposed definition of ''contained'' accordingly. However, we do not agree with the commenter who suggested adding that solid hazardous secondary materials may be stored in ''designated locations.'' We have determined that our definition of ''contained'' (which includes land-based units) is sufficiently flexible to cover solid material, such as scrap metal or furnace bricks which are not stored in tanks, containers, or containment buildings. We have also made clear in the preamble the circumstances under which such materials could be considered ''contained.''

For the reasons stated above, EPA is finalizing the definition of ''contained'' as proposed, but replacing the statement that ''hazardous secondary materials meeting the applicable requirements of 40 CFR parts 264 or 265 are considered to be contained'' with ''hazardous secondary materials that meet the applicable requirements of 40 CFR parts 264 or 265 are presumptively contained'' (see 40 CFR 260.10).

EPA agrees with commenters who suggested editorial changes to the definition of contained and has incorporated these changes into today's rule.

F. Notification as a Condition

In the July 2011 proposal, EPA proposed to make the notification requirement in 40 CFR 260.42 a condition, rather than a requirement, of the generator-controlled exclusion in 40 CFR 261.4(a)(23). At issue are the consequences an entity would face for failing to notify. Thus, notification as a requirement of the exclusion means that failure to notify would constitute a violation of the notification regulations. On the other hand, notification as a condition of the exclusion means failure to notify could potentially result in the loss of the exclusion for the hazardous secondary materials (*i.e.,* the hazardous secondary materials would become solid and hazardous wastes and subject to full Subtitle C requirements). EPA also requested comment on whether notification should be a condition of the remanufacturing exclusion and of the pre-2008 recycling exclusions. (For EPA's response to comments for notification as a condition of the pre-2008 recycling exclusions, see section XIX.)

Comments: Notification as a Condition

Commenters were split on this issue. Many commenters supported EPA's proposed change to make notification a condition of the exclusion. These commenters argued that notification as a condition would decrease the incentives for a facility to evade enforcement by not notifying. A few commenters agreed that states would use enforcement discretion to distinguish between facilities that failed to notify due to an inadvertent oversight or from a blatant disregard for the requirement. One commenter urged EPA to clarify that a facility submitting a notification does not need to wait for any response from the implementing agency prior to using exclusion.

On the other hand, many commenters did not support this proposed change and argued that notification should remain a requirement of the exclusion, as it is currently. These commenters argued that notification, or the absence thereof, is not indicative of discard and that the information of who is using the exclusion should not impact the determination of whether a material is discarded. Some commenters argued that enforcement discretion is not exercised in a consistent and reasonable manner and that the proposed change would subject generators who are legitimately recycling their hazardous secondary materials to undue severe enforcement consequences. Other commenters argued that there are innocent reasons why a facility would not notify, for example, because of confusion surrounding the point when a virgin material becomes a secondary material. Still other commenters believed that it is highly unrealistic to believe that any facility operating under the provisions would intentionally fail to notify EPA in an attempt to evade enforcement. Other commenters argued that there is already sufficient incentive to notify because facilities' would already incur significant penalties under RCRA 3007 for failing to notify. Additionally, one commenter noted that making notification a condition of the exclusion differs from how other paperwork violations are treated.

EPA's Response: Notification as a Condition

EPA agrees with commenters who supported making notification a condition of the exclusion. The notification provision is the only formal indication of a facility's intent to reclaim a hazardous secondary material under the conditional exclusion. For example, if during an inspection of a large quantity generator of hazardous waste, EPA were to discover a hazardous secondary material that had been stored on-site for more than 90 days without a RCRA permit (an act that would typically be a violation of the hazardous waste regulations), a previously filed notification would be an indication that the facility was planning to reclaim the hazardous secondary material under the conditions of the exclusion. Absent such notification, it would be difficult for the facility to justify its true intentions for the hazardous secondary material. Failure to meet the notification provision is a strong indication that the facility either did not intend to comply with or was unaware of the provisions of the exclusion. In both cases, the lack of notification could indicate that the hazardous secondary material was being mismanaged.

EPA agrees with commenters that making notification a condition of the rule would further discourage facilities from trying to evade enforcement by not notifying because, under the final rule, the costs and consequences of not notifying are significantly higher than if notification remains a requirement. Notification is essential to keep

regulators and the public informed about hazardous secondary materials activity and to enable effective compliance monitoring. Making notification a condition provides states and EPA the ability to properly enforce those that intentionally fail to notify in order to evade enforcement, while leaving the flexibility to tailor enforcement appropriately in those cases involving an unintentional oversight. Therefore, EPA is making the notification provision in 40 CFR 260.42 a condition of the generator-controlled exclusion in 40 CFR 261.4(a)(23), as well as a condition of the remanufacturing exclusion in 40 CFR 261.4(a)(27).

In response to opposing comments, EPA does not agree that failing to notify is not indicative of discard. As noted, notification serves as a formal declaration that a facility is not managing a hazardous waste but, rather, an excluded hazardous secondary material under the conditions of the exclusion. Notification, thus, documents the generator's decision to not discard its hazardous secondary materials, which is the inherent first step in any exclusion from the definition of solid waste.

EPA also does not agree that the notification condition would be inappropriately enforced. EPA notes that notification as a condition subjects only those generators who failed to notify to enforcement consequences; generators who submit notifications as required, and meet the conditions of the final rule exclusions, would not face enforcement consequences. EPA does not find this to be unduly burdensome to the regulated community.

EPA also finds that the commenter's example of an innocent reason for failing to notify (because of confusion surrounding the point when a virgin material becomes a secondary material) as further reason to strengthen the notification provision. That is, in order to comply with the final rule, a generator must know which hazardous secondary materials are being managed according to the specific conditions of the exclusion. In other words, a generator has to make a choice to manage hazardous secondary materials under the conditions of the rule before they are considered "excluded." (Notification, in fact, clearly documents this choice.) Therefore, EPA finds it difficult to believe that a generator could innocently fail to notify under the final rule because the generator is unclear about when a virgin material becomes a hazardous secondary material that it must manage under the exclusion. These ambiguities must be resolved prior to the facility availing itself of the exclusion.

EPA also disagrees with commenters that argued it is highly unrealistic to believe that any facility operating under the provisions would intentionally fail to notify EPA, as well as commenters that argued that sufficient incentives to notify already exist. We note that there is likely an economic incentive for some facilities to fail to notify and simply consider the paperwork violation as a cost of doing business. Where an economic incentive exists, EPA maintains that regulation is appropriate in order to adequately discourage undesirable behavior.

Finally, although notification as a condition may differ from how other paperwork requirements are applied in the hazardous waste regulations, it does not differ from how other paperwork requirements are applied in conditional exclusions from the definition of solid waste. For example, notification is a condition of the zinc fertilizer exclusion in 40 CFR 261.4(a)(20). Additionally, EPA confirms that the conditional exclusions at 40 CFR 261.4(a)(23) and 40 CFR 261.4(a)(27) are self-implementing and thus facilities do not need to wait for any response from the implementing agency prior to using exclusion.

G. Recordkeeping for Speculative Accumulation

In the July 2011 DSW proposal, EPA proposed to amend the generator-controlled exclusion to require persons operating under the exclusion to place a label on the storage unit indicating the first date that the excluded hazardous secondary material began to be accumulated. In cases where placing a label on the storage unit is not practicable (*e.g.*, if the hazardous secondary materials are stored in a surface impoundment), we proposed as an alternative to require persons operating under the generator-controlled exclusion to document in an inventory log the first date that the excluded hazardous secondary material began to be accumulated. EPA noted that enforcement personnel had suggested that ease of enforcement would be greatly facilitated if persons subject to the speculative accumulation requirement were required to post a start date for the accumulation. In this way, inspectors and other regulatory authorities could quickly ascertain how long a facility has been storing an excluded hazardous secondary material, and, therefore, whether that facility was in compliance with the applicable storage time. The Agency also noted that placing labels on storage units or entering accumulation start dates in inventory logs is likely to be already part of normal business operations at many facilities. For this reason, the proposed requirement would not be unduly burdensome and would provide a greater degree of clarity both to the regulated community and to regulatory authorities who need to determine whether excluded hazardous secondary materials meet the speculative accumulation limits.

Since the same arguments for tracking accumulation start dates could be made more broadly for all recycling subject to the speculative accumulation limits, EPA also requested comment on whether to add this recordkeeping requirement to the speculative accumulation provision in 40 CFR 261.1(c)(8) itself. The Agency did not propose or solicit comment on changing the substantive requirements of the speculative accumulation provision, such as the time allowed for storage or the amount that is required to be recycled within a calendar year.

Comments: Recordkeeping for Speculative Accumulation

Many commenters, particularly states, supported the proposed recordkeeping requirement and also supported extending the requirement to all persons currently subject to the speculative accumulation requirements at 40 CFR 261.1(c)(8). These commenters generally believed that posting accumulation start dates (or using some other mechanism, such as an inventory log) provides assurance both to generators and inspectors that the generator in question is in compliance with the speculative accumulation provision, and that the proposed requirement would not be burdensome to the regulated community. One commenter supported requiring accumulation start dates to be posted in storage areas within a specified number of feet from the storage unit, since reference to logs distant from storage units could make enforcement difficult. Facilities that prefer a centrally located log could maintain such a "master" log in addition to the record maintained near the actual storage unit, this commenter suggested.

Some commenters, however, opposed the proposed recordkeeping provision for speculative accumulation, either for the generator-controlled exclusion or for other persons subject to 40 CFR 261.1(c)(8). Some of these commenters argued that 40 CFR 261.2(f) already requires respondents in enforcement actions who are claiming that a material is not a solid waste to demonstrate that they meet the terms of an exclusion or

exemption, by, among other things, providing appropriate documentation. Some commenters apparently believed that the proposed requirement would mandate sending a notification to EPA, or posting the quantity of the hazardous secondary material and the precise time it was generated, or posting ''finish'' dates, as well as ''start'' dates for accumulation. In addition, some commenters expressed concern about the potential difficulty of posting accumulation start dates for hazardous secondary materials that are recycled rapidly in continuous processes with little or no prior storage.

EPA's Response: Recordkeeping for Speculative Accumulation

After evaluating the comments received, EPA has concluded that the proposed recordkeeping requirements for speculative accumulation provide considerable benefits to both regulatory authorities and the regulated community and that the burden on the regulated community will be minimal. Posting accumulation start dates (or using another mechanism, such as an inventory log) is a simple and effective way to provide useful information about likely compliance with the speculative accumulation provision, and that the cost to facilities does not outweigh this benefit. We also find that all of the reasons for adopting this requirement for the generator-controlled exclusion apply equally to the question of whether to adopt it for all persons subject to 40 CFR 261.1(c)(8). In response to the commenter who supported also requiring the posting of accumulation start dates in storage areas within a specified number of feet from the storage unit, EPA is not convinced that such a requirement would be necessary for all facilities, and the appropriate distance from the storage unit might also vary for different facilities. We are therefore not adopting this requirement.

In response to those commenters who argued that the proposed recordkeeping requirement is redundant with § 261.2(f), we note that that provision applies to respondents in enforcement actions and does not provide specific guidance on how to determine compliance with the speculative accumulation provisions in the case of routine inspections. We therefore do not agree that the proposed recordkeeping requirement is redundant with 40 CFR 261.2(f). Today's revision to the speculative accumulation provision at 40 CFR 261.1(c)(8) does not entail submitting notifications to EPA, posting the quantity of the hazardous secondary material and the time it was generated, or posting finish dates. The final definition of ''contained'' specifies that a unit must be properly labeled or otherwise have a system (such as a log) to immediately identify the hazardous secondary materials in the unit. Neither such a label nor the posting of an accumulation start date requires detailed information. In response to the commenters who were concerned about hazardous secondary materials that were continuously recycled without prior storage, we agree with those commenters and are revising the proposed recordkeeping requirement to allow ''other appropriate methods'' to be used to document the accumulation period.

For the reasons given above, EPA is amending 40 CFR 261.1(c)(8) to require that all persons subject to that provision must place materials in a storage unit with a label indicating the first date that the excluded hazardous secondary material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method.

XV. Major Comments on the Replacement of the Exclusion for Hazardous Secondary Materials That Are Transferred for the Purpose of Reclamation

Summary of Comments: Replacement of the Transfer-Based Exclusion With the Alternative Subtitle C Recycling Standards

Environmental and community organizations, as well as many state commenters, supported withdrawing the transfer-based exclusion because this would remove the possibility of hazardous secondary materials being sent to unpermitted reclaimers without a manifest. These commenters agreed with EPA's rationale that transfers of most types of hazardous secondary materials to other companies for reclamation involve discard, and that the 2008 DSW transfer-based exclusion could result in adverse impacts to human health and the environment from discarded material. Commenters noted that, prior to reclamation occurring, hazardous secondary materials have limited inherent value. Some commenters in particular were concerned about how the transfer-based exclusion made the generator responsible for verifying the safety and legitimacy of the recycler's operations, when most generators would not have the expertise to make such a determination. One commenter examined the compliance history of the facilities currently operating under the 2008 DSW exclusions and noted that a large percentage have been the subject of enforcement actions in the past five years, and many have been subject to clean-up authorities under either RCRA or CERCLA for past contamination.

Most states supported the alternative hazardous waste standards as a replacement for the transfer-based exclusion as an approach that would help encourage recycling, while maintaining protection of human health and the environment. States generally supported the longer accumulation period, but some state commenters suggested replacing it with the speculative accumulation limits. Finally, while, as noted above, environmental groups supported removing the transfer-based exclusion because of the potential hazards from third-party recycling, they did not support the alternative standards because they believed that the longer accumulation times would not be as protective as full Subtitle C regulation.

In contrast, most industry commenters and a few states opposed replacing the transfer-based exclusion with alternative hazardous waste standards. These commenters argued that the withdrawal would significantly hinder reclamation and therefore, the lifecycle environmental benefits from recycling, contrary to the resource conservation goals of RCRA. One commenter reported that retaining the generator-controlled exclusion but not allowing off-site transfers limits generator flexibility if, due to unforeseen circumstances (*e.g.*, equipment malfunctions), the generator is not able to recycle on-site. Several industry commenters opposed the alternative standards, saying that the added compliance requirements (*e.g.*, the reclamation plan) are likely to outweigh any benefit provided by the relaxed accumulation time limits. Two commenters suggested that EPA apply the alternative standards to the reclamation facility, but reduce the requirements that apply to the generator, given that the majority of the damage cases occurred at the recycling facility.

Commenters also argued that EPA's record does not support repealing the transfer-based exclusion, stating that EPA did not present any new data that the 2008 DSW transfer-based exclusion would cause environmental harm and noting that the 2011 DSW proposal stated that facilities currently operating under the exclusion do not appear to have any problems from hazardous materials recycling. Comments included discussions of the conditions of the 2008 DSW transfer-based exclusion and

why such conditions would be adequate to protect human health and the environment, and suggested if EPA was concerned about the conditions, the solution would be to strengthen the conditions, not withdraw the exclusion. In particular, the Pennsylvania Department of Environmental Protection, which oversees 27 of the 65 facilities operating under the transfer-based exclusion, commented strongly in favor of keeping the transfer-based exclusion and suggested that EPA add a condition that recyclers have a RCRA Subtitle C permit.

EPA's Response: EPA agrees with those comments stating that the 2008 transfer-based exclusion could result in adverse impacts to human health and the environment from discarded material, but disagrees that all off-site transfers for reclamation requires Subtitle C hazardous waste regulation, because imposing Subtitle C hazardous waste regulation would result in regulating hazardous secondary material that is currently being legitimately recycled and not discarded as hazardous waste. Instead, EPA agrees with those commenters that support retaining an exclusion from the definition of solid waste for off-site recycling with additional conditions which will address the potential for discard happening in the future.

As discussed in more detail in Section VI of this preamble, EPA has identified several regulatory gaps in the 2008 transfer-based exclusion that could result in significant risk to human health and the environment from discarded material. Specifically, the conditions for the transfer-based exclusion for recyclers lack the ability to provide oversight before management begins and do not allow public participation in the environmental decision-making process, thereby decreasing the likelihood of compliance and increasing the potential for risk to human health and the environment from discarded hazardous secondary material. The evidence of past damage cases at third-party recycling facilities leading to significant risk to human health and the environment from hazardous secondary materials originally intended for recycling and the underlying perverse incentives of the recycling market to over-accumulate such hazardous secondary materials intended for recycling, resulting in discard of the material, demonstrates the need for such additional oversight and public participation. In other words, the transfer-based exclusion can exacerbate financial incentives for small and/or inexperienced businesses to take in more hazardous secondary materials than they actually can use, mishandle it, and even go out of business, as shown by the fact that bankruptcies or other types of business failures were associated with 66% of the recycling damage cases, resulting in multi-million dollar cleanups.

At the same time, as EPA noted in the 2011 DSW proposal and as was echoed in the public comments, EPA has also carefully monitored the implementation of the 2008 DSW final rule since it came into effect in December 2008, and to date, no environmental problems have been reported at facilities claiming the DSW exclusions. As of April 2014, a total of 65 facilities are operating under the transfer-based exclusion, 56 of which are generators transferring off-site and 7 which are reclamation facilities.[44] All seven reclamation facilities are RCRA permitted. (There are no reclaimers without a Subtitle C permit currently operating under the transfer-based exclusion). Of the 56 generators operating under the transfer-based exclusion, 32 generators appear to have either started or substantially increased their recycling as a result of the 2008 DSW exclusions. These include generators that had previously reported in their 2007, 2009, or 2011 biennial report that they sent their solvents offsite for fuel blending, and then notified that they are sending their spent solvents for reclamation under the 2008 DSW final rule. In addition, in at least five cases, facilities have switched from sending spent pickle liquor to landfilling or deep well injection to recycling under the 2008 DSW rule. In total, the 2008 DSW notifications document that over 57,000 tons of hazardous secondary material were reclaimed under the 2008 DSW rule during 2011.[45] In addition, the fact that the Pennsylvania Department of Environmental Protection (PA DEP), which oversees 27 of the 65 facilities operating under the transfer-based exclusion, commented strongly in favor of keeping the transfer-based exclusion, supports the idea that an exclusion for off-site reclamation can be safely implemented. At the same time, given that the transfer-based exclusion has been achieving its intended purpose of encourage safe, legitimate recycling, withdrawing the transfer-based exclusion and replacing it with RCRA Subtitle C hazardous waste requirements is unnecessary and would result in hazardous secondary material that is currently being legitimately recycled and not discarded being regulated as hazardous waste. Because Subtitle C regulation would be more stringent than the current exclusion, if EPA were to finalize the alternative Subtitle C standards, Pennsylvania (and other states that have adopted the 2008 DSW rule) would have to change their programs and regulate this material as hazardous waste, despite the fact that it is currently being legitimately recycled and not discarded.

However, the fact that the comments from PA DEP went on to recommend that the transfer-based exclusion be limited to RCRA-permitted recycling facilities also supports EPA's determination that the self-implementing measures of the transfer-based exclusion have the potential to result in significant risk to human health and the environment. Because all recycling under the transfer-based exclusion has been (to date) performed at RCRA permitted facilities, EPA is unable to extrapolate what would happen at facilities without a RCRA Subtitle C permit if the transfer-based exclusion were fully implemented. Given the evidence of past damage cases leading to significant risk to human health and the environment from hazardous secondary materials originally intended for recycling and the underlying perverse incentives of the recycling market to over-accumulate such hazardous secondary materials intended for recycling, resulting in discard of the material, additional oversight of recycling beyond the self-implementing measures of the transfer-based exclusion are needed to ensure that the hazardous secondary material is legitimately recycled and not discarded.

EPA is therefore replacing the transfer-based exclusion currently found in 40 CFR 261.4(a)(24) and (25) with the verified recycler exclusion in 40 CFR 261.4(a)(24). This replacement strikes an appropriate balance between encouraging the safe and legitimate recycling of hazardous secondary materials and allowing the appropriate oversight to ensure the exclusion works as intended. It also addresses the issue of allowing a generator flexibility to recycle on site or off site as circumstances require (as long as the generator notifies under both the generator-controlled exclusion and the verified recycler exclusion). As discussed in section VI. D of the preamble, the verified recycler exclusion retains the conditions from the transfer-based exclusion that were intended to help identify hazardous secondary material that is legitimate

[44] Some of these facilities are also managing hazardous secondary materials under the generator-controlled exclusion.

[45] U.S. EPA, *EPA's Evaluation of Data Collected from Notifications Submitted under the 2008 Definition of Solid Waste Exclusions*, April 11, 2014.

recycled and not discarded, and adds conditions that address the regulatory gaps identified in the 2011 DSW proposal.

XVI. Major Comments on the Remanufacturing Exclusion

A. List of Eligible Solvents

In the July 2011 DSW proposal, EPA requested comments on excluding 18 spent solvents when they are remanufactured back into higher value commercial-grade solvents under the conditions of the exclusion. The solvents were: Toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform, chloromethane, dichloromethane, methyl isobutyl ketone, N,N-dimethylformamide, tetrahydrofuran, n-butyl alcohol, ethanol, and methanol. EPA chose these 18 spent solvent chemicals to limit the exclusion to higher-value materials and processes that resemble manufacturing more than waste management. EPA also requested comment on whether there are other solvents, chemicals or other types of hazardous secondary materials that should be included in the remanufacturing exclusion. In particular, EPA requested comments on opportunities for remanufacturing other types of non-renewable hazardous secondary materials, such as metal catalysts or other types of metal-bearing hazardous secondary materials.

Comments: List of Eligible Solvents

Many commenters supported the current list of spent solvents and did not support expanding the list in any way. These commenters cautioned against expanding the list of chemicals until EPA could determine the effectiveness of this exclusion. Several other comments did not focus on adding solvents or other hazardous secondary materials, but focused on the toxicity or market structure of the 18 listed spent solvents. One commenter questioned the claim of ''higher-value'' for chloroform, chloromethane, ethyl benzene, xylene, methanol and MTBE. Another commenter stated they no longer use many of the 18 listed spent solvents because the solvents are defined as a toxic substance and a hazardous air pollutant under other environmental statutes. The commenter continued by saying that members of their association now use more ''environmentally friendly'' solvents.

The remaining commenters discussed adding solvents or other hazardous secondary materials. Some commenters suggested expanding the solvent list to include benzene, acetone, isopropyl alcohol, or all solvents used in reactors, extractors, purifiers or blending equipment in pharmaceutical, organic, chemical, or plastics and resins manufacturing. Finally other commenters suggested adding additional hazardous secondary materials that were not solvents. The hazardous secondary materials suggested for addition were metal-bearing hazardous secondary material, F006 and spent hydroprocessing catalysts.

EPA's Response: List of Eligible Solvents

EPA agrees with those commenters who supported the remanufacturing exclusion and limiting it to the list of 18 spent solvents, at least at this point in time. EPA determined that these 18 spent solvents are good candidates for remanufacturing because they are used in large volumes as processing aids and because there are existing markets for all these solvents to be remanufactured to serve similar purposes to those of the original commercial-grade materials. EPA does not agree with comments that suggested adding chemicals to the list, but did not provide specific data or information that would lead the Agency to add these chemicals to the list at this point in time. While EPA may expand the list of eligible hazardous secondary materials for the remanufacturing exclusion based on additional data (see section VII of this preamble), the currently available information only supports the inclusion of the proposed list of 18 spent solvents.

EPA disagrees with those commenters who did not support including many of the identified solvents on the list because of their toxicity. In the 2011 DSW proposal, EPA acknowledged that the eligible solvents have suspected or recognized hazardous health effects associated with their manufacture, processing, and use.[46] Although EPA and industry have been working to find substitutes for the more hazardous of these solvents, or find ways to use less of them, this has not yet been widely achieved.[47] [48] With respect to the pharmaceutical sector in particular, complex chemical processes already registered with the Food and Drug Administration are involved, and EPA has found this a very challenging area to address in terms of chemical substitution and process changes. In addition, some of these solvents are building blocks and primary intermediate chemicals, making them difficult to replace. Until lower-risk substitutes for these solvents are found, it is helpful from a health risk standpoint to minimize the volume of solvents manufactured and to limit exposure to those already manufactured. This is something that the remanufacturing exclusion can achieve.

B. List of Eligible Industry Sectors

Under the 2011 DSW proposal, EPA identified the operations of four manufacturing sectors as candidates for the remanufacturing exclusion. The eligible sectors were pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and the paints and coatings manufacturing sector (NAICS 325510). These four sectors were selected because their primary business is manufacturing rather than waste management. Furthermore, these sectors are closely associated with the chemical functions identified in the remanufacturing exclusion and currently use a high volume of the solvents identified for the functional purposes included in this exclusion. EPA also asked for comment on whether there were other industry sectors that should be included in the remanufacturing exclusion.

Comments: List of Eligible Industry Sectors

Several commenters suggested specific industries for EPA to add to the remanufacturing exclusion. The suggested industries were K061 recyclers, the biofuels sector, recyclers with a part B permit like Safety-Kleen, petroleum refineries (NAICS 324110), petrochemical manufacturers (NAICS 325110), synthetic rubber manufacturers (NAICS 325212), fiber glass manufacturers, and electronic manufacturers. K061 recyclers and the biofuels sector were suggested due to their active markets and potential impacts on the environment if hazardous secondary materials were managed improperly. Companies, such as Safety-Kleen, with a part B permit, were suggested because these recyclers encourage sustainable materials management through remanufacturing. Petroleum refineries (NAICS 324110), petrochemical manufacturers (NAICS 325110) and synthetic rubber

[46] Allen, D., Shonnard, D., *Green Engineering: Environmentally Conscious Design of Chemical Processes, Risk Concepts*, chapter 2, pgs 35–62, Austin, S., U.S. EPA Editor, Published by Prentice-Hall, 2001.

[47] For information on U.S. EPA's Green Chemistry Program, see *http://www.epa.gov/gcc/*.

[48] Information on the American Chemical Society's Green Chemistry Institute's Pharmaceutical Roundtable is available via the ACS Web site *http://portal.acs.org/portal/acs/corg/content*.

manufacturers (NAICS 325212) were suggested due to their significant generation of spent solvents. The commenter believed these industry sectors' spent solvents should be eligible just like the solvents from the proposed industry sectors. Another commenter suggested adding fiber glass manufacturers because they operate refractory recycling programs and refractories are higher-value hazardous secondary materials. Finally, the electronics sector was recommended for its recycling of precious metals.

EPA's Response: List of Eligible Industry Sectors

EPA acknowledges that the industry sectors that were nominated for inclusion in the remanufacturing exclusion participate in recycling activities; however, these sectors' recycling activities do not include the types of practices or functions that were within the scope of the remanufacturing exclusion. Under the remanufacturing exclusion, a manufacturer may send their hazardous secondary material to another manufacturer, from one of the permissible industry sectors, provided that the remanufacturer uses the hazardous secondary material in one of the four permissible functions. The commenters all suggested industries that send their hazardous secondary materials to a third party, who is not necessarily a manufacturer, but a facility that would recover the solvent or other hazardous secondary material and who would then sell the recycled product to another person.

As discussed in the market forces study, it is generally in the best interest of commercial third party recyclers to maximize the amount of hazardous secondary material they can accept to increase profits. This market structure creates a perverse market incentive to over-accumulate hazardous secondary materials, which can result in discard, which the remanufacturing exclusion seeks to avoid. In contrast, the market forces study shows that facilities engaged in industrial intra-company recycling, where companies generate hazardous secondary materials as by-products of their main production processes and recycle the hazardous secondary materials used in production, have more flexibility in waste management decisions than a commercial recycler does. When a commercial recycler's primary or entire income is from accepting hazardous secondary materials for recycling and selling recycled products, there is no economic alternative if the market crashes to stay in business unless the company can afford the cost of a hazardous waste management permit and the cost of becoming a hazardous waste disposal facility. Remanufacturers, on the other hand, as a type of intra-industry recycler, profit primarily from the sale of their product and can switch their inputs between raw materials and hazardous secondary materials if market conditions shift.

It is also not clear that the suggested industry sectors will know what function their hazardous secondary materials will be used for after remanufacturing. As discussed previously, the remanufacturing exclusion encourages higher-value materials to be remanufactured and then used in high-value processes again. Furthermore, this exclusion focuses on the functions of aiding chemical manufacturing and processing because the solvents performing these functions retain their original physical and chemical properties. In these functions, the solvents are not contaminated by substances, such as inks and greases, which are difficult to separate, but only mixed with pure product ingredients, from which they can be separated readily in a commercially feasible manner. Unfortunately, the suggested industry sectors provided by commenters do not appear to coincide with the intent of remanufacturing hazardous secondary materials that retain their original physical and chemical properties. Therefore, these additional sectors will not be included in the remanufacturing exclusion.

However, EPA notes that these sectors would be eligible to participate in the verified recycler exclusion (40 CFR 261.4(a)(24)) if they meet the conditions of that exclusion.

C. Regulatory Language

In the July 2011 DSW proposal, EPA did not specifically include regulatory language for the remanufacturing exclusion, but EPA did include a streamlined version of the scope, applicability and conditions of the exclusion followed by a very detailed explanation of the exclusion that included the reasoning for each condition.

Comments: Regulatory Language

Many commenters said they were unable to comment on the remanufacturing exclusion because there was no regulatory language included in the proposal. Almost all commenters supported the concept of the remanufacturing exclusion, but requested that EPA re-propose the remanufacturing exclusion in a separate rulemaking with regulatory text, so commenters could accurately comment on the exclusion.

EPA's Response: Regulatory Language

The preamble language discussing the remanufacturing exclusion contained adequate detail and information to allow comment on the proposed remanufacturing exclusion. In the July 2011 DSW proposal, the remanufacturing exclusion was presented in a narrative form that closely resembles the regulatory language being finalized today. The proposed rule also included a large amount of detail on the scope, applicability, and conditions of the remanufacturing exclusion. The proposal laid out exactly what solvents, industry sectors, and chemical functions were permissible in the remanufacturing exclusion. The proposal then clearly stated what was required for the notification, remanufacturing plan, records of shipments and confirmations of receipts, tanks and container management standards and the speculative accumulation requirement. EPA has determined that between the narrative and detailed explanation of the remanufacturing exclusion, commenters were provided more than enough information to comment on the remanufacturing exclusion, and thus, we are finalizing it in today's final rule.

XVII. Major Comments on Legitimacy

A. Codifying Legitimacy for All Recycling

Comments: Codification of Legitimacy

Comments from industry across the board (including waste management companies) vehemently opposed codifying the legitimacy provision at § 260.43 for the pre-2008 recycling exclusions and exemptions, arguing that this action, combined with making factor 3 and factor 4 mandatory, is a drastic change in policy and likely will end much of the current recycling that is occurring under RCRA. Industry commenters argued that this would be a huge administrative burden with little environmental benefit and that recycling has been taking place under these exclusions largely without problems for many years. Some industry commenters expressed their opinion that the codified legitimacy factors are significantly different than EPA's existing legitimacy policy and therefore, the legitimacy analysis that would have to be undertaken is not substantively the same. Other commenters opined that applying the codified legitimacy standard to the pre-2008 exclusions and exemptions would function as a disincentive to recycling by adding

paperwork burden and increasing compliance difficulties, especially for generators who would be exposed to potential RCRA enforcement due to subsequent noncompliance by the recycler. One commenter stated that inspectors could miss the more obvious cases of sham recycling because Agency resources would be expended in reviewing the large amount of required documentation and inspecting the more frequently used pre-existing exclusions, such as the use/reuse exclusion in 261.2(e) and the closed loop recycling exclusion in 261.4(a)(8) to the detriment of investigating other potentially more problematic recycling.

Many of the specific industry commenters on this issue were scrap metal recyclers who argued that although they have been legitimately recycling for decades, expecting them to prove that their recycling operations were legitimate for the first time would be prohibitively expensive, time-consuming and unworkable. The scrap metal recycling industry had particular issues with factor 4 as drafted in the 2011 DSW proposal and had many questions on how to do the comparable demonstration.

With respect to the states, a number of states were supportive of codifying one legitimacy standard for all hazardous secondary material recycling activities. They argued that codifying the legitimacy provision would give industry and states a definitive standard to evaluate recycling and that industries operating under the pre-2008 recycling exclusions and exemptions should not have any problems documenting compliance with the legitimate recycling provision of § 260.43, if their recycling is truly legitimate. On the other hand, a number of states, the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), and the Northeast Waste Management Officials' Association (NEWMOA) all expressed concerns over applying the codified legitimacy standard to certain long-standing recycling exclusions, including lead-acid batteries, circuit boards, scrap metal, and closed loop recycling, with one state arguing that this additional regulatory burden was not necessary for the 2008 pre-existing exclusions and exemptions.

Several environmental and community organizations supported codification of the legitimate recycling provision for all hazardous secondary materials recycling, but did not provide a detailed explanation of their position. In addition, whereas one environmental organization acknowledged that EPA did not solicit comment on the elimination of these exclusions, this organization stated that they believed a re-examination of all of the exclusions by the Agency, including the pre-2008 exclusions and exemptions should be conducted as soon as possible.

EPA's Response: Codification of Legitimacy

In response to the many comments that were submitted, the Agency is making a number of changes to the 2011 DSW proposal. Specifically, EPA is codifying a general statement in § 261.2(g) that makes it clear that a hazardous secondary material found to be sham recycled is discarded and thus, is a solid waste. However, we are not codifying a reference to the legitimacy provisions at 40 CFR 260.43 in each of the pre-2008 recycling exclusions/exemptions, as we proposed to do in the 2011 DSW proposal. On further reflection, we have determined that the sham recycling prohibition in § 261.2(g) more clearly defines the Agency's view on legitimate recycling and the pre-2008 recycling exclusions and exemptions. We also agree with those commenters who pointed out that we generally looked at the legitimacy of the recycling activity when we promulgated the material-specific or industry-specific exclusions and, therefore, we are not requiring facilities to revisit past legitimacy determinations. However, by codifying a prohibition on sham recycling that applies to all hazardous secondary materials being recycled, we are confirming that we expect anyone operating under a recycling exclusion or exemption to do so legitimately. (As we discuss later in this section and in section VIII, the Agency also has made a number of other revisions to the legitimacy standard to address the concerns raised in the comments.)

Comments: Effect on Existing Legitimacy Determinations

Many industry commenters argued that EPA or the states have already made legitimate recycling determinations for their specific recyclable materials. Some commenters also noted that EPA considered legitimacy at the time their material-specific exclusion was promulgated and had already made legitimacy determinations for those recyclable materials (*e.g.*, the zinc fertilizer exclusion, precious metal exclusion, etc.). These commenters also argued that as part of rulemaking for the material-specific exclusions, the Agency had determined what conditions were necessary to ensure legitimacy. Some argued that overlaying the general legitimacy factors on the 2008 pre-existing conditional exclusions and exemptions is unnecessary and duplicative and would create significant disincentives to recycling.

EPA's Response: Effect on Current Legitimacy Determinations

In response to the concerns expressed that the codified legitimacy factors would lead to practices previously considered legitimate now being considered sham operations, in general, the Agency is clarifying that it does not intend for the current recycling legitimacy determinations to change due to the codification of the legitimacy factors. We consider the factors we are finalizing today to be consistent with the criteria in the Lowrance Memo and previous preamble statements on legitimate recycling. Therefore, we generally do not anticipate that implementing agencies will revisit past legitimacy determinations. If recycling was considered legitimate under the Lowrance Memo, its status should not change as a result of today's rule. To make its intent more clear, the Agency is codifying a prohibition against sham recycling in § 261.2(g) instead of adding a provision in each of the pre-2008 exclusions and exemptions referring to the legitimacy provision in § 260.43. This codification will give implementing agencies a clear regulatory statement that can be used to enforce against sham recyclers, yet not require the vast majority of recyclers that are performing legitimate recycling under the pre-2008 exclusions and exemptions to revisit previously-made legitimacy determinations.

Any existing legitimate recycling determination should not change due to the codification of the legitimacy factors. In addition, examples that were provided in the public comments helped inform our decision-making and led us to revise factor 4 significantly to address this issue. The final regulatory text is consistent with the pre-existing legitimacy guidance and the manner in which legitimacy determinations have been made by the EPA Regions and authorized states. Thus, we do not expect implementing agencies to revisit past legitimacy determinations.

Regarding the existing exclusions and exemptions in the regulations, EPA acknowledges that, in establishing a specific exclusion or exemption, we have already determined in the rulemaking record that the specific recycling practice is excluded from the definition of solid waste provided all the conditions of the rule are met. However, the Agency has always enforced its rules on the basis that any recycling must be legitimate (See *U.S.* v.

Self, 2 F.3d 1071, 1079 (10th Cir. 1993); *U.S.* v. *Marine Shale Processors,* 81 F.3d 1361, 1366 (5th Cir. 1996); *Marine Shale Processors* v. *EPA,* 81 F.3d 1371, 1381–83 (5th Cir. 1996)). This is meant to prevent a company from claiming to be operating under an existing exclusion or exemption and simply using that as a way to avoid full RCRA Subtitle C regulation. Thus, since EPA is not modifying the existing exclusions and exemptions, there is no change regarding legitimacy determinations, except that the factors are now codified. A company's ability to claim a recycling exclusion or exemption has always depended on the recycling being legitimate.

B. Making All Four Legitimacy Factors Mandatory

Comments: Mandatory Factors

For the most part, states commenting on this part of the proposal supported all the legitimacy factors being mandatory (the exceptions being Tennessee and Louisiana), although several states went on to say that they either opposed the petition process or are concerned about it for the following reasons: (1) The resources necessary for addressing incoming petitions, (2) the possibility of using the petition process as a potential backdoor out of legitimacy, and/or (3) the potential for the petition process to lead to inconsistencies among states on legitimacy determinations. Most states have supported making all four factors mandatory in past proposals and continue to do so here, arguing that codifying the legitimacy factors in the rule (instead of only in rule preamble and in policy documents) will provide clearer instruction to the regulated community and will strengthen the ability of state programs to enforce the criteria in situations where recycling is not legitimate. This, the states claim, will reduce the potential risk to human health and the environment from mismanagement of hazardous secondary materials and from elevated concentrations of contaminants in recycled products. They also argue that making all four factors mandatory will remove a serious flaw in the enforceability of legitimacy. Other commenters noted that requiring all four legitimacy factors to be met is critical to ensure reclamation is being conducted at a qualified facility and to minimize the potential for creation of future damage cases. Most states found it hard to conceive of a legitimate recycler that would not be able to satisfy all four factors.

Although some commenters representing the hazardous waste recycling industry did support making all the factors mandatory, the majority of industry commenters did not support this provision. Those commenters who did support a requirement that all four factors be met argued that this structure would be fairer and more enforceable. On the other hand, many of the commenters that argued against making all factors mandatory stated that this would discourage much of the current recycling and would be too hard to meet. Commenters particularly singled out factor 4 (toxics along for the ride) as problematic for implementation. Specifically, we got comments from multiple members of the mining and mineral processing industry arguing that factor 4 is not applicable to their industry and from scrap metal recyclers asking how factor 4 would apply at their facilities.

Many commenters also argued that the petition process was not an adequate mechanism for those processes that do not meet all four factors because there will be too many petitions for the states and EPA to be able to process and because shutting down recycling operations during the time spent waiting for petitions to be processed would be very expensive and wasteful.

Another important consideration is what the Agency has learned since implementing the 2008 DSW final rule, which finalized the legitimacy factors as a condition of the generator-controlled and transfer-based exclusions, with two factors that are mandatory and two factors that must be considered. Since that rule became effective, the Agency has become aware of a misconception regarding the "to be considered" factors. It has become clear that some industry stakeholders believe those factors to be less important, stating that they are optional or even can be ignored. This was not the Agency's intention at all. The Agency tried to make it clear that they must be considered and could, in fact, indicate sham recycling on their own. However, through public comment and stakeholder meetings, we have repeatedly heard that industry views these factors as optional.

Another argument against making all the factors mandatory requirements is that the overall determination is made on a case-by-case basis, which is often facility-specific, and not all legitimate recycling can fit into such a rigid system. Commenters argue that making all four factors mandatory removes the flexibility necessary for the broad universe of hazardous secondary materials being recycled.

EPA's Response: Mandatory Factors

After much consideration and review of the public comments, the Agency has decided to make all four legitimacy factors mandatory with adjustments to the factors themselves to account for the variability and diversity of legitimate hazardous secondary material recycling. As explained above in sections VIII.B.5 and VIII.B.6, we have adjusted the regulatory language of factor 4 to build in more flexibility for meeting this factor,[49] but are also making it clear in the regulatory language that it is important that each factor be met, except as otherwise noted.[50] Since finalizing the legitimacy factors in the 2008 DSW final rule, our experience with implementation has made us realize the importance of requiring all factors be met. Even though we stressed the importance of considering each factor in the 2008 DSW final rule, many of the stakeholders are under the misimpression that the factors that were to be considered could actually be ignored. We did not mean to give the impression that factor 3 and factor 4 were optional and thus, have decided that the best way to give the proper weight to these factors is to make them mandatory with additional flexibility to address the various recycling scenarios.

In addition, instead of a petition process for those legitimate recycling scenarios that don't meet factor 4, we are finalizing a documentation, certification, and notification process. We continue to find that legitimacy determinations are best made on a case-by-case basis, which has always been the case, with the facts of a specific recycling situation in hand. If a person has any questions as to the legitimacy of a particular recycling activity, he can always approach the appropriate regulatory agency for assistance in making a legitimacy determination.

C. Documentation of Legitimate Recycling

When the Agency codified the legitimacy standard in the 2008 DSW final rule, we did not require specific documentation regarding the legitimate recycling determination. In the 2011 DSW proposal, in addition to proposing that the legitimacy standard apply to all

[49] In addition, we are also finalizing in the regulatory language the additional flexibility that was proposed in factor 3 to the legitimacy provision.

[50] As we discuss in Section VIII.B.6.c, the Agency has included a self-implementing process that would allow the person performing the recycling to document, certify, and notify the appropriate Regional Administrator that even though the hazardous secondary material does not meet factor 4, the recycling is still considered legitimate.

hazardous secondary material recycling and that all four legitimacy factors must be met, EPA proposed a new documentation requirement for persons performing the recycling. We proposed that the recyclers include a narrative description of how their hazardous secondary materials are legitimately recycled and that this documentation be maintained on-site for the duration of the recycling operations and for three years after the recycling operations cease. However, as explained above in section VIII.C.2, we are only finalizing the requirement to document a legitimate recycling determination for those recyclers operating under the generator-controlled exclusion and for those recyclers that are legitimately recycling, but do not meet factor 4—that is, they must document why the recycling operation is legitimate even if they do not meet factor 4.

Comments: Documentation

ASTSWMO, NEWMOA, and most other states supported requiring documentation of legitimate recycling for both the generator and recycler (with exceptions noted in their comments about certain long-standing recycling exclusions and exemptions, including lead-acid batteries, circuit boards, scrap metal, and closed loop recycling). Most state environmental agencies cited the ability to implement and enforce the RCRA recycling program as the primary reason why documentation is needed. However, a few states did not support requiring documentation for any of the pre-2008 recycling exclusions and exemptions. One state agreed that some documentation may be necessary for inspections, but also stated that common business records would likely suffice in most cases. An environmental organization coalition suggested we provide a consistent format and require documentation of both generators and recyclers. Industry generally opposed the documentation requirement and felt that it would pose significant practical challenges, especially for factor 4. Some industry commenters felt that ''up-front'' documentation is not necessary since EPA can rely on § 261.2(f) for documentation. Other commenters argued that for companies that rely heavily on the existing exclusions and exemptions, it would be easy to inadvertently miss documenting every instance (*i.e.,* closed loop recycling) and the consequences could be severe. In fact, one industry association argued that documentation may actually cause more non-compliance due to the huge administrative burden, especially for large facilities that utilize many of the recycling exclusions and that the voluminous paperwork could result in inspectors missing more obvious sham recycling.

Other commenters objected to any recordkeeping requirements documenting that a recycling activity is legitimate, arguing the policy is not new so, therefore, no new documentation should be required. They argued that since EPA already believes most recycling is legitimate, requiring documentation for all recycling is overly burdensome, expensive, and not necessary. Some industry commenters argued that EPA offered no evidence in the record that documenting the legitimacy of a recycling practice would have any additional environmental benefit. A few commenters asserted that requiring documentation for all recycling might actually cause more non-compliance, especially for the more frequently used recycling exclusions, such as the use/reuse and closed-loop recycling exclusions.

Finally, there was ample confusion in the comments on who would be required to put together and provide the documentation. The Agency proposed that the requirement would apply to the ''persons performing the recycling.'' That is, if the generator sent his hazardous secondary materials off-site to a recycler, then the recycler would be the one responsible for maintaining the documentation. If, on the other hand, the generator recycled his hazardous secondary materials on-site, then the generator would be responsible for documenting that the recycling activity was legitimate. However, some commenters still expressed confusion over who would be responsible for the documentation.

EPA's Response: Documentation

As discussed previously, the Agency has determined that, for purposes of the existing pre-2008 recycling exclusions and exemptions, documentation is not required, unless the facility has determined it is legitimately recycling, but does not meet Factor 4. In the vast majority of cases, recycling under the existing exclusions is legitimate and documentation is not necessary. The Agency has previously acknowledged the legitimacy of these recycling practices when it first promulgated the material-specific and industry-specific exclusions and exemptions, when at that time it took into consideration the legitimacy of the recycling practices. After review of the public comment, the Agency has determined that routine documentation of legitimacy is an unnecessary burden for persons legitimately recycling under the pre-2008 recycling exclusions and exemptions.

However, the Agency is requiring documentation on legitimacy determinations under two circumstances: (1) Persons operating under the generator-controlled exclusion originally finalized in the 2008 DSW final rule, and (2) persons legitimately recycling under any recycling exclusion or exemption where the hazardous constituents in the recycled products are not comparable or are unable to be compared to those in analogous products (unless the recycled product meets widely recognized commodity specifications or the hazardous secondary material is returned to the production process). In these cases, the persons recycling would be required to keep documentation of the legitimacy of their recycling.

Specifically, the Agency has determined that requiring documentation under the generator-controlled exclusion is appropriate because this exclusion is generic and can be used by a wide variety of industries recycling any of a number of hazardous secondary materials. In addition, as explained above in section VIII.B.6.c, the Agency has also determined that documentation is necessary for those rare cases of legitimate recycling that has significantly higher levels of hazardous constituents in the recycled product than in an analogous product, or has no analogous product, has no widely-recognized commodity specifications for the recycled product, and is not returned to the production process. In those cases, due to the self-implementing nature of the legitimacy determinations, it is important that the recycler perform the proper assessment and document how the recycling is still legitimate.

Finally we would note that 40 CFR 261.2(f) applies whenever a person is claiming that a hazardous secondary material is not a solid waste, which oftentimes is because the material is being recycled. Section 261.2(f) states that, in the context of an enforcement action to implement Subtitle C of RCRA, a person claiming that a material is not a solid waste or is conditionally exempt from regulation is responsible for showing that they meet the terms of the exclusion or exemption and must provide appropriate documentation to show why they are eligible. For the legitimacy requirement finalized today, under § 261.2(f), in the event of an enforcement action, persons claiming that their recycling activity is legitimate would have the burden to provide documentation showing how the

recycling meets all four factors, except as otherwise noted. That is, they would need to show how the recyclable hazardous secondary materials provide a useful contribution to the recycling process and are stored as valuable commodities, and how the product of the recycling activity is valuable and comparable to a legitimate product.

D. Factor 3: Language and Implementation

Comments: Factor 3

Many commenters supported the regulatory language revisions to factor 3, particularly the following additional italicized language: ''Where there is an analogous raw material, the hazardous secondary material, must be managed, at a minimum, in a manner consistent with the management of the raw material *or in an equally protective manner.*'' Some commenters argued, however, that the real change to factor 3 was the proposed revision to the contained standard because the second part of factor 3 reads: ''Where there is no analogous raw material, the hazardous secondary material must be contained.'' These commenters expressed concern that by making factor 3 mandatory and by revising the contained definition, the Agency was in effect making factor 3 more stringent.

EPA's Response: Factor 3

The Agency disagrees with the comments that the revised contained standard is more stringent and thus, results in a more stringent factor 3. First, as noted by the commenters, the contained standard only applies in cases where there is no analogous raw material to compare the management of the hazardous secondary material to. More importantly, however, as explained in more detail is section V, while the revised contained standard is more clear and more definitive, it is not more stringent, but is consistent with the contained standard previously discussed and described in the preamble to the 2008 DSW final rule. Thus, EPA finds that overall the revisions to factor 3 are reasonable and consistent with the Agency's previous positions on legitimacy. Therefore, the Agency is finalizing the regulatory language for factor 3 as proposed and has determined the added flexibility will allow existing legitimate recycling to continue without any negative impact on environmental protection.

E. Factor 4: Language and Implementation

In the 2011 DSW proposal, EPA proposed to change the wording within the regulatory language for factor 4 from ''significant'' and ''significantly elevated'' to ''comparable to or lower than'' and explained that this language more clearly reflects the intent of this factor. In addition to this language change, other proposed changes to the legitimacy provision impact the design and implementation of factor 4. The proposal to make all four legitimacy factors mandatory led many commenters to discuss specific concerns they had about factor 4 and what problems they would have meeting the factor as it was proposed. In this section, EPA examines some of those comments, as well as provides the Agency's responses and the changes that were made to the proposal in this final rule to make factor 4 more workable.

In concert with many of the comments about the difficulties of meeting the proposed factor 4, EPA also received many comments about its proposed petition process for when a recycling process does not meet either factor 3 or factor 4. EPA is thus, also addressing those comments in this section of the preamble because the documentation, certification and notification process that will be replacing the proposed petition process is found within factor 4 of the legitimacy provision.

Comments: ''Comparable''

EPA's proposal to change the language within factor 4 that describes the comparison of levels of contaminants between products made from recycling of hazardous secondary materials and products using raw materials was supported by most of the states that commented on factor 4 and opposed by many of the industry commenters. The states that supported the change stated that the term ''comparable'' is better because it is more specific, though several of these commenters also asked for further guidance on the language.

Industry commenters who opposed this change to factor 4 stated that there was not a good reason in the preamble for the change in the language and that they do not think that ''comparable'' means the same thing as ''not significantly higher,'' arguing that if the terms mean the same thing there was no reason for EPA to change them. Several commenters argued that this change in language makes the factor more stringent and/or less flexible.

EPA's Response: ''Comparable''

EPA is finalizing the proposed language in this factor and using the term ''comparable'' in discussing levels of hazardous constituents. This term means any contaminants present in the product made from hazardous secondary materials are present at levels comparable to or lower than the levels in the analogous product, although levels can be slightly higher than those found in the analogous product, but must be within a small acceptable range. This change in language is not a change from its long-standing policy and it is also consistent with the legitimacy provisions in the Identification of Non-Hazardous Secondary Materials that are Solid Wastes final rule (76 FR 15456, March 21, 2011).

In response to comments requesting further guidance and those that state that this language change is making factor 4 too stringent, first we have repeated in section VIII of the preamble the examples that we included in the 2008 DSW final rule which explains how the Agency envisions this factor working. Moreover, the additional changes that it made to factor 4 in this final rule, describing several situations under which a product of a recycling process would be considered comparable to a legitimate product or intermediate, address both these concerns. As EPA determined in previous rulemakings, promulgating an exact numerical cut-off for what would be considered ''comparable'' is not practicable for the legitimacy provision because it applies to a wide variety of recycling scenarios. EPA may provide future guidance on the application of this provision if needed.

Comments: Uncertainty About Compliance

Many of the comments that EPA received from industry regarding factor 4 stated that facilities are concerned about this factor, particularly if it were to become mandatory, because it would be difficult to determine if a given recycling process is in compliance. Many of these commenters stated the high cost of testing for 40 CFR part 261 Appendix VIII constituents as one of their concerns.

EPA's Response: Uncertainty About Compliance

First, we are reiterating in this final rule that testing of the recycled product is generally not required under factor 4 of legitimacy. A generator can use its knowledge of the materials it uses and of the recycling process to make legitimacy determinations, although they may choose to test if they are uncertain if the product from their hazardous secondary materials contains elevated levels of hazardous constituents when compared to non-recycled products. In addition, factor 4

as finalized today presents no greater compliance issues than it would under the 2008 DSW final rule, because under the 2008 legitimacy definition, a facility still had to consider the hazardous constituents in Appendix VIII of part 261 in determining whether factor 4 is met, and be able to demonstrate why recycling was still legitimate even if it was not met. Furthermore, as we have noted elsewhere, we have made certain revisions to factor 4, in response to comments, for facilities to determine that they are in compliance with this factor. Specifically, the provisions in § 260.43(a)(4) state that products that meet widely recognized commodity standards and specifications would be considered comparable and meet factor 4 and hazardous secondary materials that are recycled back into the original generating process would be considered comparable and also meet factor 4, which is intended to make compliance with factor 4 simpler across many of the industries in which much industrial recycling takes place.

Comments: No Analogous Product To Compare

Many of the comments regarding factor 4, including many of the examples that were sent in to describe the difficulties of complying with factor 4, described recycling situations in which there is no analogous product and argued that it would be very difficult to meet the proposed factor 4 in a situation where there is no analogous product.

EPA's Response: No Analogous Product To Compare

After examining the comments submitted, including the examples provided, EPA agrees with the commenters that the design of proposed factor 4 did not adequately take into consideration recycling scenarios that either always includes some form of recycled hazardous secondary material or that would be considered closed loop recycling. As a result of these comments, EPA modified the structure of factor 4 to include provisions specifically for the situation where there are no analogous products, (found in § 260.43(a)(4)(ii)). The finalized provisions state that when there is no analogous product, the product of the recycling process is comparable to a legitimate product or intermediate when the product is a commodity meeting widely recognized commodity standards and specifications or when the hazardous secondary materials being recycling are returned to the original process or processes from which they were generated.

This change to factor 4 provides the necessary flexibility to those persons who recycle hazardous secondary materials for which there is not an analogous product for comparison. However, EPA has also included a documentation, certification, and notice provision for cases that do not fit these two scenarios. Under this provision, the recycler can perform an assessment of the hazardous secondary material and still determine that its recycling is legitimate despite not meeting factor 4. This finding must be documented and certified by a responsible facility official and a copy kept on-site for as long as the recycling continues, and for 3 years after the recycling operations cease. Also, a notice of this finding must be sent to the appropriate Regional Administrator (or State Director, in an authorized state), using the Site ID form.

Comments: Petition Process

As stated above in this section, many commenters argued that the petition process was not an adequate mechanism for relief for those processes that do not meet all four factors and therefore, they opposed the proposed petition process. They argued that there would be too many petitions for the states and EPA to process efficiently, which could result in shutting down recycling operations during the time spent waiting for petitions to be processed, which would be very expensive and wasteful. States were particularly concerned about the amount of resources that would be needed to process the incoming petitions.

EPA's Response: Petition Process

In response to the arguments presented by the commenters in opposition to the petition process and the concerns with how implementation of the petition process could impact recycling, EPA is not finalizing the petition process in this final rule. Instead, EPA has made two changes to its proposal to account for the situations that the petition process was meant to cover. The first is the additional provisions in factor 4 (already discussed above in this section) that describe the specific situations in which EPA considers a product of a recycling process to be comparable to an analogous product or intermediate. The second is the documentation, certification, and notice provision for products that have levels of hazardous constituents that are not comparable to or lower than an analogous product or intermediate or that are unable to be compared, but which are not covered by the new provisions.

Under the documentation, certification, and notice process, a recycler must determine that its recycling is still legitimate despite the levels of hazardous constituents in the recycled product not being comparable to those in an analogous product or intermediate. This determination can take into account exposure of toxics in the product, bioavailability of toxics in the product or other relevant considerations that show the recycled product does not contain levels of hazardous constituents that pose a risk to human health or the environment. The facility then must prepare documentation explaining its assessment and include a certification that the recycling is legitimate. In addition, the facility would need to notify the appropriate Regional Administrator (or State Director, in an authorized state) of this finding.

This provision is a less burdensome process for both recyclers and the states implementing the RCRA program because it maintains the self-implementing nature of the legitimacy requirement. However, because facilities will still have to provide notice to the regulatory agency, it also allows implementing agencies to perform oversight and inspections of recycling facilities if they are concerned about the legitimacy of a specific recycling process.

XVIII. Major Comments on the Revisions to Solid Waste Variances and Non-Waste Determinations

In the July 2011 DSW proposed rule, EPA proposed several modifications to the existing regulations for solid waste variances and non-waste determinations in 40 CFR 260.31(c), 40 CFR 260.33 and 40 CFR 260.34 to ensure protection of human health and the environment and foster greater consistency on the part of implementing agencies.

A. Requiring Facilities To Re-Apply for a Variance or Non-Waste Determination

In the July 2011 DSW proposal, EPA proposed to revise 40 CFR 260.33(c) to require facilities to re-apply for a variance in the event of a change in circumstances that affects how a material meets the criteria upon which a solid waste variance has been based, as is currently required for non-waste determinations. Additionally, EPA requested comment on whether to require variances and non-waste determinations to be renewed periodically, and, if so, what time period would be appropriate (*e.g.,* two or five years as suggested in the preamble to the 2011 July DSW proposal).

Comments: Re-Apply for a Variance in the Event of a Change

The majority of commenters supported EPA's proposed change to require facilities to re-apply for a variance in the event of change in circumstances that affects how a hazardous secondary material meets the criteria upon which a solid waste variance has been based. The commenters believe the change promoted clarity and consistency in the regulations and that it made sense to ensure the hazardous secondary materials continued to meet the conditions of the exclusion over time. Other commenters, however, while supporting such a provision, urged EPA to require a re-certification rather than a full application process so as to reduce the burden on states and the regulated community.

A few commenters disagreed with this provision, as they argued that administrative authorities already use discretion to review changes in circumstances.

EPA's Response: Re-Apply for a Variance in the Event of a Change

EPA agrees with the majority of commenters that finalizing a requirement to require facilities to take action in the event of a change in circumstances will ensure the hazardous secondary material remains eligible for a variance and continues to meet the variance criteria over time. EPA also agrees with those commenters that suggested ways to reduce the administrative burden on states and the regulated community. Therefore, in today's final rule, EPA is requiring that, in the event of a change, the facility must send a description of the change to the regulatory authority and the regulatory authority will determine whether the facility must re-apply for a variance. This change in procedure allows both the regulatory authority and regulated community to avoid spending unnecessary resources where the change in circumstances is found to be of no consequence to the original variance that the regulatory authority has granted. EPA notes that re-applying for a variance should be less burdensome than the initial application because a facility would only have to update its original application.

EPA disagrees with those commenters who opposed this change on the basis that regulatory authorities already use discretion to review changes in circumstances. First, the changes that EPA made to the final rule would not automatically require a person to re-apply for the variance, but make the regulatory authority aware of the change so that an informed decision could be made as to whether the variance is still appropriate. Moreover, relying on case-by-case discretion to require notice in the event of a change could allow certain hazardous secondary materials to remain excluded from regulation under Subtitle C of RCRA, even though based on the changed circumstances, the variance is no longer appropriate, and could present a risk to human health and the environment. It would also contradict the Agency's goal to foster greater consistency on the part of implementing agencies.

Comments: Periodic Renewal of Variances and Non-Waste Determinations

A number of commenters did not support requiring periodic renewals of variances and non-waste determinations. Commenters opposed this change because of the additional burden on both the states and the regulated community and the fact that this would not be needed if EPA finalized its proposed change to require a renewal or recertification in the event of a change. Additionally, some commenters argued that the administrative authority already has discretion to set renewal timeframes as a condition of the variance. One commenter argued that facilities make significant business investments based on regulatory certainty and, thus, if variances are subject to repeal, this may prevent investment in recycling activities.

A few commenters, however, supported a renewal requirement and argued that reapplying in the event of a change is not the same as a periodic renewal. This commenter argued that the requirement to re-apply in the event of a change relies almost entirely on the facility to self-report on a change in circumstances, of which the facility may have an economic incentive not to do. Other commenters suggested that generators "re-certify," rather than re-apply, on an annual or biennial basis that they continue to meet the conditions of a variance or non-waste determination in order to reduce administrative burden.

EPA's Response: Periodic Renewal of Variances and Non-Waste Determinations

EPA agrees with the commenters that supported a renewal requirement for solid waste variances and non-waste determinations. Variances and non-waste determinations are granted based on case-specific circumstances of a particular hazardous secondary material being recycled. Many of the variance and non-waste determination criteria specifically consider factors such as, the manner in which the hazardous secondary material is recycled, the market factors of the recycling process, the value of the hazardous secondary material, and contractual arrangements. However, these factors are not static and, instead, change and evolve over time. It is therefore prudent that regulatory authorities periodically review these case-specific situations to ensure that the hazardous secondary material continues to meet the criteria of the variance or non-waste determination. Therefore, EPA is adding a provision to 40 CFR 260.33(d) that solid waste variances and non-waste determinations shall be effective for a fixed term not to exceed 10 years, which is the same term limit for RCRA hazardous waste permits under 40 CFR 270.50(a).

EPA is establishing a time limit of 10 years (rather than two or five years, as suggested in the July 2011 proposal) considering the need to provide regulatory certainty to support business investment, as well as the fact that 10 years is the same as the duration of RCRA permits under 40 CFR 270.50(a). The 10-year time frame also ensures that renewals occur regularly enough in order to evaluate significant changes in recycling processes, technologies, and market factors that may affect the terms of a variance or non-waste determination.

EPA disagrees with those commenters who argued that periodic renewals would not be needed if EPA finalized the proposed change to require notice in the event of a change in circumstances that affect how a hazardous secondary material meets the conditions of a variance or, as currently required for a non-waste determination. As one commenter noted, the requirement to provide notice in the event of a change relies on a facility self-reporting that change and thus, this requirement may not be consistently implemented. A periodic time limit, in this case 10 years, however, triggers a re-review of the circumstances without relying on self-reporting by the facility. Furthermore, EPA disagrees with commenters who opposed this change on the basis that regulatory authorities already use discretion to review changes in circumstances. (See response to this comment in EPA's Response to "Re-Apply for a Variance in the Event of a Change.) Regarding the commenter that argued that periodic renewals would disrupt business investment, EPA finds that a time limit of ten years (rather than two or five years, as suggested in the

July 2011 proposal) is a sufficient amount of time to provide regulatory certainty to support business investment, given that ten years is the same as the duration of RCRA permits.

B. Requiring Notification for Facilities Operating Under Variances and Non-Waste Determinations

In the July 2011 DSW proposal, EPA proposed to add a provision under 40 CFR 260.33 stating that facilities receiving a variance or non-waste determination must provide notification as required under 40 CFR 260.42. This would require facilities to send a notification prior to operating under the regulatory provision and by March 1 of each even-numbered year thereafter to the EPA or the State Director, if the state was authorized, using EPA Form 8700–12.

Comments: Requiring Notification for Facilities Operating Under Variances and Non-Waste Determinations

Commenters were split on this issue. Many commenters supported requiring facilities receiving a solid waste variance or non-waste determination to submit notifications in compliance with 40 CFR 260.42. These commenters believed that the notification would provide updated information about a facility's activities and would enable better compliance monitoring. These commenters also agreed that notification would improve transparency, because the notifications could be available online.

However, many commenters opposed requiring facilities that receive a variance from being a solid waste or non-waste determination to submit notifications. These commenters argued that the act of applying for and receiving a variance or non-waste determination constitutes adequate notification for regulatory authorities. These commenters also argued that notification would increase the burden on facilities and was not necessary if EPA finalized its proposal to require facilities to re-apply in the event of a change.

EPA's Response: Requiring Notification for Facilities Operating Under Variances and Non-Waste Determinations

Although EPA recognizes the arguments both for and against notification, EPA agrees with those commenters who support notification in order to enable better compliance monitoring and to improve transparency. Therefore, EPA is finalizing a requirement in 40 CFR 260.33(e) that facilities receiving a variance or non-waste determination must provide notification as required by 40 CFR 260.42.

This requirement serves to meet EPA's goal to foster greater consistency on the part of implementing agencies and to help ensure the proper implementation of the solid waste variances and non-waste determinations. The intent of the notification is to enable variances and non-waste determinations to be tracked nationally and over time, which facilitates state-to-state consistency in determinations. Additionally, notification enables effective oversight of facilities receiving solid waste variances and non-waste determinations because it provides regulatory authorities with a mechanism for receiving regularly updated information (such as information regarding quantities of hazardous secondary materials managed under the determination). Furthermore, this information can be used to identify facilities which may have undergone changes to their reclamation process significant enough to trigger a review of the determination under 40 CFR 260.33(c).

EPA does not agree that the solid waste variance or non-waste determination application itself constitutes adequate notification. Currently, individual facility applications are not tracked nationally and there exist no consolidated list of facilities operating under a solid waste variance or non-waste determination. Notification, using EPA Form 8700–12, ensures that standard information regarding facilities receiving solid waste variances and non-waste determinations can be collected, stored, and used to enable compliance monitoring and to foster consistency in implementing the regulations.

We also do not agree that the notification requirement is duplicative of the requirement to send notice in the event of a change because the two requirements serve different purposes and require different information. In the event of a change, facilities must send a description of the change in circumstances to EPA or the authorized state, who then make an evaluation as to whether a facility should re-apply for a solid waste variance or non-waste determination. Under 40 CFR 260.42, facilities submit information, such as type and quantity of hazardous secondary material being managed, using EPA Form 8700–12, which enables the information to be entered into EPA's database where it can be accessed by both EPA and state regulatory authorities.

Furthermore, EPA does not agree that notification using EPA Form 8700–12 poses an undue burden. The form is relatively simple to complete and is currently being used for facilities excluded from the definition of solid waste under 40 CFR 261.4(a)(23). Additionally, EPA is currently developing an electronic submission process, which will further reduce reporting burden.

C. Revisions to the Partial Reclamation Variance

In the July 2011 DSW proposal, EPA proposed to revise the partial reclamation variance provision of 40 CFR 260.31(c) to clarify when partially-reclaimed materials are not solid waste because they are commodity-like. Specifically, EPA proposed to: (1) Revise the introductory text to clarify when the variance applies; (2) revise the introductory text to require that all of the decision criteria must be met; (3) revise the language of all of the decision criteria; and (4) eliminate the sixth criterion, that is, "other relevant factors."

Comments: General Comments on Proposed Changes to Partial Reclamation Variance

Many commenters supported EPA's proposed changes to the partial reclamation variance. In fact, two of these commenters argued that existing variances that do not meet the new criteria should be rescinded or revised.

A few commenters, however, did not support the proposed changes. These commenters argued that EPA does not have the record to support its finding that states are inconsistently and incorrectly applying the partial reclamation variance criteria and that variances granted by the states are not protective of human health and the environment. Additionally, one commenter argued that EPA provided no documentation for public review to substantiate how EPA intended the variance criteria to apply when it promulgated the variance in 1985. Another commenter argued that the proposed changes will restrict recycling.

EPA's Response: General Comments on Proposed Changes to Partial Reclamation Variance

EPA agrees with commenters who supported the proposed changes. Not finalizing the proposed revisions to the partial reclamation variance would only result in a continuation of inconsistency among state determinations, which in some cases, allow partially-reclaimed materials to be excluded from the definition of solid waste when they are

clearly not commodity-like, but rather hazardous wastes. EPA notes, however, that the final changes to the partial reclamation variance criteria only apply to facilities receiving variances after the effective date of today's rule. The changes are not retroactive and thus would not apply to facilities currently operating under existing partial reclamation variances, unless and until the facility's variance came up for renewal. Thus, the Agency does not agree with those commenters who suggested that any variance that does not meet the revised criteria should be rescinded or revised immediately.

EPA estimates that the states have granted between 15 to 20 partial reclamation variances, including variances granted in Indiana, Louisiana, Ohio, Oregon, Pennsylvania, Texas and Washington. EPA itself has also issued a partial reclamation variance to World Resource Company (WRC) in Arizona. (See list of partial reclamation variances issues by the states in today's docket.) Some of the partial reclamation variances were granted as the Agency intended and have required RCRA Part B storage and treatment permits for the incoming hazardous waste material. Other states, however, have issued partial reclamation variances which contradict the intention of the partial reclamation variance. For example, EPA publicly expressed its disagreement in a November 18, 2010, letter to Indiana's Department of Environmental Management (IDEM) concerning the tentative approval of a facility's request for a partial reclamation variance, a copy of which is found in today's docket. In our letter, we made clear that we did not believe IDEM should grant a partial reclamation variance to incoming hazardous wastes that were not "sufficiently commodity-like to qualify for the variance."

EPA also disagrees with commenters who argued that EPA's record does not provide adequate basis for how the Agency intended the partial reclamation variance to operate. In the preamble to the 1985 DSW final rule (January 4, 1985; 50 FR 655), the Agency made clear that incoming materials to a partial reclamation facility were hazardous wastes and that the facility processing these incoming materials must obtain appropriate RCRA Part B storage and treatment permits. (Furthermore, these facilities are also subject to biennial reporting under 40 CFR 264.75.) Additionally, the Agency points to the partial reclamation variance it issued to WRC on August 13, 2002 (67 FR 52617) as a public example of the how the Agency intended for the partial reclamation variance to be implemented. In this case, the Agency's partial reclamation variance to WRC for the partial reclamation of F006 electroplating sludges required WRC to obtain RCRA Part B storage and treatment permits for the incoming hazardous waste.

In addition, EPA disagrees that the final rule changes will unnecessarily restrict recycling. Today's changes clarify how the partial reclamation variance has always been intended to operate; thus, any recycling that is consequentially restricted from the variance as a result of the changes was never intended to be excluded from hazardous waste requirements. EPA maintains that hazardous waste must be managed under appropriate hazardous waste requirements in order to ensure protection of human health and the environment.

Comments: Revisions to Introductory Text

Most commenters supported the proposed changes to the introductory text, including requiring that all criteria must be met and requiring compliance with the legitimacy criteria in 40 CFR 260.43. One commenter, while supporting the proposed changes said that EPA should define vague words such as "commodity-like," "sufficient economic value," and "substantial." Another commenter said that commodity-like partially-reclaimed material must be marketable to the general public, that is, it must be a material that could be marketed to more than one facility.

Some commenters did not agree that all the criteria must be met. One commenter argued that this conflicts with EPA's 1985 preamble in which EPA said the Regional Administrator can weigh factors and may rely on any or all of them to reach a decision. Additionally, the WRC variance that EPA issued acknowledged that the partial reclamation steps being performed were "not elaborate." However, the partial reclamation involved by WRC was sufficiently substantial to produce a commodity-like material as verified by contracts, sales, and subsequent management of the commodity-like material. Other commenters believed EPA's proposed changes to the introductory text imposed prescriptive conditions which conflict with the intent of the variance by restricting the administrative authority's decision-making discretion.

EPA's Response: Revisions to Introductory Text

EPA agrees with those commenters who supported the proposed changes to the introductory text, including requiring that all criteria must be met and requiring compliance with the legitimacy factors in 40 CFR 260.43. In response to the one commenter who believed that certain terms are vague, it is EPA's intent with this final rule to clarify how the partial reclamation variance should be applied. Although, specific definitions would be difficult to promulgate given the broad applicability of the terms, EPA notes that today's preamble discussion along with today's regulatory revisions to the variance criteria serve to better define how EPA is using these terms in the partial reclamation variance, particularly when a material becomes commodity-like. For example, EPA notes in its preamble that criteria 2–5 define the fundamental characteristics that indicate whether a partially-reclaimed material is "commodity-like."

Regarding comments that argued against requiring all criteria to be met, EPA has determined that in order to reduce the inconsistency in state-to-state partial reclamation variances, the criteria must be made more prescriptive. Balancing the factors, as was EPA's original direction in 1985, has resulted in subjective interpretations that differ across states and which, in some cases, do not align with the original intent of the partial reclamation variance. EPA finds that requiring all criteria to be met is a more effective framework for determining when a partially-reclaimed material is commodity-like and therefore not a solid waste.

Comments: General Comments on Revisions to Variance Criteria

Many commenters supported the changes to the criteria of the partial reclamation variance. However, a few commenters disagreed with inserting the word "whether" at the beginning of each criterion because it implied the criterion was more prescriptive. A few commenters also argued that EPA's proposed insertion of the word "partially" before "reclaimed" disregards the fact that EPA has acknowledged that more than one processing step may be necessary before the inherent value of a usable product is recovered.

EPA's Response: General Comments on Revisions to Variance Criteria

EPA agrees with the many commenters that supported the proposed changes to the variance criteria. Regarding EPA's proposed insertion of the word "whether" in each criterion, the intent of this change is to make the criteria more prescriptive in order to reduce the inconsistency of

partial reclamation variance determinations. EPA also disagrees that adding the word ''partially'' in front of ''reclaimed'' disregards the fact that EPA has acknowledged that more than one processing step may be necessary before the inherent value of a usable product is recovered. EPA recognizes that reclamation of hazardous secondary materials may involve multiple steps and hazardous waste may be recycled in any number of steps in accordance with the hazardous waste regulations. However, EPA maintains that a variance from the definition of solid waste is appropriate only for partially-reclaimed material that is commodity-like, as demonstrated by satisfaction of the partial reclamation criteria.

Comments: Proposed Criterion (1)—Whether the Degree of Partial Reclamation the Material Has Undergone Is Substantial

For the first proposed criterion, two commenters argued that EPA's use of ''partial reclamation'' in place of ''processing'' did not provide additional clarification. Another commenter stated the criterion should state EPA's intent on 76 FR 44129 and read ''whether the degree of partial reclamation the material has undergone is substantial and the material produced is not the original hazardous waste.'' Other commenters were concerned regarding the term ''substantial,'' because it is subjective and needs a better definition. These commenters argued that EPA has not provided a standard regarding when a material is ''no longer the original hazardous waste.''

EPA's Response: Proposed Criterion (1)—Whether the Degree of Partial Reclamation the Material Has Undergone Is Substantial

EPA disagrees with those commenters who argued that EPA's use of ''partial reclamation'' in place of ''processing'' did not provide additional clarification. The term ''processing'' is a broad, general term that can refer to a number of processes, such as the process used to generate the hazardous waste. However, the intention of the partial reclamation variance is to evaluate, specifically, the degree of partial reclamation and therefore it makes sense to use ''partial reclamation'' in criterion 1. Additionally, this revised language for the first criterion conforms to the revised changes in the introductory text of the partial reclamation variance.

EPA agrees with commenters that adding a clarifying statement to criterion (1) is helpful and has added ''as demonstrated by using a partial reclamation process other than the process that generated the hazardous waste'' after ''substantial.'' We believe this language clarifies (and responds to the comment regarding the term ''substantial'') that the process used to generate the hazardous waste (such as dewatering of sludge) would not be considered ''substantial'' under this criterion. Therefore, by emphasizing that the partial reclamation process must be substantial in the first criterion, the Agency is reiterating that the material produced by the partial reclamation process must be commodity-like as supported by also meeting criteria (2)–(5).

Under the final rule, EPA is finalizing the first criterion to read: ''Whether the degree of partial reclamation the material has undergone is substantial as demonstrated by using a partial reclamation process other than the process that generated the hazardous waste.''

Comments: Proposed Criterion (2)—Whether the Partially-Reclaimed Material Has Sufficient Economic Value That it Will Be Purchased for Final Reclamation

For the second proposed criterion, one commenter supported EPA's emphasis in the preamble on the existence of contracts for the sale of the partially-reclaimed material. This commenter argued that such emphasis is important to ensure that partial reclaimers do not accumulate significant quantities of material without assurance that a willing buyer actually exists. This commenter stated that an example of excess accumulation risk is shown by the variance recently granted by IDEM to the facility, ShoreMet, in which the variance was granted on the basis that a market for the partially-reclaimed material would exist solely because other reclaimers had sold fully-reclaimed F006 (wastewater treatment sludges from electroplating operations) and F019 (wastewater treatment sludges from aluminum coating processes). This commenter argued that such an analysis does not ensure that ShoreMet can market its partially-reclaimed material.

Another commenter argued that reclamation may involve more than one processing step and that the proposed changes to this criterion limit the administrative authority's ability to consider the value of the partially-reclaimed material and the usable end products. This commenter also argued that the term ''value'' in 40 CFR 260.43 means sold to a third party or used as an effective substitute, which may not apply here. Still another commenter noted the F006 reclamation guidance [51] allows the use of theoretical ''on paper'' value of precious metals present, despite that substantial processing might be needed before those precious metals realize market value.

EPA's Response: Proposed Criterion (2)—Whether the Partially-Reclaimed Material Has Sufficient Economic Value That it Will Be Purchased for Final Reclamation

EPA agrees with the commenter that supported EPA's emphasis in the preamble on the existence of contracts for the sale of the partially-reclaimed material as demonstrating the second criterion is being met.

As we have stated previously, the partial reclamation variance is for those hazardous secondary materials that have been partially-reclaimed but, must be reclaimed further, as long as the partial reclamation has produced a commodity-like material. That is, if the partially-reclaimed material is being purchased for further reclamation, the Agency considers the partially-reclaimed material to have sufficient economic value, regardless of how each party calculates the value to be paid. Evidence to support this criterion may include sales information; demand for the materials; and business contracts, such as contracts specifying quantities of material sold, details of the transaction, and the effective price paid for the partially reclaimed material by purchasers (*i.e.,* after subtracting transportation costs and any other goods or services rendered in exchange for the material purchased).

EPA is making one change to the proposed second criterion. As noted above, EPA understands that reclamation of hazardous waste may involve multiple steps and thus EPA finds it is more appropriate to ensure that the partially-reclaimed material is purchased for ''further reclamation'' rather than ''final reclamation'' to allow for processes that use more than one reclamation step in processing the partially-reclaimed material. Therefore, the final second criterion in today's rule reads: ''Whether the partially-reclaimed material has sufficient economic value that it will be purchased for further reclamation.''

[51] U.S. EPA, ''Background Document: Providing Context—The Example of F006 Electroplating Sludges,'' June 2011. Docket ID: EPA–HQ–RCRA–2010–0742–0016.

Comments: Proposed Criterion (3)—Whether the Partially-Reclaimed Material Is a Viable Substitute for a Product or Intermediate Produced From Virgin or Raw Materials Which Feeds Subsequent Production Steps

For the third criterion, one commenter disagreed with the proposed wording change because it restricts the authority's ability to consider the benefit provided by subsequent processing of the partially-reclaimed material and directs the authority only to consider whether it is immediately a substitute or product before further processing. Another commenter suggested replacing the phrase ''which feed subsequent production steps'' with the phrase ''that is used in a subsequent manufacturing process'' to be more clear. Still another commenter suggested that this criterion should state more plainly that ''it is a substitute for ingredients, intermediates, or commercially available virgin/raw materials.''

EPA's Response: Proposed Criterion (3)—Whether the Partially-Reclaimed Material Is a Viable Substitute for a Product or Intermediate Produced From Virgin or Raw Materials Which Feeds Subsequent Production Steps

EPA maintains that the partial reclamation variance is for those materials that have been partially-reclaimed, but must be reclaimed further, as long as the partial reclamation has produced a commodity-like material. Thus, whether or not a material is produced at a later stage of reclamation as a viable substitute for a product or intermediate is not relevant in determining whether a partially-reclaimed material produced earlier is commodity-like.

EPA agrees with the commenter who suggested replacing the phrase ''which feed subsequent production steps,'' with the commenters suggested wording, with certain modifications, in order to improve clarity. Therefore, the Agency is modifying this criterion to read, ''whether the partially-reclaimed material is a viable substitute for a product or intermediate produced from virgin or raw materials, which is used in subsequent production steps.'' With this clarification, the Agency is making clear that, while multiple steps may be involved in producing a commodity-like material, it is only when the partially-reclaimed material is a viable substitute for a product or intermediate is it considered ''commodity-like.''

EPA is not making the suggested change to state that the partially-reclaimed material ''is a substitute for ingredients, intermediates, or commercially available virgin/raw materials'' because EPA is concerned that this language may introduce confusion in distinguishing between when a partially-reclaimed material is ''commodity-like'' as compared to raw or virgin material that would need to undergo substantial processing before meeting this definition. Therefore, EPA is maintaining the proposed language to read ''is a viable substitute for a product or intermediate produced from virgin or raw materials.''

Comments: Proposed Criterion (4)—Whether There Is a Guaranteed Market for the Partially-Reclaimed Material

For the fourth proposed criterion, whether there is a guaranteed market for the partially-reclaimed material, a few commenters argued that EPA is not specific enough to meet its objective and suggested that the criterion should read ''whether there is a guaranteed and secure long-term market for the partially-reclaimed material.'' These commenters also stated that EPA should include in the final rule more empirical and measurable ways to define this concept, for example including markets with consistent positive profit margins for a minimum of ten years.

EPA's Response: Proposed Criterion (4)—Whether There Is a Guaranteed Market for the Partially-Reclaimed Material

EPA agrees that clarity is needed and has modified the fourth criterion to include examples of how a market for the partially-reclaimed material can be demonstrated. The fourth criterion now reads, ''whether there is a market for the partially-reclaimed material as demonstrated by known customer(s) who are further reclaiming the material (*e.g.* record of sales and/or contracts, and evidence of subsequent use, such as bills of lading).'' In response to the commenter who urged EPA to include more empirical and measurable ways to define this concept, the Agency has determined that examination of the contracts, record of sales, and bills of lading between the partial reclaimer and its customers will provide adequate evidence of whether this criterion is satisfied.

Comments: Proposed Criterion (5)—Whether the Partially-Reclaimed Material Is Handled To Minimize Loss

For the fifth proposed criterion, one commenter argued that ''minimize loss'' should be better defined and that, at a minimum, the partially-reclaimed material should meet the ''contained'' standard for hazardous secondary materials and be managed exactly like any other commodity.

EPA's Response: Proposed Criterion (5)—Whether the Partially-Reclaimed Material Is Handled To Minimize Loss

EPA does not find that the phrase ''minimize loss'' needs to be better defined. As we have discussed elsewhere and in the preamble to the 2011 July DSW proposal, evidence to support this criterion may include documentation of facility procedures used to minimize loss (*e.g.,* inspections, training) and storage and management equipment designed to minimize loss. Additionally, under today's final rule, partially-reclaimed materials must meet the legitimate recycling standard in 40 CFR 260.43, which requires that the hazardous secondary materials be managed as a valuable commodity. This criterion explains that, where there is an analogous raw material, the hazardous secondary materials must be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material, the hazardous secondary material should be contained, as defined in 40 CFR 260.10.

Comments: Revision To Eliminate Sixth Criterion

Many commenters supported EPA's proposal to eliminate the sixth criterion concerning other relevant factors. One commenter stated that criterion six has been and is currently being used as a primary basis for granting partial reclamation variances for hazardous secondary materials, and has led to the creation of unfair and illegal advantages for some reclaimers.

A few commenters, however, disagreed with the proposed change. One commenter argued that removing criterion six conflicts with the intent of the partial reclamation variance by restricting the administrative authority's discretion. Other commenters argued that the overall situation should be considered and that an applicant's history of compliance would be an ''other relevant factor'' that should be considered when evaluating an application for a partial reclamation variance.

EPA's Response: Revision To Eliminate Sixth Criterion

EPA agrees with those commenters that supported the elimination of the sixth criterion. The sixth criterion has resulted in subjective interpretations which have led, in the Agency's view, to incorrect application of the partial reclamation variance and therefore, EPA

is removing it from the list of criteria. We do not agree with the commenter who argued that removing this criterion would restrict the administrative authority's discretion. For example, EPA agrees with those commenters who said that an applicant's history of compliance could be considered as part of a partial reclamation variance determination. However, rather than requiring that compliance be considered under a sixth criterion, EPA notes that compliance would likely be a factor in determining how the facility is meeting the legitimate recycling factors in 40 CFR 260.43 and the partial reclamation variance criteria (1)–(5). For example, regulatory compliance could be used regarding whether the partially-reclaimed material is handled to minimize loss.

D. Revision to the Criteria for Non-Waste Determinations To Require Petitioners To Demonstrate Why Their Material Cannot Meet an Existing Exclusion

EPA proposed to revise the criteria for the non-waste determination in 40 CFR 260.34 to require that petitioners explain or demonstrate why their hazardous secondary materials cannot meet, or should not have to meet, the existing DSW exclusions under 40 CFR 261.2 or 40 CFR 261.4.

Comments: Non-Waste Determination Criteria To Require Petitioners To Demonstrate Why Their Material Cannot Meet an Existing Exclusion

Many commenters agreed with this proposed change. These commenters noted that, as a practical matter, it would seem facilities seeking such a determination would have already evaluated the existing exclusions and thus, requiring this information should not be overly burdensome.

A few commenters, however, disagreed with this proposed change. One commenter argued that petitioners will be unwilling to provide justification at the risk of disqualification of an accepted exclusion in another state or EPA region for the same process. Another commenter noted that there may be legitimate reasons where the use of an exclusion might be too close to call and the facility wants greater comfort in a determination. A third commenter argued it is unreasonable for EPA to place the burden of interpreting EPA's regulations on those who are regulated prior to consenting to review a request for a non-waste determination.

EPA's Response: Non-Waste Determination Criteria To Require Petitioners To Demonstrate Why Their Material Cannot Meet an Existing Exclusion

EPA agrees with those commenters who supported this proposed change to require that petitioners explain or demonstrate why their hazardous secondary materials cannot meet, or should not have to meet, the existing DSW exclusions under 40 CFR 261.2 or 40 CFR 261.4. EPA agrees that this type of evaluation should already have been conducted by facilities that are formally petitioning the state or EPA for a non-waste determination. This provision provides the regulatory authority with the information it needs, while helping to reduce the number of applications because facilities will be forced to evaluate whether an existing self-implementing exclusion may be used.

EPA does not agree with the opposing arguments presented by the commenters as a basis for not finalizing the proposed change. These arguments, including that a facility may want more comfort in a determination and that EPA shouldn't put the burden on facilities to interpret regulations, are precisely why EPA and authorized states would benefit from receiving an explanation or demonstration from the facility why they cannot or should not have to meet an existing exclusion. This information would enable regulatory authorities to review and resolve questions regarding whether a non-waste determination may be warranted. Additionally, EPA does not find convincing the argument that a facility may be unwilling to provide justification at the risk of disqualification of an accepted exclusion in another state or EPA region. In fact, by finalizing this change, EPA is fostering greater consistency in state-to-state interpretations.

E. Designation of the Regional Administrator as the EPA Recipient of Petitions for Variances and Non-Waste Determinations

In the July 2011 DSW proposal, EPA proposed to change the word "Administrator" to "Regional Administrator" in 40 CFR 260.30, 260.31, 260.32, 260.33, and 260.34. Due to the case-specific nature of the variances and non-waste determinations, EPA believed that these decisions may be better made by the Regional Administrator.

Comments: Designation of the Regional Administrator as the EPA Recipient of Petitions for Variance and Non-Waste Determinations

Most of the comments on this issue opposed the proposed change arguing that there are significant differences in regional interpretations just as there are differences in state interpretations and that the change will lead to increased inconsistency in the implementation of variances and non-waste determinations. Other commenters urged EPA to clarify that petitions for solid waste variances and non-waste determinations may be sent to Directors of authorized states, just as the petition process works currently. These commenters argued that states are delegated by EPA to administer the hazardous waste regulations and, therefore, states have a role in reviewing solid waste variance and non-waste determination petitions.

Only a few commenters supported the proposed change.

EPA's Response: Designation of the Regional Administrator as the EPA Recipient of Petitions for Variance and Non-Waste Determinations

EPA recognizes the commenters' concerns who argued that designating the Regional Administrator, rather than the Administrator, as the person responsible for evaluating such petitions and deciding whether to grant a solid waste variance or a non-waste determination may increase inconsistency by virtue of there being ten Regional Administrators as compared to the one Administrator. Because the Agency is striving for as much consistency as possible, we have decided not to finalize this proposed change. We would also note that the rule does not change in any way the delegation of authority to states authorized to administer the hazardous waste regulations and thus, authorized states that have adopted these provisions may continue to evaluate and decide whether to grant a solid waste variance or a non-waste determination, as they do currently.

F. Requirement To Share Copies of Variances and Non-Waste Determinations

In the July 2011 DSW proposal, EPA requested comment on whether to require states to share copies of any solid waste variance and non-waste determination petitions and the tentative decisions with EPA for review and comment in order to encourage collaboration and national consistency. Formalizing collaboration would have

the benefit of reinforcing existing working relationships between EPA and the states.

Comments: Requirement To Share Copies of Variances and Non-Waste Determinations

A number of comments did not support a requirement for states to share copies of solid waste variance and non-waste determination petitions with EPA for comment. These commenters argued that another layer of bureaucracy would delay the process. One commenter was concerned with protecting a company's confidential business information. Another commenter argued that EPA has not made an adequate case for the need for national approvals and that there may be legitimate reasons for arriving at different conclusions, for different variance petitions.

Some commenters, however, supported EPA's efforts to collect solid waste variance and non-waste determination decisions and to share the information with other states.

EPA's Response: Requirement To Share Copies of Variances and Non-Waste Determinations

EPA recognizes commenters' concerns who argued that requiring states to share copies of solid waste variance and non-waste determination petitions with EPA for review and comment would likely increase the duration of the petition process. Therefore, EPA is not codifying this requirement in the final rule. EPA, however, will likely continue to work with the states in order to increase state-to-state consistency in such determinations and may pursue non-regulatory efforts to collect and share solid waste variances and non-waste determinations as part of implementing the final rule.

XIX. Major Comments on the Proposed Revisions to Pre-2008 Recycling Exclusions

In the 2011 DSW proposed rule, EPA considered whether additional requirements should be codified for recycling exclusions and exemptions that EPA promulgated prior to the 2008 DSW final rule. Specifically, EPA requested comment on codifying the legitimate recycling standard in 40 CFR 260.43, the contained standard in 40 CFR 260.10, and the notification provision in 40 CFR 260.42 for 32 regulatory provisions that exclude or exempt certain types of recycling from full Subtitle C regulations.[52]

However, EPA explicitly did not reopen comment on any substantive provisions of the regulatory exclusions or exemptions. The inclusion of requirements for legitimacy, containment, and notification were strictly meant as means to better enforce the regulations.

The request for comment stemmed from EPA's analysis of a report it developed as part of the DSW rulemaking, "An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials" (environmental problems study), which analyzed 218 recycling damage cases.[53] The goal of the environmental problems study was to identify and characterize environmental problems that have been attributed to hazardous secondary material recycling activities. EPA then used the findings from this study to craft a number of conditions for the 2008 DSW final rule, which were specifically designed to target the major causes of damage and thus help define "discard" of hazardous secondary materials. These conditions, however, were applied only to the 2008 DSW exclusions.

EPA reviewed and analyzed each damage case in the environmental problems study and determined the regulatory provision that likely, or potentially, governed the management of the hazardous secondary materials.[54] This analysis was based on the type of hazardous secondary material and the date of the damage case related to the effective date of the regulatory provision. From this analysis, EPA had concluded that over half of the damage cases in the environmental problems study were associated with hazardous secondary materials that were likely excluded or exempted from Subtitle C regulation under an existing (pre-2008) regulatory provision.[55] For example, EPA reported in the 2011 DSW proposed rule that 52 damage cases (23%) are associated with scrap metal that is likely excluded under § 261.4(a)(13) and/or § 261.6(a)(3)(ii), while drum reconditioning accounted for 23 damage cases (10%), in which the residuals are likely excluded under 40 CFR 261.7. Additionally, 35 damage cases (16%) were associated with batteries that are likely managed under 40 CFR 273.2 and/or 40 CFR part 266 subpart G. Based on these results, and given that many of the pre-2008 recycling exclusions do not directly specify conditions that are necessary to ensure discard is not occurring, we concluded that these provisions may not be adequately enforceable in order to protect human health and the environment. Thus, in the 2011 DSW proposal, we requested comment on whether EPA should codify additional conditions for these recycling exclusions.

Many comments in response to EPA's request for comment on whether the Agency should codify additional conditions to the pre-2008 recycling provisions were unfavorable, although a number of comments indicated support for the codification.

Comments: Potential Impact of Additional Requirements

Industry commenters, and scrap metal recyclers in particular, strongly opposed adding conditions, arguing that the additional conditions will pose an undue burden on businesses without any environmental benefit and will discourage recycling. For example, commenters argued that scrap metal recyclers go to great lengths to ensure that they do not handle hazardous waste. These commenters said that, if EPA were to add conditions to the scrap metal exclusion, a scrap metal recycler would be required to obtain additional insurance, local licenses, training, new inspection procedures, lawyers, and consultants in order to maintain compliance and to prepare for an inadvertent loss of the exclusion, which would make it a handler of hazardous waste. Commenters argued that many scrap metal businesses are small and family-owned and cannot afford these new requirements and thus, these regulations will severely affect business and jobs.

Many commenters also argued that the contained standard is not necessary or practical and would be expensive. Commenters believed that the one-size-

[52] EPA also proposed additional recordkeeping requirements in the speculative accumulation standard in 40 CFR 261.1(c)(8). See section XIV for responses to these comments.

[53] The original environmental problems study, published January 11, 2007, reviewed 208 damage cases. Based on information submitted by commenters to the 2007 DSW supplemental proposed rule, EPA reviewed an additional ten recycling damage cases in an addendum to the environmental problems study, published July 14, 2008. A second addendum was published in June 2011. As part of this DSW final rule, EPA updated the environmental problems study to combine all of the information compiled from the 2007 study, the 2008 and 2011 addenda, and new information collected by EPA since June 2011. This 2014 updated study includes information on 250 damage cases and can be found in the docket for today's rule.

[54] U.S. EPA *Correlation of Recycling Damage Cases with Regulatory Exclusions, Exemptions or Alternative Standards.*

[55] The determination that the hazardous secondary materials were "likely" associated with pre-2008 recycling exclusions and exemptions was based on the waste description and the fact that most recyclers did not appear to have a RCRA permit. EPA did not specifically verify if the damage case facility was operating under an exclusion or exemption.

fits-all approach that EPA requested comment on fails to reflect EPA's recognition over the years of the need to tailor any conditions for regulatory exclusions to the specific characteristics of the recycling activities. For example, one commenter argued that the contained standard is redundant for the spent wood preservatives exclusion under 40 CFR 261.4(a)(9), which already requires facilities to manage solutions and wastewater "to prevent release to either land or groundwater or both" and to construct recycling units so "prior to reuse they can be visually or otherwise determined to prevent such release." This commenter also noted that drip pads must comply with 40 CFR part 265 subpart W. Other commenters noted that applying the contained standard to lead-acid batteries is inappropriate and unnecessary because EPA, on several occasions, has recognized that individual lead-acid batteries qualify as "containers," citing a November 17, 1989, memo from Sylvia Lowrance (RO 13339). Furthermore, these commenters argued that the contained standard duplicates § 266.80(b).

Regarding notification, many commenters did not support adding notification to the pre-2008 exclusions. These commenters argued that the EPA Form 8700–12 (Site Identification Form) and, in particular the Addendum to the Site Identification Form, which is used to notify under 40 CFR 260.42, is too burdensome for facilities operating under a pre-2008 exemption/exclusion. For example, the Addendum requires facilities to list their hazardous secondary materials using EPA hazardous waste codes. In some cases, particularly for scrap metal recyclers, facilities would be required to determine which secondary material would be considered a hazardous secondary material, which may involve extensive testing in order to determine which hazardous waste code to report on the form. Additionally, the Addendum also requires facilities to report quantities of hazardous secondary material managed under the exclusions, but commenters explained that facilities operating under a pre-2008 exclusion have not generally determined which secondary material would be considered a hazardous secondary material, and therefore, any quantity estimates, which are required on the Addendum, would not be reliable for programmatic decisions. Moreover, commenters argued that notification would be difficult for facilities with multiple excluded processes. For example, one commenter explained that one facility in Tennessee has more than a hundred closed-loop recycling processes and thus it would be extremely onerous to report each process on a notification.

Commenters also argued that it is difficult to estimate the number of facilities operating under the exclusions and thus the impact on the state implementers of the notification program is uncertain. For example, notification would impact all forms of scrap metal handling (junk yards, scrap dealers, steel-makers), generators and handlers managing lead-acid batteries (vehicle repair facilities, retailers) and precious metals destined for reclamation (x-ray facilities, dentists, vets, jewelers). These commenters argued that most states are already under resource constraints and will be unable to cope with the tens of thousands of new forms that would need processing if EPA were to codify notification as a condition of the exclusions. Some state commenters suggested ways to reduce the burden on states, including not requiring periodic notifications on the same day that biennial reports are due and by implementing a process whereby notifications could be submitted electronically. Commenters also noted that the re-notification requirement for excluded facilities would be more stringent than what is currently required for hazardous waste small quantity generators.

EPA's Response: Potential Impact of Additional Requirements

EPA did not believe at the time of the proposal that the additional requirements—meeting the legitimate recycling standard, the contained standard, and the notification requirement—would present an undue burden on facilities. As discussed in more detail below, this is because EPA considers certain requirements, like legitimate recycling and containment, inherent in the definition of solid waste recycling exclusions and assumes that the regulated community already meets these standards. Notification was considered to be a simple reporting requirement that would pose minimal additional burden.

However, upon reviewing the comments, EPA has determined that more study is needed before taking action. Therefore, EPA is not making any changes to the language of the 32 recycling exclusions and exemptions at this time. In the case of the legitimacy provision, EPA is instead codifying a general prohibition against sham recycling. In the case of the contained standard and notification requirement, EPA is deferring any action until further study is conducted. EPA's response to comments regarding burden implications of each of the provisions is discussed in more detail below.

(1) *Legitimacy.* With respect to legitimacy, it has been EPA's 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. Additionally, EPA considers the four legitimacy factors codified in 40 CFR 260.43 to be substantively the same as the existing legitimacy policy, which has been articulated in the 1989 Lowrance Memo and in various DSW **Federal Register** notices.

In proposing to codify the legitimate recycling standard for all exclusions, we did not intend to raise questions about the status of general legitimacy determinations that underlie these existing exclusions from the definition of solid waste, or about case-specific determinations that have already been made by EPA or the states. As noted in the comments, EPA generally considered the legitimacy of the recycling process when the original determinations were promulgated, and the Agency did not intend to force companies to have to reexamine long standing legitimate recycling practices. Therefore EPA is not revising the pre-2008 exclusions and exemptions to include a legitimacy requirement.

However, as discussed in section VIII, 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. Therefore, EPA is codifying a general statement in § 261.2(g) that makes it clear that a hazardous secondary material found to be sham recycled is discarded and thus, is a solid waste. By codifying a prohibition on sham recycling that applies to all hazardous secondary materials being recycled, we are confirming that we expect anyone operating under a recycling exclusion or exemption to be doing so legitimately. EPA finds that this will give implementing agencies a clear regulatory statement that can be used to enforce against sham recyclers, yet not require the vast majority of recyclers that are performing legitimate recycling under the pre-2008 exclusions and exemptions to revisit previously-made legitimacy determinations.

Additionally, the Agency has, based on the public comments, made adjustments to the legitimacy factors to build in more flexibility for meeting each factor and thus, ease the use of the

standard. For example, EPA has modified factor 4 to rely on widely-recognized commodity standards and specifications in the case where there is no analogous product as a way of recognizing industry standards that ensure their products are legitimate. EPA gives the example in the regulatory text of commodity specification grades for common metals, which would be relevant to scrap metal recyclers, among other metal recyclers. EPA has also included a provision that states that when ''hazardous secondary materials being recycled are returned to the original process or processes from which they were generated to be reused, the product of the recycling process is comparable to a legitimate product or intermediate,'' and thus would meet factor 4. This revision addresses concerns regarding the closed loop exemption at § 261.4(a)(8), as well as mineral processing to produce primary metals, because these processes always include materials looping back into the process to ensure that all the valuable metals that can be extracted from the ore are being collected for use.

For more information and responses to comments on legitimacy, please see section XVII in today's preamble.

(2) *Contained.* With respect to the contained standard, EPA has long determined that hazardous secondary materials that are released to the environment and are not destined for recycling are clearly discarded. Based on the environmental problems study, the results of which showed mismanagement of hazardous secondary materials as one of the major causes of damage, EPA requested comment in the 2011 DSW proposed rule on applying the proposed contained standard to all hazardous secondary materials. EPA assumes that the vast majority of recycling facilities ''contain'' their hazardous secondary materials and thus would already meet the contained standard. Therefore, EPA assumed that the contained standard would not present any additional burden to the regulated community, especially since the contained standard is ''performance-based'' and provides much flexibility, but could be used to enforce against those facilities that were mismanaging their materials.

However, as the commenters' noted, EPA has already promulgated certain management standards for some exclusions based on the case-specific characteristics of the hazardous secondary material or recycling process (*e.g.,* drip pads used to manage wastewaters and/or spent wood preserving solutions under 40 CFR 261.4(a)(9)). Thus, EPA understands that simply applying the contained standard wholesale across the 32 recycling provisions, may not be the most efficient or effective course of action as EPA would not be considering how the contained standard would work within each specific exclusion and its existing conditions. Therefore, EPA is deferring action on applying the contained standard to the pre-2008 exclusions and exemptions until we can more adequately address commenters' concerns.

(3) *Notification.* With respect to notification, EPA's intent was to provide basic information to regulatory authorities in order to enable adequate compliance monitoring of the exclusions. EPA had requested comment on requiring notification under 40 CFR 260.42 using the Site ID Form (EPA Form 8700–12), which is the same provision used for the 2008 DSW final rule exclusions. Given that this form is familiar to the regulated community, we had not considered this requirement to pose an undue burden.

However, based on comments we received, we understand that using the same notification requirement developed for hazardous secondary materials that were recently excluded in 2008 presents challenges when used for hazardous secondary materials that have been excluded for many decades. For example, the notification provision in 40 CFR 260.42 requires information on types of hazardous secondary materials (using hazardous waste codes) and quantities of these materials. However, as noted by commenters, this is difficult, for example, for scrap metal recyclers, because these facilities currently do not distinguish between non-hazardous scrap metal and scrap metal that would be hazardous waste were it not for the exclusion. Requiring notification in this instance may infer that scrap metal recyclers would be required to extensively test their hazardous secondary material in order to determine if the scrap metal was hazardous, and therefore excluded, and to determine which hazardous waste code to report on the form. Additionally, the notification presents challenges for facilities with numerous closed-loop recycling processes because the form would require these facilities to specifically list each process. We also understand commenters' concerns regarding the burden on states that must review and process these forms. Because the majority of the pre-2008 exclusions and exemptions do not include notification requirements, EPA does not have precise data regarding how many facilities are recycling hazardous secondary materials under these exclusions and exemptions. This lack of data hinders EPA's ability to more precisely estimate the burden on states and whether such a requirement would be environmentally beneficial. Therefore, EPA is deferring action on applying notification to the pre-2008 exclusions and exemptions until we can more adequately address commenters' concerns.

Comments: EPA's Authority To Add Requirements to Pre-2008 Exclusions

Commenters stated that EPA lacks jurisdiction to add requirements to materials that are not solid wastes and, if EPA is changing its position on the waste status of these materials, the Agency must provide a reasoned explanation for disregarding facts and circumstances that underlay the prior policy. Some commenters argued that EPA had evaluated each of the hazardous secondary materials at the time it promulgated the exclusions and thus, EPA must demonstrate why management in compliance with the existing conditions constitutes discard.

EPA's Response: EPA's Authority To Add Requirements to Pre-2008 Exclusions

EPA disagrees with comments that argue that EPA does not have the authority to require conditions for hazardous secondary materials being recycled. As noted in the Background section of this preamble, in the Safe Food court case, the D.C. Circuit upheld an EPA rule that excludes from the definition of solid waste hazardous secondary materials used to make zinc fertilizers, and the fertilizers themselves, as long as the recycled materials meet certain handling, storage, and reporting conditions and the resulting fertilizers have concentration levels for certain hazardous constituents that fall below specified thresholds. It is therefore within EPA's discretion to determine conditions under which a hazardous secondary material is not being discarded and thus may be excluded from hazardous waste regulation.

However, EPA agrees that more information is needed before determining whether adding requirements to the pre-2008 exclusions and exemptions is needed to make them more enforceable. EPA's request for comment on this issue was based on conclusions drawn from the environmental problems study, which evaluated over 200 damage cases, and the *Correlation of Recycling Damage Cases with Regulatory Exclusions, Exemptions or Alternative Standards,* which analyzed which damage cases

were likely operating under a pre-2008 exclusion and exemption. From these studies, EPA concluded that over half of the damage cases were likely operating under an existing exclusion and exemption. However, EPA did not examine the specific underlying causes of the damage cases (whether they were based on the lack of oversight of the pre-2008 exclusions and exemptions or on other causes). Thus EPA has decided that additional information is needed to determine whether additional regulatory action is needed, or whether the problems should be addressed through some other method, such as outreach and compliance assistance.

Comments: Record Support

Many commenters argued that EPA's record does not support this regulatory change and that EPA failed to conduct a thorough analysis. For example, commenters argued that EPA's record needs to show that significant environmental problems have been caused by a meaningful number of facilities operating in compliance with the pre-2008 exclusions and exemptions. These commenters noted that many of the damage cases involve civil or criminal violations, indicating that the problem was non-compliance with the regulations, not from a lack of regulations. Thus, these commenters believed that EPA already has sufficient authority to enforce against bad actors. Additionally, EPA's own analysis only links damage cases to just seven exclusions, yet EPA is considering adding conditions to 32 exclusions.

EPA's Response: Record Support

EPA disagrees with comments that argue that since the environmental problems study includes cases with civil or criminal violations, this demonstrates existing regulations are adequately enforceable. On the contrary, the frequency of violations in the damage cases may demonstrate the need for greater, not less, oversight, particularly in the case of sham recycling, where discard via over-accumulation of material can become a major problem before the Agency can take action.

For example, in one of the damage cases, 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 K061, and, after 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, resulting in significant risk to human health and the environment from discarded material. Therefore EPA is codifying a general probation against sham recycling, in order to prevent such cases from occurring.

However, in the case of containment and notification, EPA agrees with commenters and has determined that additional information about the underlying causes of the damage cases would be useful to determine whether additional regulatory action is needed, or whether the problems should be addressed through some other method, such as outreach and compliance assistance.

EPA also understands commenters' concerns regarding the limitations of the correlation analysis, including the fact that EPA could only correlate with confidence 7 of the 32 recycling exclusions and exemptions to damage cases in its environmental problems study. The analysis was hampered by a lack of precision in the data. For example, because notification is not required for the majority of pre-2008 exclusions and exemptions, we can only conservatively identify damage case correlations where the type of hazardous secondary material very clearly matches to an exclusion (*e.g.,* scrap metal). We lack information to make inferences for broadly applicable exclusions, (*e.g.,* use/reuse) or for broadly defined hazardous secondary materials (*e.g.,* metal-bearing wastes). Therefore, by virtue of some exclusions' broad applicability, we were unable to correlate them to specific damage cases.

Although it is difficult to assign specific damage cases to certain exclusions, we note that in the environmental problems study only nine of the damage cases were operating under a RCRA permit at the time of damage. Thus, EPA can generally conclude that the majority of the damage cases were operating outside of RCRA, inferring these facilities were either operating illegally or likely operating under an exclusion, exemption, alternate standard, or no standard at all. In the case of containment and notification, EPA has determined that additional information about the underlying causes of the damage cases would be useful to determine whether additional regulatory action is needed, or whether the problems should be addressed through some other method, such as outreach and compliance assistance.

Comments: Time To Comment

Industry commenters argued that they did not have adequate time to comment. Further, they had no forewarning of the changes EPA was considering before the proposal was issued. EPA's request for comment did not involve prior discussions with stakeholders, as is typical when developing proposed rules. Moreover, this issue was not part of the 2008 DSW final rulemaking, Sierra Club's petition, or part of EPA's settlement agreement with the Sierra Club. Many commenters urged EPA to meet with industry representatives in order to better understand industry practices.

Commenters also argued that if EPA codified a notification as a condition of the exclusions, thousands of facilities would be at risk of losing the exclusion due to failure to notify, which could result in civil fines and solid waste management fees for the facility. These commenters stated that notification as a condition in this instance presents acute risks to facilities operating under an exclusion, because, up to this point, these facilities have not been required to comply with the RCRA hazardous waste requirements. Thus, commenters said many facilities may fail to notify simply because they were unaware the regulations had changed.

EPA's Response: Time To Comment

EPA understands commenters that argued they did not have adequate time to comment on applying the contained standard and notification for pre-2008 recycling exclusions and exemptions. Contrary to the legitimate recycling standard, which has been EPA's long-standing policy and has been articulated in the 1989 Lowrance memo and various **Federal Register** notices, EPA had not previously indicated it was considering the contained standard and notification for pre-2008 exclusions and exemptions prior to the 2011 DSW proposal. Although the 2011 proposed rule provided an opportunity for public comment, EPA understands commenters' concerns, with notification in particular, as these provisions would impact thousands of businesses, many of which may not be closely following DSW rulemaking activity. EPA agrees that a more inclusive approach to a potential rulemaking that involves stakeholders in upfront discussions would likely result in gainful information, more effective strategies for addressing issues, and better communication with the regulated community.

Comments: Support for Adding Requirements to Existing Exclusions

Some commenters, including environmental organizations, supported adding conditions to the pre-2008 exclusions and exemptions, arguing that EPA must adopt the regulatory conditions, including the legitimacy standard in light of the risks posed by the 32 recycling exclusions and the historical pattern of environmental contamination at facilities that are exempt from RCRA. These commenters believed that the prevention of one damage case every two years would more than offset the compliance costs. Some state commenters also supported adding conditions to the pre-2008 exclusions and exemptions, although some argued that EPA should exempt certain types of hazardous secondary materials, like scrap metal, spent lead-acid batteries, closed-loop recycling, and printed circuit boards, from the requirements.

Other commenters supported adding notification to the pre-2008 recycling provisions. These commenters argued that states may not be aware of excluded activities unless they are occurring at facilities that are otherwise regulated or are the subject of a citizen complaint. These commenters said that notifications would allow states to periodically evaluate these facilities to ensure they are meeting the terms of the exclusion and that, while the initial burden on states might be quite heavy, the long-term benefit of knowing where these facilities are justifies this burden.

EPA's Response: Support for Adding Requirements to Existing Exclusions

EPA acknowledges commenters who support additional requirements for the pre-2008 exclusions and exemptions in order to avoid potential damage cases and protect human health and the environment. However, based on the comments received, the EPA has determined that it does not have enough information to determine if adding requirements to the existing pre-2008 recycling exclusions and exemptions would be the most effective method for addressing the damage cases or whether a more targeted approach would be more appropriate.

Regarding legitimacy, in lieu of adding a legitimacy requirement to the specific recycling exclusions, EPA is instead codifying a general statement in § 261.2(g) that makes it clear that a hazardous secondary material found to be sham recycled is discarded and thus, is a solid waste. EPA finds that this will give implementing agencies a clear regulatory statement that can be used to enforce against sham recyclers, yet not require the vast majority of recyclers that are performing legitimate recycling under the pre-2008 exclusions and exemptions to revisit previously-made legitimacy determinations. EPA also notes that today's final legitimacy standard includes modifications that address implementation concerns for certain hazardous secondary materials and processes, such as scrap metal and closed-loop recycling. For more information on these modifications, please see the other sections on legitimacy in this preamble.

Regarding the contained standard and notification, for reasons stated above, the Agency is deferring action on applying the contained standard and notification to the pre-2008 exclusions and exemptions in order to consider how best to implement these conditions in the context of the case-specific circumstances of the regulatory provisions.

XX. State Authorization

A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize a qualified state to administer and enforce a hazardous waste program within the state in lieu of the federal program, and to issue and enforce permits in the state. A state may receive authorization by following the approval process described in 40 CFR 271.21 (see 40 CFR part 271 for the overall standards and requirements for authorization). EPA continues to have independent authority to bring enforcement actions under RCRA sections 3007, 3008, 3013, and 7003. An authorized state also continues to have independent authority to bring enforcement actions under state law.

After a state receives initial authorization, new federal requirements promulgated under RCRA authority existing prior to the 1984 Hazardous and Solid Waste Amendments (HSWA) do not apply in that state until the state adopts and receives authorization for equivalent state requirements. In contrast, under RCRA section 3006(g) (42 U.S.C. 6926(g)), new federal requirements and prohibitions promulgated pursuant to HSWA provisions take effect in authorized states at the same time that they take effect in unauthorized states. As such, EPA carries out the HSWA requirements and prohibitions in authorized states, including the issuance of new permits implementing those requirements, until EPA authorizes the state to do so.

Authorized states are required to modify their programs only when EPA enacts federal requirements that are more stringent or broader in scope than the existing federal requirements. RCRA section 3009 allows the states to impose standards more stringent than those in the federal program (see also 40 FR 271.1(i)). Therefore, authorized states are not required to adopt federal regulations, both HSWA and non-HSWA, that are considered less stringent than previous federal regulations or that narrow the scope of the RCRA program and Subtitle C hazardous waste regulations would continue to apply in those states.

B. Effect on State Authorization of Final Rule

The regulations finalized in today's notice are not promulgated under the authority of HSWA. Thus, the standards will be applicable on the effective date only in those states that do not have final authorization of their base RCRA programs. Moreover, authorized states are required to modify their programs only when EPA promulgates federal regulations that are more stringent or broader in scope than the authorized state regulations. For those changes that are less stringent, states are not required to modify their program. This is a result of section 3009 of RCRA, which allows states to impose more stringent regulations than the federal program.

The revisions to the definition of solid waste being finalized today are more stringent than those promulgated under the 2008 DSW final rule, so those states which have adopted the 2008 DSW final rule would be required to modify their programs. However, when compared to the federal program that was in place when the 2008 DSW final rule was finalized, many of today's revisions would be considered less stringent (*e.g.*, the revised generator-controlled exclusion, the verified recycler exclusion, and the remanufacturing exclusion). Therefore, authorized states that have not adopted the 2008 DSW final rule are not required to modify their programs to adopt these exclusions and the federally authorized state hazardous waste regulations applying the full subtitle C requirements will continue to apply in those states. As noted in footnote 58 of the proposed rule, final decisions regarding whether a state rule is more stringent under 40 CFR 271.1(i)(1) or broader in scope than the federal program under 40 CFR 271.1(i)(2) are made when the Agency authorizes state programs. However, the revisions to the definition of legitimacy and the prohibition of sham recycling, as discussed in section VIII of the preamble, are more stringent than the current federal hazardous waste

program because they codify implicit requirements that have been largely implemented through guidance. Also, the additional recordkeeping requirement in the speculative accumulation provision in 40 CFR 261.1(c)(8), as discussed in section V of the preamble, is also more stringent than the current federal hazardous waste program. Finally, the changes to the standards and criteria for variances from classification as a solid waste discussed in section IX are more stringent than the current federal hazardous waste program. In these cases, all authorized states will be required to modify their programs to adopt equivalent, consistent and no less stringent requirements.

XXI. Statutory and Executive Order (EO) Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is a ''significant regulatory action'' because it is likely to ''raise novel legal or policy issues'' under section 3(f)(4) of Executive Order 12866. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011) and any changes made in response to OMB recommendations have been documented in the docket for this action.

In addition, EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis is contained in EPA's background document for today's action titled ''Regulatory Impact Analysis'' (RIA). A copy of the analysis is available in the docket for this action and the analysis is briefly summarized here. EPA estimates that the 2014 DSW rule will result in a future annual costs savings of $1.0 to $2.0 million per year, depending on discount rate used, as compared to a baseline of full implementation of the 2008 DSW rule. This cost savings is based on the assumption that same number of states would adopt the 2014 DSW rule as would adopt the 2008 DSW rule. However, because the 2014 DSW rule addresses many of the concerns states raised about the 2008 DSW rule, there is a potential that more states would adopt it, thus increasing the upper bound of annual cost savings to $17.5 million to $59 million per year.

In addition to estimating the cost savings of today's action, the RIA also provides qualitative (*i.e.,* non-monetized) descriptions of three categories of expected future benefits for today's action consisting of: (1) Reduction in future environmental damages associated with industrial recycling of hazardous secondary materials; (2) improved industry environmental compliance; (3) indirect legal & financial benefits to industry consisting of reduced liability, less uncertainty for regulated entities, and lower legal and financial credit costs.

B. Paperwork Reduction Act (Information Collection Request)

The information collection requirements in this rule will be submitted for approval to the Office of Management and Budget (OMB) under the *Paperwork Reduction Act,* 44 U.S.C. 3501 *et seq.* The information collection requirements are not enforceable until OMB approves them. The information collection request has been updated since the July 22 proposed rule to reflect the final rule requirements and to respond to public comments. The EPA ICR number for this next submission will be 2310.03 and the OMB control number will be 2050–0202.

Several information requirements established for this action are voluntary to the extent that the conditional exclusions being finalized today are voluntary and represent an overall reduction in burden, as compared with the alternative information requirements associated with managing hazardous secondary materials as hazardous waste. The information requirements help ensure that: (1) Entities operating under today's rule are held accountable to the applicable requirements; and (2) inspectors can verify compliance with the conditions of today's rule when needed.

EPA estimates the total annual burden to respondents under the new paperwork requirements as a result of the final rule changes to be 34,454 hours and $68,071 in operations and maintenance costs ($2,378,111, including labor costs), respectively. Burden and costs continuing from the 2008 ICR No. 2310.02 include 2,034 hours and $299 in operations and maintenance ($144,235, including labor costs), respectively. The total annual burden and operations and maintenance costs are estimated at 36,488 hours and $68,370 in operations and maintenance costs, or 109,464 hours and $205,110 in operations and maintenance over three years. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the **Federal Register** to display the OMB control number for the approved information collection requirements contained in this final rule.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business based on small size standards defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201 for 27 NAICS codes with the largest number of affected entities; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. The small entities directly regulated by this final rule are primarily small businesses in the manufacturing sector (*i.e.,* NAICS codes 32 and 33). We have determined that the average annual impact on small businesses is estimated to be significantly less than 1% of annual business sales for all small entities.

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities. Comments were requested, and the comment period was extended once until October 20, 2011. In September 2011, EPA held two public meetings to accept public comment on the proposal in Philadelphia, PA and in Chicago, IL.

D. Unfunded Mandates Reform Act

This rule does not contain a Federal mandate that may result in expenditures of $100 million or more for state, local, and Tribal governments, in the aggregate, or the private sector in any one year. EPA's RIA for today's action estimates the maximum state government share of future direct costs for complying with today's action is $0.3 million per year. No impacts are expected for local or Tribal governments. Because these direct costs are well below the $100 million annual direct cost threshold, this rule is not subject to the requirements of sections 202 or 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132.

The RIA estimates that the state government share of future annualized direct costs is $0.3 million per year. No added costs are expected for local or tribal governments. Because these direct costs are well below the $25 million Federalism test threshold, EPA concludes that Executive Order 13132 does not apply to today's action.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Subject to the Executive Order 13175 (65 FR 67249, November 9, 2000), EPA may not issue a regulation that has tribal implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by tribal governments, or EPA consults with tribal officials early in the process of developing the regulation and develops a tribal summary impact statement.

EPA has concluded that this action may have tribal implications. However, it will neither impose substantial direct compliance costs on tribal governments, nor preempt tribal law. Under the RCRA statute, the federal government implements hazardous waste regulations directly in Indian Country. Thus, the changes to the hazardous waste regulations promulgated today would not impose any direct costs on tribal governments. In addition, currently there are no facilities operating on land controlled by tribal governments, but if such facilities did locate in such areas, then this action could have tribal implications, to the extent that the rule is intended to address potential adverse impacts of the 2008 DSW final rule.

EPA consulted with tribal officials early in the process of developing this regulation to ensure they had an opportunity for meaningful and timely input into its development. Specifically, tribal representatives participated in the public meetings EPA held on the draft environmental justice methodology and noted that the Bureau of Census data used as the basis for the demographic analysis may undercount indigenous populations. EPA also sent a consultation letter to all federally recognized tribes requesting a consultation on the 2011 DSW proposal and held a tribes-only live webinar on August 11, 2011 to allow tribal official the opportunity to ask questions and offer input into the proposed rule. EPA did not receive formal comments from tribal officials during the consultation process.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to EO 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in EO 12866, and because the Agency does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in the *Potential Adverse Impacts Under the Definition of Solid Waste Exclusions (Including Potential Disproportionate Adverse Impacts to Minority and Low-Income Populations)* in the docket for today's rule.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not a ''significant energy action'' as defined in Executive Order 13211 (66 FR 28355, May 22, 2001), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. EPA does not expect today's final rule to adversely affect the supply, distribution, or use of energy.

On the contrary, EPA expects that at least two elements of today's final rule may provide future annual energy savings by (a) inducing under today's solvent remanufacturing exclusion larger future annual quantities of industrial processing solvents which get recycled rather than disposed (*i.e.,* incinerated) thereby reducing the relatively higher lifecycle energy and other lifecycle resource impacts associated with manufacturing virgin solvents, and (b) inducing more state governments to adopt the other DSW exclusions which are revised under today's final rule, thereby generally stimulating other types of industrial recycling of hazardous secondary materials (HSM), which EPA also expects may reduce adverse lifecycle impacts on the economy and environment compared to the lifecycle impacts of producing virgin materials for which larger future annual quantities of recycled HSM may substitute. Thus, Executive Order 13211 does not apply to this rule.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.,* materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Executive Order 12898: Environmental Justice

Executive Order 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this final rule will not have disproportionately high and adverse human health or

environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. The purpose of this final rule is to revise the 2008 DSW final rule in such a way that reduces potential adverse impacts, including potential disproportionate impacts to minority and low-impact communities. For further information on the potential for disproportionate impacts to minority and low-income populations, see the *Potential Adverse Impacts Under the Definition of Solid Waste Exclusions (Including Potential Disproportionate Adverse Impacts to Minority and Low-Income Populations)* in the docket for today's rule.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A Major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective on July 13, 2015.

List of Subjects

40 CFR Part 260

Environmental protection, Administrative practice and procedure, Confidential business information, Hazardous waste, Reporting and recordkeeping requirements.

40 CFR Part 261

Environmental protection, Hazardous waste, Incorporation by reference, Recycling, Solid waste.

Dated: December 10, 2014.

Gina McCarthy,

Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

■ 1. The authority citation for part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921–6927, 6930, 6935, 6937, 6938, 6939 and 6974.

Subpart B—Definitions

■ 2. Section 260.10 is amended as follows:

■ a. Add in alphabetical order the definition of "Contained;"

■ b. Remove the definition of "Hazardous secondary material generated and reclaimed under the control of the generator;" and

■ c. Add in alphabetical order the definition of "Remanufacturing,"

The additions read as follows:

§ 260.10 Definitions

* * * * *

Contained means held in a unit (including a land-based unit as defined in this subpart) that meets the following criteria:

(1) The unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment. Unpermitted releases are releases that are not covered by a permit (such as a permit to discharge to water or air) and may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures;

(2) The unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and

(3) The unit holds hazardous secondary materials that are compatible with other hazardous secondary materials placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions.

(4) Hazardous secondary materials in units that meet the applicable requirements of 40 CFR parts 264 or 265 are presumptively contained.

* * * * *

Remanufacturing means processing a higher-value hazardous secondary material in order to manufacture a product that serves a similar functional purpose as the original commercial-grade material. For the purpose of this definition, a hazardous secondary material is considered higher-value if it was generated from the use of a commercial-grade material in a manufacturing process and can be remanufactured into a similar commercial-grade material.

* * * * *

Subpart C—Rulemaking Petitions

■ 3. Section 260.30 is amended by adding paragraph (f) to read as follows:

§ 260.30 Non-waste determinations and variances from classification as a solid waste.

* * * * *

(f) Hazardous secondary materials that are transferred for reclamation under § 261.4(a)(24) and are managed at a verified reclamation facility or intermediate facility where the management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards.

■ 4. Section 260.31 is amended by revising paragraph (c) and adding paragraph (d) to read as follows:

§ 260.31 Standards and criteria for variances from classification as a solid waste.

* * * * *

(c) The Administrator may grant requests for a variance from classifying as a solid waste those hazardous secondary materials that have been partially reclaimed, but must be reclaimed further before recovery is completed, if the partial reclamation has produced a commodity-like material. A determination that a partially-reclaimed material for which the variance is sought is commodity-like will be based on whether the hazardous secondary material is legitimately recycled as specified in § 260.43 of this part and on whether all of the following decision criteria are satisfied:

(1) Whether the degree of partial reclamation the material has undergone is substantial as demonstrated by using a partial reclamation process other than the process that generated the hazardous waste;

(2) Whether the partially-reclaimed material has sufficient economic value that it will be purchased for further reclamation;

(3) Whether the partially-reclaimed material is a viable substitute for a product or intermediate produced from virgin or raw materials which is used in subsequent production steps;

(4) Whether there is a market for the partially-reclaimed material as demonstrated by known customer(s) who are further reclaiming the material (*e.g.,* records of sales and/or contracts

and evidence of subsequent use, such as bills of lading);

(5) Whether the partially-reclaimed material is handled to minimize loss.

(d) The Administrator may grant requests for a variance from classifying as a solid waste those hazardous secondary materials that are transferred for reclamation under § 261.4(a)(24) and are managed at a verified reclamation facility or intermediate facility where the management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards. The Administrator's decision will be based on the following criteria:

(1) The reclamation facility or intermediate facility must demonstrate that the reclamation process for the hazardous secondary materials is legitimate pursuant to § 260.43;

(2) The reclamation facility or intermediate facility must satisfy the financial assurance condition in § 261.4(a)(24)(vi)(F);

(3) The reclamation facility or intermediate facility must not be subject to a formal enforcement action in the previous three years and not be classified as a significant non-complier under RCRA Subtitle C, or must provide credible evidence that the facility will manage the hazardous secondary materials properly. Credible evidence may include a demonstration that the facility has 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) The intermediate or reclamation facility must have the equipment and trained personnel needed to safely manage the hazardous secondary material and must meet emergency preparedness and response requirements under 40 CFR part 261 subpart M;

(5) If residuals are generated from the reclamation of the excluded hazardous secondary materials, the reclamation facility must have the permits required (if any) to manage the residuals, have a contract with an appropriately permitted facility to dispose of the residuals or present credible evidence that the residuals will be managed in a manner that is protective of human health and the environment, and

(6) The intermediate or reclamation facility must address the potential for risk to proximate populations from unpermitted releases of the hazardous secondary material to the environment (*i.e.,* releases that are not covered by a permit, such as a permit to discharge to water or air), which may include, but are not limited to, potential releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures), and must include consideration of potential cumulative risks from other nearby potential stressors.

■ 5. Section 260.33 is amended by revising paragraph (c) and adding paragraphs (d) and (e) to read as follows:

§ 260.33 Procedures for variances from classification as a solid waste, for variances to be classified as a boiler, or for non-waste determinations.

* * * * *

(c) In the event of a change in circumstances that affect how a hazardous secondary material meets the relevant criteria contained in § 260.31, § 260.32, or § 260.34 upon which a variance or non-waste determination has been based, the applicant must send a description of the change in circumstances to the Administrator. The Administrator may issue a determination that the hazardous secondary material continues to meet the relevant criteria of the variance or non-waste determination or may require the facility to re-apply for the variance or non-waste determination.

(d) Variances and non-waste determinations shall be effective for a fixed term not to exceed ten years. No later than six months prior to the end of this term, facilities must re-apply for a variance or non-waste determination. If a facility re-applies for a variance or non-waste determination within six months, the facility may continue to operate under an expired variance or non-waste determination until receiving a decision on their re-application from the Administrator.

(e) Facilities receiving a variance or non-waste determination must provide notification as required by § 260.42 of this chapter.

■ 6. Section 260.34 is amended by revising paragraphs (b)(4) and (c)(5) to read as follows:

§ 260.34 Standards and criteria for non-waste determinations.

* * * * *

(b) * * *

(4) Other relevant factors that demonstrate the hazardous secondary material is not discarded, including why the hazardous secondary material cannot meet, or should not have to meet, the conditions of an exclusion under § 261.2 or § 261.4 of this chapter.

(c) * * *

(5) Other relevant factors that demonstrate the hazardous secondary material is not discarded, including why the hazardous secondary material cannot meet, or should not have to meet, the conditions of an exclusion under § 261.2 or § 261.4 of this chapter.

■ 7. Section 260.42 is amended by revising paragraphs (a) introductory text, (a)(4) through (9), removing paragraph (a)(10), and revising paragraph (b).

The revisions read as follows:

§ 260.42 Notification requirement for hazardous secondary materials.

(a) Facilities managing hazardous secondary materials under §§ 260.30, 261.4(a)(23), 261.4(a)(24), or 261.4(a)(27) must send a notification prior to operating under the regulatory provision and by March 1 of each even-numbered year thereafter to the Regional Administrator using EPA Form 8700–12 that includes the following information:

* * * * *

(4) The regulation under which the hazardous secondary materials will be managed;

(5) When the facility began or expects to begin managing the hazardous secondary materials in accordance with the regulation;

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

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

(8) The quantity of each hazardous secondary material to be managed annually; and

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

(b) If a facility managing hazardous secondary materials has submitted a notification, but then subsequently stops managing hazardous secondary materials in accordance with the regulation(s) listed above, the facility must notify the Regional Administrator within thirty (30) days using EPA Form 8700–12. For purposes of this section, a facility has stopped managing hazardous secondary materials if the facility no longer generates, manages and/or reclaims hazardous secondary materials under the regulation(s) above and does not expect to manage any amount of hazardous secondary materials for at least 1 year.

■ 8. Section 260.43 is amended by revising the section heading and

paragraph (a) and removing and reserving paragraphs (b) and (c).

The revision reads as follows:

§ 260.43 Legitimate recycling of hazardous secondary materials.

(a) Recycling of hazardous secondary materials for the purpose of the exclusions or exemptions from the hazardous waste regulations must be legitimate. Hazardous secondary material that is not legitimately recycled is discarded material and is a solid waste. In determining if their recycling is legitimate, persons must address all the requirements of this paragraph.

(1) Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product or intermediate 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.

(2) 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.

(3) The generator and the recycler must manage the hazardous secondary material as a valuable commodity when it is under their control. Where there is an analogous raw material, the hazardous secondary material must be managed, at a minimum, in a manner consistent with the management of the raw material or in an equally protective manner. Where there is no analogous raw material, the hazardous secondary material must be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded.

(4) The product of the recycling process must be comparable to a legitimate product or intermediate:

(i) Where there is an analogous product or intermediate, the product of the recycling process is comparable to a legitimate product or intermediate if:

(A) The product of the recycling process does not exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit, and

(B) The concentrations of any hazardous constituents found in appendix VIII of part 261 of this chapter that are in the product or intermediate are at levels that are comparable to or lower than those found in analogous products or at levels that meet widely-recognized commodity standards and specifications, in the case where the commodity standards and specifications include levels that specifically address those hazardous constituents.

(ii) Where there is no analogous product, the product of the recycling process is comparable to a legitimate product or intermediate if:

(A) The product of the recycling process is a commodity that meets widely recognized commodity standards and specifications (*e.g.,* commodity specification grades for common metals), or

(B) The hazardous secondary materials being recycled are returned to the original process or processes from which they were generated to be reused (*e.g.,* closed loop recycling).

(iii) If the product of the recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate per paragraph (a)(4)(i) or (ii) of this section, the recycling still may be shown to be legitimate, if it meets the following specified requirements. The person performing the recycling must conduct the necessary assessment and prepare documentation showing why the recycling is, in fact, still legitimate. The recycling can be shown to be legitimate based on lack of exposure from toxics in the product, lack of the bioavailability of the toxics in the product, or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk. The documentation must include a certification statement that the recycling is legitimate and must be maintained on-site for three years after the recycling operation has ceased. The person performing the recycling must notify the Regional Administrator of this activity using EPA Form 8700–12.

* * * * *

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

■ 9. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, 6924(y) and 6938.

Subpart A—General

■ 10. Section 261.1 is amended by revising paragraphs (c)(4) and (8) to read as follows:

§ 261.1 Purpose and scope.

* * * * *

(c) * * *

(4) A material is ''reclaimed'' if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents. In addition, for purposes of § 261.4(a)(23) and (24), smelting, melting, and refining furnaces are considered to be solely engaged in metals reclamation if the metal recovery from the hazardous secondary materials meets the same requirements as those specified for metals recovery from hazardous waste found in § 266.100(d)(1) through (3) of this chapter, and if the residuals meet the requirements specified in § 266.112 of this chapter.

* * * * *

(8) A material is ''accumulated speculatively'' if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that—during the calendar year (commencing on January 1)—the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. Materials must be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (*e.g.,* slags from a single smelting process) that is recycled in the same way (*i.e.,* from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under § 261.4(c) are not to be included in making the calculation. Materials that are already defined as solid wastes also are not to be included in making the calculation. Materials are no longer in this category once they are removed from accumulation for recycling, however.

* * * * *

■ 11. Section 261.2 is amended as follows:
■ a. Remove and reserve paragraph (a)(2)(ii);
■ b. Revise paragraph (b)(3);
■ c. Add paragraph (b)(4);
■ d. Revise paragraph (c)(3) and table 1 in paragraph (c)(4); and
■ e. Add paragraph (g).

The revisions and additions text reads as follows:

§ 261.2 Definition of solid waste.

* * * * *

(b) * * *

(3) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned or incinerated; or

(4) Sham recycled, as explained in paragraph (g) of this section.

* * * * *

(c) * * *

(3) *Reclaimed.* Materials noted with a "–" in column 3 of Table 1 are not solid wastes when reclaimed. Materials noted with an "*" in column 3 of Table 1 are solid wastes when reclaimed unless they meet the requirements of §§ 261.4(a)(17), or 261.4(a)(23), 261.4(a)(24), or 261.4(a)(27).

(4) * * *

TABLE 1

	Use constituting disposal (§ 261.2(c)(1))	Energy recovery/fuel (§ 261.2(c)(2))	Reclamation (§ 261.2(c)(3)), except as provided in §§ 261.4(a)(17), 261.4(a)(23), 261.4(a)(24) or 261.4(a)(27)	Speculative accumulation (§ 261.2(c)(4))
	1	2	3	4
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in 40 CFR Part 261.31 or 261.32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	.....	(*)
By-products (listed in 40 CFR 261.31 or 261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)	.....	(*)
Commercial chemical products listed in 40 CFR 261.33	(*)	(*)	.....	.....
Scrap metal that is not excluded under 40 CFR 261.4(a)(13)	(*)	(*)	(*)	(*)

Note: The terms "spent materials," "sludges," "by-products," and "scrap metal" and "processed scrap metal" are defined in § 261.1.

* * * * *

(g) *Sham recycling.* A hazardous secondary material found to be sham recycled is considered discarded and a solid waste. Sham recycling is recycling that is not legitimate recycling as defined in § 260.43.

■ 12. Section 261.4 is amended as follows:
■ a. Republish paragraph (a) introductory text;
■ b. Revise paragraph (a)(23) and (24);
■ c. Remove and reserve paragraph (a)(25); and
■ d. Add paragraph (a)(27).

The revisions and addition as follows:

§ 261.4 Exclusions.

(a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this part:

* * * * *

(23) Hazardous secondary material generated and legitimately reclaimed within the United States or its territories and under the control of the generator, provided that the material complies with paragraphs (a)(23)(i) and (ii) of this section:

(i)(A) The hazardous secondary material is generated and reclaimed at the generating facility (for purposes of this definition, generating facility means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator); or

(B) The hazardous secondary material is generated and reclaimed at different facilities, if the reclaiming facility is controlled by the generator or if both the generating facility and the reclaiming facility are controlled by a person as defined in § 260.10 of this chapter, and if the generator provides one of the following certifications: "on behalf of [insert generator facility name], I certify that this facility will send the indicated hazardous secondary material to [insert reclaimer facility name], which is controlled by [insert generator facility name] and that [insert name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material," or "on behalf of [insert generator facility name], I certify that this facility will send the indicated hazardous secondary material to [insert reclaimer facility name], that both facilities are under common control, and that [insert name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material." For purposes of this paragraph, "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. The generating and receiving facilities must both maintain at their facilities for no less than three years records of hazardous secondary materials sent or received under this exclusion. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received under the exclusion. These requirements may be satisfied by routine business records (*e.g.,* financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations); or

(C) The hazardous secondary material is generated pursuant to a written contract between a tolling contractor and a toll manufacturer and is reclaimed by the tolling contractor, if the tolling contractor certifies the following: "On behalf of [insert tolling contractor name], I certify that [insert tolling contractor name] has a written contract with [insert toll manufacturer name] to manufacture [insert name of product or intermediate] which is made from specified unused materials, and that [insert tolling contractor name] will reclaim the hazardous secondary materials generated during this manufacture. On behalf of [insert tolling contractor name], I also certify that [insert tolling contractor name] retains ownership of, and responsibility 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''. The tolling contractor must maintain at its facility for no less than three years records of hazardous secondary materials received pursuant to its written contract with the tolling manufacturer, and the tolling manufacturer must maintain at its facility for no less than three years records of hazardous secondary materials shipped pursuant to its written contract with the tolling contractor. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received pursuant to the written contract. These requirements may be satisfied by routine business records (*e.g.,* financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations). For purposes of this paragraph, tolling contractor means 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. Toll manufacturer means a person who produces a product or intermediate made from specified unused materials pursuant to a written contract with a tolling contractor.

(ii)(A) The hazardous secondary material is contained as defined in § 260.10 of this chapter. A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of reclamation. Hazardous secondary material managed in a unit with leaks or other continuing or intermittent unpermitted releases is discarded and a solid waste.

(B) The hazardous secondary material is not speculatively accumulated, as defined in § 261.1(c)(8).

(C) Notice is provided as required by § 260.42 of this chapter.

(D) The material is not otherwise subject to material-specific management conditions under paragraph (a) of this section when reclaimed, and it is not a spent lead-acid battery (see § 266.80 and § 273.2 of this chapter).

(E) Persons performing the recycling of hazardous secondary materials under this exclusion must maintain documentation of their legitimacy determination on-site. Documentation must be a written description of how the recycling meets all four factors in § 260.43(a). Documentation must be maintained for three years after the recycling operation has ceased.

(F) The emergency preparedness and response requirements found in subpart M of this part are met.

(24) Hazardous secondary material that is generated and then transferred to a verified reclamation facility for the purpose of reclamation is not a solid waste, provided that:

(i) The material is not speculatively accumulated, as defined in § 261.1(c)(8);

(ii) The material is not handled by any person or facility other than the hazardous secondary material generator, the transporter, an intermediate facility or a reclaimer, and, while in transport, is not stored for more than 10 days at a transfer facility, as defined in § 260.10 of this chapter, and is packaged according to applicable Department of Transportation regulations at 49 CFR parts 173, 178, and 179 while in transport;

(iii) The material is not otherwise subject to material-specific management conditions under this paragraph (a) when reclaimed, and it is not a spent lead-acid battery (see §§ 266.80 and 273.2 of this chapter);

(iv) The reclamation of the material is legitimate, as specified under § 260.43 of this chapter;

(v) The hazardous secondary material generator satisfies all of the following conditions:

(A) The material must be contained as defined in § 260.10. A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of recycling. Hazardous secondary material managed in a unit with leaks or other continuing releases is discarded and a solid waste.

(B) The hazardous secondary material generator must arrange for transport of hazardous secondary materials to a verified reclamation facility (or facilities) in the United States. A verified reclamation facility is a facility that has been granted a variance under § 260.31(d), or a reclamation facility where the management of the hazardous secondary materials is addressed under a RCRA Part B permit or interim status standards. If the hazardous secondary material will be passing through an intermediate facility, the intermediate facility must have been granted a variance under § 260.31(d) or the management of the hazardous secondary materials at that facility must be addressed under a RCRA Part B permit or interim status standards, and the hazardous secondary material generator must make contractual arrangements with the intermediate facility to ensure that the hazardous secondary material is sent to the reclamation facility identified by the hazardous secondary material generator.

(C) The hazardous secondary material generator must maintain at the generating facility for no less than three (3) years records of all off-site shipments of hazardous secondary materials. For each shipment, these records must, at a minimum, contain the following information:

(*1*) Name of the transporter and date of the shipment;

(*2*) Name and address of each reclaimer and, if applicable, the name and address of each intermediate facility to which the hazardous secondary material was sent;

(*3*) The type and quantity of hazardous secondary material in the shipment.

(D) The hazardous secondary material generator must maintain at the generating facility for no less than three (3) years confirmations of receipt from each reclaimer and, if applicable, each intermediate facility for all off-site shipments of hazardous secondary materials. Confirmations of receipt must include 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. This requirement may be satisfied by routine business records (*e.g.,* financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt);

(E) The hazardous secondary material generator must comply with the emergency preparedness and response conditions in subpart M of this part.

(vi) Reclaimers of hazardous secondary material excluded from regulation under this exclusion and intermediate facilities as defined in § 260.10 of this chapter satisfy all of the following conditions:

(A) The reclaimer and intermediate facility must maintain at its facility for no less than three (3) years records of all shipments of hazardous secondary material that were received at the facility and, if applicable, for all shipments of hazardous secondary materials that were received and subsequently sent off-site from the facility for further reclamation. For each shipment, these records must at a minimum contain the following information:

(*1*) Name of the transporter and date of the shipment;

(*2*) Name and address of the hazardous secondary material generator and, if applicable, the name and address of the reclaimer or intermediate facility

which the hazardous secondary materials were received from;

(*3*) The type and quantity of hazardous secondary material in the shipment; and

(*4*) For hazardous secondary materials that, after being received by the reclaimer or intermediate facility, were subsequently transferred off-site for further reclamation, the name and address of the (subsequent) reclaimer and, if applicable, the name and address of each intermediate facility to which the hazardous secondary material was sent.

(B) The intermediate facility must send the hazardous secondary material to the reclaimer(s) designated by the hazardous secondary materials generator.

(C) The reclaimer and intermediate facility must send to the hazardous secondary material generator confirmations of receipt for all off-site shipments of hazardous secondary materials. Confirmations of receipt must include 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. This requirement may be satisfied by routine business records (*e.g.,* financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt).

(D) The reclaimer and intermediate facility must manage the hazardous secondary material in a manner that is at least as protective as that employed for analogous raw material and must be contained. An ''analogous raw material'' is a raw material for which a hazardous secondary material is a substitute and serves the same function and has similar physical and chemical properties as the hazardous secondary material.

(E) Any residuals that are generated from reclamation processes will 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 if they themselves are specifically listed in subpart D of 40 CFR part 261, such residuals are hazardous wastes and must be managed in accordance with the applicable requirements of 40 CFR parts 260 through 272.

(F) The reclaimer and intermediate facility have financial assurance as required under subpart H of 40 CFR part 261,

(G) The reclaimer and intermediate facility have been granted a variance under § 260.31(d) or have a RCRA Part B permit or interim status standards that address the management of the hazardous secondary materials; and

(vii) All persons claiming the exclusion under this paragraph (a)(24) of this section provide notification as required under § 260.42 of this chapter.

* * * * *

(27) Hazardous secondary material that is generated and then transferred to another person for the purpose of remanufacturing is not a solid waste, provided that:

(i) The hazardous secondary material consists of one or more of the following spent solvents: Toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform, chloromethane, dichloromethane, methyl isobutyl ketone, NN-dimethylformamide, tetrahydrofuran, n-butyl alcohol, ethanol, and/or methanol;

(ii) The hazardous secondary material originated from using one or more of the solvents listed in paragraph (a)(27)(i) of this section in a commercial grade for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510).

(iii) The hazardous secondary material generator sends the hazardous secondary material spent solvents listed in paragraph (a)(27)(i) of this section to a remanufacturer in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510).

(iv) After remanufacturing one or more of the solvents listed in paragraph (a)(27)(i) of this section, the use of the remanufactured solvent shall be limited to reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and the paints and coatings manufacturing sectors (NAICS 325510) or to using them as ingredients in a product. These allowed uses correspond to chemical functional uses enumerated under the Chemical Data Reporting Rule of the Toxic Substances Control Act (40 CFR parts 704, 710–711), including Industrial Function Codes U015 (solvents consumed in a reaction to produce other chemicals) and U030 (solvents become part of the mixture);

(v) After remanufacturing one or more of the solvents listed in paragraph (a)(27)(i) of this section, the use of the remanufactured solvent does not involve cleaning or degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles. (These disallowed continuing uses correspond to chemical functional uses in Industrial Function Code U029 under the Chemical Data Reporting Rule of the Toxics Substances Control Act.); and

(vi) Both the hazardous secondary material generator and the remanufacturer must:

(A) Notify EPA or the State Director, if the state is authorized for the program, and update the notification every two years per 40 CFR 260.42;

(B) Develop and maintain an up-to-date remanufacturing plan which identifies:

(*1*) The name, address and EPA ID number of the generator(s) and the remanufacturer(s),

(*2*) The types and estimated annual volumes of spent solvents to be remanufactured,

(*3*) The processes and industry sectors that generate the spent solvents,

(*4*) The specific uses and industry sectors for the remanufactured solvents, and

(*5*) A certification from the remanufacturer stating ''on behalf of [insert remanufacturer facility name], I certify that this facility is a remanufacturer under pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510), and will accept the spent solvent(s) for the sole purpose of remanufacturing into commercial-grade solvent(s) that will be used for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) or for use as product ingredient(s). I also certify that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the appropriate Clean Air Act regulations under 40 CFR part 60, part 61 or part 63, or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in 40 CFR part 261, subparts

AA (vents), BB (equipment) and CC (tank storage),'';

(C) Maintain records of shipments and confirmations of receipts for a period of three years from the dates of the shipments;

(D) Prior to remanufacturing, store the hazardous spent solvents in tanks or containers that meet technical standards found in subparts I and J of 40 CFR part 261, with the tanks and containers being labeled or otherwise having an immediately available record of the material being stored;

(E) During remanufacturing, and during storage of the hazardous secondary materials prior to remanufacturing, the remanufacturer certifies that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the appropriate Clean Air Act regulations under 40 CFR part 60, part 61 or part 63; or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in 40 CFR part 261 subparts AA (vents), BB (equipment) and CC (tank storage); and

(F) Meet the requirements prohibiting speculative accumulation per 40 CFR 261.1(c)(8).

* * * * *

■ 13. Part 261 is amended by:

■ a. Adding Subparts I and J;

■ b. Adding reserved Subparts K and L;

■ c. Adding Subpart M;

■ d. Adding reserved Subparts N through Z; and

■ e. Adding Subparts AA through CC.

The additions read as follows:

Subpart I—Use and Management of Containers

Sec.

261.170 Applicability.
261.171 Condition of containers.
261.172 Compatibility of hazardous secondary materials with containers.
261.173 Management of containers.
261.175 Containment.
261.176 Special requirements for ignitable or reactive hazardous secondary material.
261.177 Special requirements for incompatible materials.
261.179 Air emission standards.

Subpart J—Tank Systems

261.190 Applicability.
261.191 Assessment of existing tank system's integrity.
261.192 [Reserved]
261.193 Containment and detection of releases.
261.194 General operating requirements.
261.195 [Reserved]
261.196 Response to leaks or spills and disposition of leaking or unfit-for-use tank systems.
261.197 Termination of remanufacturing exclusion.
261.198 Special requirements for ignitable or reactive materials.
261.199 Special requirements for incompatible materials.
261.200 Air emission standards.

Subparts K–L [Reserved]

Subpart M—Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials

261.400 Applicability.
261.410 Preparedness and prevention
261.411 Emergency procedures for facilities generating or accumulating of 6000 kg or less of hazardous secondary material.
261.420 Contingency planning and emergency procedures for facilities generating or accumulating more than 6000 kg of hazardous secondary material.

Subparts N–Z [Reserved]

Subpart AA—Air Emission Standards for Process Vents

261.1030 Applicability.
261.1031 Definitions.
261.1032 Standards: Process vents.
261.1033 Standards: Closed-vent systems and control devices.
261.1034 Test methods and procedures.
261.1035 Recordkeeping requirements.
261.1036–261.1049 [Reserved]

Subpart BB—Air Emission Standards for Equipment Leaks

261.1050 Applicability.
261.1051 Definitions.
261.1052 Standards: Pumps in light liquid service.
261.1053 Standards: Compressors.
261.1054 Standards: Pressure relief devices in gas/vapor service.
261.1055 Standards: Sampling connection systems.
261.1056 Standards: Open-ended valves or lines.
261.1057 Standards: Valves in gas/vapor service or in light liquid service.
261.1058 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors.
261.1059 Standards: Delay of repair.
261.1060 Standards: Closed-vent systems and control devices.
261.1061 Alternative standards for valves in gas/vapor service or in light liquid service: percentage of valves allowed to leak.
261.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.
261.1063 Test methods and procedures.
261.1064 Recordkeeping requirements.
261.1065–261.1079 [Reserved]

Subpart CC—Air Emission Standards for Tanks and Containers

261.1080 Applicability.
261.1081 Definitions.
261.1082 Standards: General.
261.1083 Material determination procedures.
261.1084 Standards: Tanks.
261.1085 [Reserved]
261.1086 Standards: Containers.
261.1087 Standards: Closed-vent systems and control devices.
261.1088 Inspection and monitoring requirements.
261.1089 Recordkeeping requirements.
261.1090 [Reserved]

Subpart I—Use and Management of Containers

§ 261.170 Applicability.

This subpart applies to hazardous secondary materials excluded under the remanufacturing exclusion at § 261.4(a)(27) and stored in containers.

§ 261.171 Condition of containers.

If a container holding hazardous secondary material is not in good condition (*e.g.*, severe rusting, apparent structural defects) or if it begins to leak, the hazardous secondary material must be transferred from this container to a container that is in good condition or managed in some other way that complies with the requirements of this part.

§ 261.172 Compatibility of hazardous secondary materials with containers.

The container must be made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous secondary material to be stored, so that the ability of the container to contain the material is not impaired.

§ 261.173 Management of containers.

(a) A container holding hazardous secondary material must always be closed during storage, except when it is necessary to add or remove the hazardous secondary material.

(b) A container holding hazardous secondary material must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

§ 261.175 Containment.

(a) Container storage areas must have a containment system that is designed and operated in accordance with paragraph (b) of this section.

(b) A containment system must be designed and operated as follows:

(1) A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

(2) The base must be sloped or the containment system must be otherwise

designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(3) The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.

(4) Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in paragraph (b)(3) of this section to contain any run-on which might enter the system; and

(5) Spilled or leaked material and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.

§ 261.176 Special requirements for ignitable or reactive hazardous secondary material.

Containers holding ignitable or reactive hazardous secondary material must be located at least 15 meters (50 feet) from the facility's property line.

§ 261.177 Special requirements for incompatible materials.

(a) Incompatible materials must not be placed in the same container.

(b) Hazardous secondary material must not be placed in an unwashed container that previously held an incompatible material.

(c) A storage container holding a hazardous secondary material that is incompatible with any other materials stored nearby must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

§ 261.179 Air emission standards.

The remanufacturer or other person that stores or treats the hazardous secondary material shall manage all hazardous secondary material placed in a container in accordance with the applicable requirements of subparts AA, BB, and CC of this part.

Subpart J—Tank Systems

§ 261.190 Applicability.

(a) The requirements of this subpart apply to tank systems for storing or treating hazardous secondary material excluded under the remanufacturing exclusion at § 261.4(a)(27).

(b) Tank systems, including sumps, as defined in § 260.10, that serve as part of a secondary containment system to collect or contain releases of hazardous secondary materials are exempted from the requirements in § 261.193(a).

§ 261.191 Assessment of existing tank system's integrity.

(a) Tank systems must meet the secondary containment requirements of § 261.193, or the remanufacturer or other person that handles the hazardous secondary material must determine that the tank system is not leaking or is unfit for use. Except as provided in paragraph (c) of this section, a written assessment reviewed and certified by a qualified Professional Engineer must be kept on file at the remanufacturer's facility or other facility that stores or treats the hazardous secondary material that attests to the tank system's integrity.

(b) This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the material(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

(1) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;

(2) Hazardous characteristics of the material(s) that have been and will be handled;

(3) Existing corrosion protection measures;

(4) Documented age of the tank system, if available (otherwise, an estimate of the age); and

(5) Results of a leak test, internal inspection, or other tank integrity examination such that:

(i) For non-enterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects, and

(ii) For other than non-enterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination that is certified by a qualified Professional Engineer that addresses cracks, leaks, corrosion, and erosion.

Note to paragraph (b)(5)(ii): The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines in conducting other than a leak test.

(c) If, as a result of the assessment conducted in accordance with paragraph (a) of this section, a tank system is found to be leaking or unfit for use, the remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements of § 261.196.

§ 261.192 [Reserved]

§ 261.193 Containment and detection of releases.

(a) Secondary containment systems must be:

(1) Designed, installed, and operated to prevent any migration of materials or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

(2) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

Note to paragraph (a): If the collected material is a hazardous waste under part 261 of this chapter, it is subject to management as a hazardous waste in accordance with all applicable requirements of parts 262 through 265, 266, and 268 of this chapter. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR part 302.

(b) To meet the requirements of paragraph (a) of this section, secondary containment systems must be at a minimum:

(1) Constructed of or lined with materials that are compatible with the materials(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the material to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);

(2) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

(3) Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous secondary material or accumulated liquid in the secondary containment system at the earliest practicable time; and

(4) Sloped or otherwise designed or operated to drain and remove liquids

resulting from leaks, spills, or precipitation. Spilled or leaked material and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Secondary containment for tanks must include one or more of the following devices:

(1) A liner (external to the tank);

(2) A vault; or

(3) A double-walled tank.

(d) In addition to the requirements of paragraphs (a), (b), and (c) of this section, secondary containment systems must satisfy the following requirements:

(1) External liner systems must be:

(i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

(ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.

(iii) Free of cracks or gaps; and

(iv) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the material if the material is released from the tank(s) (*i.e.,* capable of preventing lateral as well as vertical migration of the material).

(2) Vault systems must be:

(i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

(ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

(iii) Constructed with chemical-resistant water stops in place at all joints (if any);

(iv) Provided with an impermeable interior coating or lining that is compatible with the stored material and that will prevent migration of material into the concrete;

(v) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the material being stored or treated is ignitable or reactive; and

(vi) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(3) Double-walled tanks must be:

(i) Designed as an integral structure (*i.e.,* an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

(ii) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(iii) Provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time.

Note to paragraph (d)(3): The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks" may be used as guidelines for aspects of the design of underground steel double-walled tanks.

(e) [Reserved]

(f) Ancillary equipment must be provided with secondary containment (*e.g.,* trench, jacketing, double-walled piping) that meets the requirements of paragraphs (a) and (b) of this section except for:

(1) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

(2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;

(3) Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and

(4) Pressurized aboveground piping systems with automatic shut-off devices (*e.g.,* excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

§ 261.194 General operating requirements.

(a) Hazardous secondary materials or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

(1) Spill prevention controls (*e.g.,* check valves, dry disconnect couplings);

(2) Overfill prevention controls (*e.g.,* level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

(3) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(c) The remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements of § 261.196 of this subpart if a leak or spill occurs in the tank system.

§ 261.195 [Reserved]

§ 261.196 Response to leaks or spills and disposition of leaking or unfit-for-use tank systems.

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the remanufacturer or other person that stores or treats the hazardous secondary material must satisfy the following requirements:

(a) *Cessation of use; prevent flow or addition of materials.* The remanufacturer or other person that stores or treats the hazardous secondary material must immediately stop the flow of hazardous secondary material into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) *Removal of material from tank system or secondary containment system.* (1) If the release was from the tank system, the remanufacturer or other person that stores or treats the hazardous secondary material must, within 24 hours after detection of the leak or, if the remanufacturer or other person that stores or treats the hazardous secondary material demonstrates that it is not possible, at the earliest practicable time, remove as much of the material as is necessary to prevent further release of hazardous secondary material to the environment and to allow inspection and repair of the tank system to be performed.

(2) If the material released was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) *Containment of visible releases to the environment.* The remanufacturer or other person that stores or treats the hazardous secondary material must immediately conduct a visual inspection of the release and, based upon that inspection:

(1) Prevent further migration of the leak or spill to soils or surface water; and

(2) Remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) *Notifications, reports.* (1) Any release to the environment, except as provided in paragraph (d)(2) of this section, must be reported to the Regional Administrator within 24 hours of its detection. If the release has been reported pursuant to 40 CFR part 302, that report will satisfy this requirement.

(2) A leak or spill of hazardous secondary material is exempted from the requirements of this paragraph if it is:

(i) Less than or equal to a quantity of 1 pound, and

(ii) Immediately contained and cleaned up.

(3) Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the Regional Administrator:

(i) Likely route of migration of the release;

(ii) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

(iii) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Regional Administrator as soon as they become available.

(iv) Proximity to downgradient drinking water, surface water, and populated areas; and

(v) Description of response actions taken or planned.

(e) *Provision of secondary containment, repair, or closure.* (1) Unless the remanufacturer or other person that stores or treats the hazardous secondary material satisfies the requirements of paragraphs (e)(2) through (4) of this section, the tank system must cease to operate under the remanufacturing exclusion at 40 CFR 261.4(a)(27).

(2) If the cause of the release was a spill that has not damaged the integrity of the system, the remanufacturer or other person that stores or treats the hazardous secondary material may return the system to service as soon as the released material is removed and repairs, if necessary, are made.

(3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

(4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the remanufacturer or other person that stores or treats the hazardous secondary material must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of § 261.193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of paragraph (f) of this section are satisfied. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (*e.g.,* the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with § 261.193 of this subpart prior to being returned to use.

(f) *Certification of major repairs.* If the remanufacturer or other person that stores or treats the hazardous secondary material has repaired a tank system in accordance with paragraph (e) of this section, and the repair has been extensive (*e.g.,* installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the remanufacturer or other person that stores or treats the hazardous secondary material has obtained a certification by a qualified Professional Engineer that the repaired system is capable of handling hazardous secondary materials without release for the intended life of the system. This certification must be kept on file at the facility and maintained until closure of the facility.

Note 1 to § 261.196: The Regional Administrator may, on the basis of any information received that there is or has been a release of hazardous secondary material or hazardous constituents into the environment, issue an order under RCRA section 7003(a) requiring corrective action or such other response as deemed necessary to protect human health or the environment.

Note 2 to § 261.196: 40 CFR part 302 may require the owner or operator to notify the National Response Center of certain releases.

§ 261.197 Termination of remanufacturing exclusion.

Hazardous secondary material stored in units more than 90 days after the unit ceases to operate under the remanufacturing exclusion at 40 CFR 261.4(a)(27) or otherwise ceases to be operated for manufacturing, or for storage of a product or a raw material, then becomes subject to regulation as hazardous waste under parts 261 through 266, 268, 270, 271, and 124 of this chapter, as applicable.

§ 261.198 Special requirements for ignitable or reactive materials.

(a) Ignitable or reactive material must not be placed in tank systems, unless the material is stored or treated in such a way that it is protected from any material or conditions that may cause the material to ignite or react.

(b) The remanufacturer or other person that stores or treats hazardous secondary material which is ignitable or reactive must store or treat the hazardous secondary material in a tank that is in compliance with the requirements for the maintenance of protective distances between the material management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2–1 through 2–6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981), (incorporated by reference, see § 260.11).

§ 261.199 Special requirements for incompatible materials.

(a) Incompatible materials must not be placed in the same tank system.

(b) Hazardous secondary material must not be placed in a tank system that has not been decontaminated and that previously held an incompatible material.

§ 261.200 Air emission standards.

The remanufacturer or other person that stores or treats the hazardous secondary material shall manage all hazardous secondary material placed in a tank in accordance with the applicable requirements of subparts AA, BB, and CC of this part.

Subparts K–L [Reserved]

Subpart M—Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials

§ 261.400 Applicability.

The requirements of this subpart apply to those areas of an entity managing hazardous secondary materials excluded under § 261.4(a)(23) and/or (24) where hazardous secondary materials are generated or accumulated on site.

(a) A generator of hazardous secondary material, or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d), that accumulates 6000 kg or

less of hazardous secondary material at any time must comply with §§ 261.410 and 261.411.

(b) A generator of hazardous secondary material, or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) that accumulates more than 6000 kg of hazardous secondary material at any time must comply with §§ 261.410 and 261.420.

§ 261.410 Preparedness and prevention.

(a) *Maintenance and operation of facility.* Facilities generating or accumulating hazardous secondary material must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous secondary materials or hazardous secondary material constituents to air, soil, or surface water which could threaten human health or the environment.

(b) *Required equipment.* All facilities generating or accumulating hazardous secondary material must be equipped with the following, *unless* none of the hazards posed by hazardous secondary material handled at the facility could require a particular kind of equipment specified below:

(1) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

(2) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

(3) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(4) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

(c) *Testing and maintenance of equipment.* All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

(d) *Access to communications or alarm system.* (1) Whenever hazardous secondary material is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under paragraph (b) of this section.

(2) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, *unless* such a device is not required under paragraph (b) of this section.

(e) *Required aisle space.* The hazardous secondary material generator or intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

(f) *Arrangements with local authorities.* (1) The hazardous secondary material generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

(i) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous secondary material handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

(ii) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(iii) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

(iv) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(2) Where state or local authorities decline to enter into such arrangements, the hazardous secondary material generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) must document the refusal in the operating record.

§ 261.411 Emergency procedures for facilities generating or accumulating 6000 kg or less of hazardous secondary material.

A generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) that generates or accumulates 6000 kg or less of hazardous secondary material must comply with the following requirements:

(a) At all times there must be at least one employee either on the premises or on call (*i.e.,* available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in paragraph (d) of this section. This employee is the emergency coordinator.

(b) The generator or intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) must post the following information next to the telephone:

(1) The name and telephone number of the emergency coordinator;

(2) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

(3) The telephone number of the fire department, unless the facility has a direct alarm.

(c) The generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(d) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

(1) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(2) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

(3) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator or an intermediate or reclamation facility operating under a verified recycler variance under

§ 260.31(d) has knowledge that a spill has reached surface water, the generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) must immediately notify the National Response Center (using their 24-hour toll free number 800/424–8802). The report must include the following information:

(i) The name, address, and U.S. EPA Identification Number of the facility;

(ii) Date, time, and type of incident (*e.g.,* spill or fire);

(iii) Quantity and type of hazardous waste involved in the incident;

(iv) Extent of injuries, if any; and

(v) Estimated quantity and disposition of recovered materials, if any.

§ 261.420 Contingency planning and emergency procedures for facilities generating or accumulating more than 6000 kg of hazardous secondary material.

A generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) that generates or accumulates more than 6000 kg of hazardous secondary material must comply with the following requirements:

(a) *Purpose and implementation of contingency plan.* (1) Each generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) that accumulates more than 6000 kg of hazardous secondary material must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water.

(2) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous secondary material or hazardous secondary material constituents which could threaten human health or the environment.

(b) *Content of contingency plan.* (1) The contingency plan must describe the actions facility personnel must take to comply with paragraphs (a) and (f) in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water at the facility.

(2) If the generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) accumulating more than 6000 kg of hazardous secondary material has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with part 112 of this chapter, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part. The hazardous secondary material generator or an intermediate or reclamation facility operating under a verified recycler variance under § 260.31(d) may develop one contingency plan which meets all regulatory requirements. EPA recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance (''One Plan''). When modifications are made to non-RCRA provisions in an integrated contingency plan, the changes do not trigger the need for a RCRA permit modification.

(3) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to § 262.410(f).

(4) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see paragraph (e) of this section), and this list must be kept up-to-date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

(5) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(6) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(c) *Copies of contingency plan.* A copy of the contingency plan and all revisions to the plan must be:

(1) Maintained at the facility; and

(2) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

(d) *Amendment of contingency plan.* The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

(1) Applicable regulations are revised;

(2) The plan fails in an emergency;

(3) The facility changes—in its design, construction, operation, maintenance, or other circumstances—in a way that materially increases the potential for fires, explosions, or releases of hazardous secondary material or hazardous secondary material constituents, or changes the response necessary in an emergency;

(4) The list of emergency coordinators changes; or

(5) The list of emergency equipment changes.

(e) *Emergency coordinator.* At all times, there must be at least one employee either on the facility premises or on call (*i.e.,* available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan. The emergency coordinator's responsibilities are more fully spelled out in paragraph (f). Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of hazardous secondary material(s) handled by the facility, and type and complexity of the facility.

(f) *Emergency procedures.* (1) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(ii) Notify appropriate State or local agencies with designated response roles if their help is needed.

(2) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and

areal extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

(3) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (*e.g.,* the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).

(4) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

(i) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(ii) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 800/424–8802). The report must include:

(A) Name and telephone number of reporter;

(B) Name and address of facility;

(C) Time and type of incident (*e.g.,* release, fire);

(D) Name and quantity of material(s) involved, to the extent known;

(E) The extent of injuries, if any; and

(F) The possible hazards to human health, or the environment, outside the facility.

(5) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous secondary material at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released material, and removing or isolating containers.

(6) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(7) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered secondary material, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the hazardous secondary material generator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 265 of this chapter.

(8) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(i) No secondary material that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(9) The hazardous secondary material generator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:

(i) Name, address, and telephone number of the hazardous secondary material generator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time, and type of incident (*e.g.,* fire, explosion);

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

Subparts N–Z [Reserved]

Subpart AA—Air Emission Standards for Process Vents

§ 261.1030 Applicability.

The regulations in this subpart apply to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or stream stripping operations that manage hazardous secondary materials excluded under the remanufacturing exclusion at § 261.4(a)(27) with concentrations of at least 10 ppmw, unless the process vents are equipped with operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63.

§ 261.1031 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Resource Conservation and Recovery Act and parts 260–266.

Air stripping operation is a desorption operation employed to transfer one or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

Bottoms receiver means a container or tank used to receive and collect the heavier bottoms fractions of the distillation feed stream that remain in the liquid phase.

Closed-vent system means a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

Condenser means a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

Connector means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, connector means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

Continuous recorder means a data-recording device recording an instantaneous data value at least once every 15 minutes.

Control device means an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse, or sale (*e.g.,* a primary condenser on a solvent recovery unit) is not a control device.

Control device shutdown means the cessation of operation of a control device for any purpose.

Distillate receiver means a container or tank used to receive and collect liquid material (condensed) from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

Distillation operation means an operation, either batch or continuous, separating one or more feed stream(s)

into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Equipment means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange or other connector, and any control devices or systems required by this subpart.

Flame zone means the portion of the combustion chamber in a boiler occupied by the flame envelope.

Flow indicator means a device that indicates whether gas flow is present in a vent stream.

First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

Fractionation operation means a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

Hazardous secondary material management unit shutdown means a work practice or operational procedure that stops operation of a hazardous secondary material management unit or part of a hazardous secondary material management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous secondary material management unit or part of a hazardous secondary material management unit for less than 24 hours is not a hazardous secondary material management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous secondary material management unit shutdowns.

Hot well means a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

In gas/vapor service means that the piece of equipment contains or contacts a hazardous secondary material stream that is in the gaseous state at operating conditions.

In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

In light liquid service means that the piece of equipment contains or contacts a material stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20 °C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 kilopascals (kPa) at 20 °C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

In situ sampling systems means nonextractive samplers or in-line samplers.

In vacuum service means that equipment is operating at an internal pressure that is at least 5 kPa below ambient pressure.

Malfunction means any sudden failure of a control device or a hazardous secondary material management unit or failure of a hazardous secondary material management unit to operate in a normal or usual manner, so that organic emissions are increased.

Open-ended valve or line means any valve, except pressure relief valves, having one side of the valve seat in contact with hazardous secondary material and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

Process heater means a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that are heated to produce steam.

Process vent means any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank (*e.g.,* distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well) associated with hazardous secondary material distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.

Repaired means that equipment is adjusted, or otherwise altered, to eliminate a leak.

Sampling connection system means an assembly of equipment within a process or material management unit used during periods of representative operation to take samples of the process or material fluid. Equipment used to take non-routine grab samples is not considered a sampling connection system.

Sensor means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

Separator tank means a device used for separation of two immiscible liquids.

Solvent extraction operation means an operation or method of separation in which a solid or solution is contacted with a liquid solvent (the two being mutually insoluble) to preferentially dissolve and transfer one or more components into the solvent.

Startup means the setting in operation of a hazardous secondary material management unit or control device for any purpose.

Steam stripping operation means a distillation operation in which vaporization of the volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

Surge control tank means a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

Thin-film evaporation operation means a distillation operation that employs a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

Vapor incinerator means any enclosed combustion device that is used for destroying organic compounds and does not extract energy in the form of steam or process heat.

Vented means discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading (working losses) or by natural means such as diurnal temperature changes.

§ 261.1032 Standards: Process vents.

(a) The remanufacturer or other person that stores or treats hazardous secondary materials in hazardous secondary material management units with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous secondary material with organic concentrations of at least 10 ppmw shall either:

(1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr), or

(2) Reduce, by use of a control device, total organic emissions from all affected

process vents at the facility by 95 weight percent.

(b) If the remanufacturer or other person that stores or treats the hazardous secondary material installs a closed-vent system and control device to comply with the provisions of paragraph (a) of this section the closed-vent system and control device must meet the requirements of § 261.1033.

(c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests must conform with the requirements of § 261.1034(c).

(d) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Regional Administrator do not agree on determinations of vent emissions and/or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the procedures in § 261.1034(c) shall be used to resolve the disagreement.

§ 261.1033 Standards: Closed-vent systems and control devices.

(a)(1) The remanufacturer or other person that stores or treats the hazardous secondary materials in hazardous secondary material management units using closed-vent systems and control devices used to comply with provisions of this part shall comply with the provisions of this section.

(2) [Reserved]

(b) A control device involving vapor recovery (*e.g.,* a condenser or adsorber) shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of § 261.1032(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.

(c) An enclosed combustion device (*e.g.,* a vapor incinerator, boiler, or process heater) shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(d)(1) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (e)(1) of this section, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) A flare shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f)(2)(iii) of this section.

(3) A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (e)(2) of this section.

(4)(i) A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, less than 18.3 m/s (60 ft/s), except as provided in paragraphs (d)(4)(ii) and (iii) of this section.

(ii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, less than the velocity, V_{max}, as determined by the method specified in paragraph (e)(4) of this section and less than 122 m/s (400 ft/s) is allowed.

(5) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (e)(5) of this section.

(6) A flare used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(e)(1) Reference Method 22 in 40 CFR part 60 shall be used to determine the compliance of a flare with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \left[\sum_{i=1}^{n} C_i H_i \right]$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is 20 °C;

K = Constant, 1.74×10^{-7} (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20 °C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR part 60 and measured for hydrogen and carbon monoxide by ASTM D 1946–82 (incorporated by reference as specified in § 260.11); and

H_i = Net heat of combustion of sample component i, kcal/9 mol at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382–83 (incorporated by reference as specified in § 260.11) if published values are not available or cannot be calculated.

(3) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR part 60 as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(4) The maximum allowed velocity in m/s, V_{max}, for a flare complying with paragraph (d)(4)(iii) of this section shall be determined by the following equation:

$$\mathrm{Log}_{10}(V_{max}) = (H_T + 28.8)/31.7$$

Where:

28.8 = Constant,

31.7 = Constant,

H_T = The net heating value as determined in paragraph (e)(2) of this section.

(5) The maximum allowed velocity in m/s, V_{max}, for an air-assisted flare shall be determined by the following equation:

$$V_{max} = 8.706 + 0.7084\ (H_T)$$

Where:

8.706 = Constant,

0.7084 = Constant,

H_T = The net heating value as determined in paragraph (e)(2) of this section.

(f) The remanufacturer or other person that stores or treats the hazardous secondary material shall monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device by implementing the following requirements:

(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow

from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet but before the point at which the vent streams are combined.

(2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

(i) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5 °C, whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone.

(ii) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5 °C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(iii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(iv) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5 °C, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone.

(v) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

(vi) For a condenser, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser, or

(B) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in degrees Celsius (°C) or ±0.5 °C, whichever is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser exit (*i.e.,* product side).

(vii) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or

(B) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(3) Inspect the readings from each monitoring device required by paragraphs (f)(1) and (2) of this section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this section.

(g) A remanufacturer or other person that stores or treats hazardous secondary material in a hazardous secondary material management unit using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of § 261.1035(b)(4)(iii)(F).

(h) A remanufacturer or other person that stores or treats hazardous secondary material in a hazardous secondary material management unit using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

(1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of § 261.1035(b)(4)(iii)(G), whichever is longer.

(2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of § 261.1035(b)(4)(iii)(G).

(i) An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

(j) A remanufacturer or other person that stores or treats hazardous secondary material at an affected facility seeking to comply with the provisions of this part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

(k) A closed-vent system shall meet either of the following design requirements:

(1) A closed-vent system shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in § 261.1034(b) of this subpart, and by visual inspections; or

(2) A closed-vent system shall be designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

(l) The remanufacturer or other person that stores or treats the hazardous secondary material shall monitor and inspect each closed-vent system required to comply with this section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

(1) Each closed-vent system that is used to comply with paragraph (k)(1) of this section shall be inspected and monitored in accordance with the following requirements:

(i) An initial leak detection monitoring of the closed-vent system shall be conducted by the remanufacturer or other person that stores or treats the hazardous secondary

material on or before the date that the system becomes subject to this section. The remanufacturer or other person that stores or treats the hazardous secondary material shall monitor the closed-vent system components and connections using the procedures specified in § 261.1034(b) of this subpart to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

(ii) After initial leak detection monitoring required in paragraph (l)(1)(i) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall inspect and monitor the closed-vent system as follows:

(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (*e.g.,* a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The remanufacturer or other person that stores or treats the hazardous secondary material shall monitor a component or connection using the procedures specified in § 261.1034(b) of this subpart to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (*e.g.,* a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (*e.g.,* a flange is unbolted).

(B) Closed-vent system components or connections other than those specified in paragraph (l)(1)(ii)(A) of this section shall be monitored annually and at other times as requested by the Regional Administrator, except as provided for in paragraph (o) of this section, using the procedures specified in § 261.1034(b) of this subpart to demonstrate that the components or connections operate with no detectable emissions.

(iii) In the event that a defect or leak is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect or leak in accordance with the requirements of paragraph (l)(3) of this section.

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection and monitoring in accordance with the requirements specified in § 261.1035 of this subpart.

(2) Each closed-vent system that is used to comply with paragraph (k)(2) of this section shall be inspected and monitored in accordance with the following requirements:

(i) The closed-vent system shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform the inspections at least once every year.

(iii) In the event that a defect or leak is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of paragraph (l)(3) of this section.

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection and monitoring in accordance with the requirements specified in § 261.1035 of this subpart.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material shall repair all detected defects as follows:

(i) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in paragraph (l)(3)(iii) of this section.

(ii) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(iii) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the remanufacturer or other person that stores or treats the hazardous secondary material determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the defect repair in accordance with the requirements specified in § 261.1035 of this subpart.

(m) Closed-vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(n) The owner or operator using a carbon adsorption system to control air pollutant emissions shall document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:

(1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:

(i) The owner or operator of the unit has been issued a final permit under 40 CFR part 270 which implements the requirements of subpart X of this part; or

(ii) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of subparts AA and CC of either this part or of 40 CFR part 265; or

(iii) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR part 61 or 40 CFR part 63.

(2) Incinerated in a hazardous waste incinerator for which the owner or operator either:

(i) Has been issued a final permit under 40 CFR part 270 which implements the requirements of subpart O of this part; or

(ii) Has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR part 265, subpart O.

(3) Burned in a boiler or industrial furnace for which the owner or operator either:

(i) Has been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 266, subpart H; or

(ii) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(o) Any components of a closed-vent system that are designated, as described in § 261.1035(c)(9) of this subpart, as unsafe to monitor are exempt from the requirements of paragraph (l)(1)(ii)(B) of this section if:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management unit using a closed-vent

system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (l)(1)(ii)(B) of this section; and

(2) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management unit using a closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in paragraph (l)(1)(ii)(B) of this section as frequently as practicable during safe-to-monitor times.

§ 261.1034 Test methods and procedures.

(a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this subpart shall comply with the test methods and procedural requirements provided in this section.

(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in § 261.1033(l) of this subpart, the test shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air).

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The background level shall be determined as set forth in Reference Method 21.

(6) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(c) Performance tests to determine compliance with § 261.1032(a) and with the total organic compound concentration limit of § 261.1033(c) shall comply with the following:

(1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

(i) Method 2 in 40 CFR part 60 for velocity and volumetric flow rate.

(ii) Method 18 or Method 25A in 40 CFR part 60, appendix A, for organic content. If Method 25A is used, the organic HAP used as the calibration gas must be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(iii) Each performance test shall consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.

(iv) Total organic mass flow rates shall be determined by the following equation:

(A) For sources utilizing Method 18.

$$E_h = Q_{2sd}\left\{\sum_{i=1}^{n} C_i MW_i\right\}[0.0416]\left[10^{-6}\right]$$

Where:

E_h= Total organic mass flow rate, kg/h;

Q_{2sd}= Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

n = Number of organic compounds in the vent gas;

C_i= Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18;

MW_i= Molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416 = Conversion factor for molar volume, kg-mol/m3 (@293 K and 760 mm Hg);

10^{-6} = Conversion from ppm

(B) For sources utilizing Method 25A.

E_h= (Q)(C)(MW)(0.0416)(10^{-6})

Where:

E_h= Total organic mass flow rate, kg/h;

Q = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

C = Organic concentration in ppm, dry basis, as determined by Method 25A;

MW = Molecular weight of propane, 44;

0.0416 = Conversion factor for molar volume, kg-mol/m3 (@293 K and 760 mm Hg);

10^{-6} = Conversion from ppm.

(v) The annual total organic emission rate shall be determined by the following equation:

E_A=(E_h)(H)

Where:

E_A=Total organic mass emission rate, kg/y;

E_h=Total organic mass flow rate for the process vent, kg/h;

H=Total annual hours of operations for the affected unit, h.

(vi) Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates (E_h, as determined in paragraph (c)(1)(iv) of this section) and by summing the annual total organic mass emission rates (E_A, as determined in paragraph (c)(1)(v) of this section) for all affected process vents at the facility.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material at an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for the test methods specified in paragraph (c)(1) of this section.

(ii) Safe sampling platform(s).

(iii) Safe access to sampling platform(s).

(iv) Utilities for sampling and testing equipment.

(4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the

three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the remanufacturer's or other person's that stores or treats the hazardous secondary material control, compliance may, upon the Regional Administrator's approval, be determined using the average of the results of the two other runs.

(d) To show that a process vent associated with a hazardous secondary material distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this subpart, the remanufacturer or other person that stores or treats the hazardous secondary material must make an initial determination that the time-weighted, annual average total organic concentration of the material managed by the hazardous secondary material management unit is less than 10 ppmw using one of the following two methods:

(1) Direct measurement of the organic concentration of the material using the following procedures:

(i) The remanufacturer or other person that stores or treats the hazardous secondary material must take a minimum of four grab samples of material for each material stream managed in the affected unit under process conditions expected to cause the maximum material organic concentration.

(ii) For material generated onsite, the grab samples must be collected at a point before the material is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the material after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For material generated offsite, the grab samples must be collected at the inlet to the first material management unit that receives the material provided the material has been transferred to the facility in a closed system such as a tank truck and the material is not diluted or mixed with other material.

(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060A (incorporated by reference under 40 CFR 260.11) of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846, or analyzed for its individual organic constituents.

(iv) The arithmetic mean of the results of the analyses of the four samples shall apply for each material stream managed in the unit in determining the time-weighted, annual average total organic concentration of the material. The time-weighted average is to be calculated using the annual quantity of each material stream processed and the mean organic concentration of each material stream managed in the unit.

(2) Using knowledge of the material to determine that its total organic concentration is less than 10 ppmw. Documentation of the material determination is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the material is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a material stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same material stream where it can also be documented that no process changes have occurred since that analysis that could affect the material total organic concentration.

(e) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous secondary materials with time-weighted, annual average total organic concentrations less than 10 ppmw shall be made as follows:

(1) By the effective date that the facility becomes subject to the provisions of this subpart or by the date when the material is first managed in a hazardous secondary material management unit, whichever is later, and

(2) For continuously generated material, annually, or

(3) Whenever there is a change in the material being managed or a change in the process that generates or treats the material.

(f) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Regional Administrator do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous secondary material with organic concentrations of at least 10 ppmw based on knowledge of the material, the dispute may be resolved by using direct measurement as specified at paragraph (d)(1) of this section.

§ 261.1035 Recordkeeping requirements.

(a)(1) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) A remanufacturer or other person that stores or treats the hazardous secondary material of more than one hazardous secondary material management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous secondary material management units in one recordkeeping system if the system identifies each record by each hazardous secondary material management unit.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material must keep the following records on-site:

(1) For facilities that comply with the provisions of § 261.1033(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be kept on-site at the facility by the effective date that the facility becomes subject to the provisions of this subpart.

(2) Up-to-date documentation of compliance with the process vent standards in § 261.1032, including:

(i) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (*i.e.,* the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (*e.g.,* identify the hazardous secondary material management units on a facility plot plan).

(ii) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (*e.g.,* temperatures, flow rates, or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. If the remanufacturer or other person that stores or treats the

hazardous secondary material takes any action (*e.g.,* managing a material of different composition or increasing operating hours of affected hazardous secondary material management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

(3) Where a remanufacturer or other person that stores or treats the hazardous secondary material chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan must be developed and include:

(i) A description of how it is determined that the planned test is going to be conducted when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

(ii) A detailed engineering description of the closed-vent system and control device including:

(A) Manufacturer's name and model number of control device.

(B) Type of control device.

(C) Dimensions of the control device.

(D) Capacity.

(E) Construction materials.

(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(4) Documentation of compliance with § 261.1033 shall include the following information:

(i) A list of all information references and sources used in preparing the documentation.

(ii) Records, including the dates, of each compliance test required by § 261.1033(k).

(iii) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of ''APTI Course 415: Control of Gaseous Emissions'' (incorporated by reference as specified in § 260.11) or other engineering texts acceptable to the Regional Administrator that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with paragraphs (b)(4)(iii)(A) through (G) of this section may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.

(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.

(D) For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in § 261.1033(d).

(E) For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.

(F) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(G) For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(iv) A statement signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous secondary material management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(v) A statement signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of § 261.1032(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of § 261.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

(vi) If performance tests are used to demonstrate compliance, all test results.

(c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this part shall be recorded and kept up-to-date at the facility. The information shall include:

(1) Description and date of each modification that is made to the closed-vent system or control device design.

(2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with § 261.1033 (f)(1) and (2).

(3) Monitoring, operating, and inspection information required by § 261.1033(f) through (k).

(4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

(i) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760 °C, period when the combustion temperature is below 760 °C.

(ii) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater, period when the combustion zone temperature is more than 28 °C below the design average combustion zone temperature established as a requirement of paragraph (b)(4)(iii)(A) of this section.

(iii) For a catalytic vapor incinerator, period when:

(A) Temperature of the vent stream at the catalyst bed inlet is more than 28 °C below the average temperature of the inlet vent stream established as a requirement of paragraph (b)(4)(iii)(B) of this section, or

(B) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of paragraph (b)(4)(iii)(B) of this section.

(iv) For a boiler or process heater, period when:

(A) Flame zone temperature is more than 28 °C below the design average flame zone temperature established as a requirement of paragraph (b)(4)(iii)(C) of this section, or

(B) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of paragraph (b)(4)(iii)(C) of this section.

(v) For a flare, period when the pilot flame is not ignited.

(vi) For a condenser that complies with § 261.1033(f)(2)(vi)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(E) of this section.

(vii) For a condenser that complies with § 261.1033(f)(2)(vi)(B), period when:

(A) Temperature of the exhaust vent stream from the condenser is more than 6 °C above the design average exhaust vent stream temperature established as a requirement of paragraph (b)(4)(iii)(E) of this section; or

(B) Temperature of the coolant fluid exiting the condenser is more than 6 °C above the design average coolant fluid temperature at the condenser outlet established as a requirement of paragraph (b)(4)(iii)(E) of this section.

(viii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly on-site in the control device and complies with § 261.1033(f)(2)(vii)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(F) of this section.

(ix) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly on-site in the control device and complies with § 261.1033(f)(2)(vii)(B), period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of paragraph (b)(4)(iii)(F) of this section.

(5) Explanation for each period recorded under paragraph (c)(4) of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(6) For a carbon adsorption system operated subject to requirements specified in § 261.1033(g) or (h)(2), date when existing carbon in the control device is replaced with fresh carbon.

(7) For a carbon adsorption system operated subject to requirements specified in § 261.1033(h)(1), a log that records:

(i) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

(ii) Date when existing carbon in the control device is replaced with fresh carbon.

(8) Date of each control device startup and shutdown.

(9) A remanufacturer or other person that stores or treats the hazardous secondary material designating any components of a closed-vent system as unsafe to monitor pursuant to § 261.1033(o) of this subpart shall record in a log that is kept at the facility the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of § 261.1033(o) of this subpart, an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

(10) When each leak is detected as specified in § 261.1033(l) of this subpart, the following information shall be recorded:

(i) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.

(ii) The date the leak was detected and the date of first attempt to repair the leak.

(iii) The date of successful repair of the leak.

(iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

(v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The remanufacturer or other person that stores or treats the hazardous secondary material may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(d) Records of the monitoring, operating, and inspection information required by paragraphs (c)(3) through (10) of this section shall be maintained by the owner or operator for at least 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record.

(e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Regional Administrator will specify the appropriate recordkeeping requirements.

(f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in § 261.1032 including supporting documentation as required by § 261.1034(d)(2) when application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced is used, shall be recorded in a log that is kept at the facility.

§§ 261.1036–261.1049 [Reserved]

Subpart BB—Air Emission Standards for Equipment Leaks

§ 261.1050 Applicability.

(a) The regulations in this subpart apply to equipment that contains

hazardous secondary materials excluded under the remanufacturing exclusion at § 261.4(a)(27), unless the equipment operations are subject to the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63.

§ 261.1051 Definitions.

As used in this subpart, all terms shall have the meaning given them in § 261.1031, the Resource Conservation and Recovery Act, and 40 CFR parts 260–266.

§ 261.1052 Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in § 261.1063(b), except as provided in paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 261.1059.

(2) A first attempt at repair (*e.g.,* tightening the packing gland) shall be made no later than five calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the following requirements are met:

(1) Each dual mechanical seal system must be:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or

(ii) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of § 261.1060, or

(iii) Equipped with a system that purges the barrier fluid into a hazardous secondary material stream with no detectable emissions to the atmosphere.

(2) The barrier fluid system must not be a hazardous secondary material with organic concentrations 10 percent or greater by weight.

(3) Each barrier fluid system must be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump must be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5)(i) Each sensor as described in paragraph (d)(3) of this section must be checked daily or be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii) of this section, a leak is detected.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 261.1059.

(iii) A first attempt at repair (*e.g.,* relapping the seal) shall be made no later than five calendar days after each leak is detected.

(e) Any pump that is designated, as described in § 261.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump meets the following requirements:

(1) Must have no externally actuated shaft penetrating the pump housing.

(2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in § 261.1063(c).

(3) Must be tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.

(f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of § 261.1060, it is exempt from the requirements of paragraphs (a) through (e) of this section.

§ 261.1053 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in paragraphs (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) of this section shall be:

(1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure, or

(2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of § 261.1060, or

(3) Equipped with a system that purges the barrier fluid into a hazardous secondary material stream with no detectable emissions to atmosphere.

(c) The barrier fluid must not be a hazardous secondary material with organic concentrations 10 percent or greater by weight.

(d) Each barrier fluid system as described in paragraphs (a) through (c) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in paragraph (d) of this section shall be checked daily or shall be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 261.1059.

(2) A first attempt at repair (*e.g.,* tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of § 261.1060, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in § 261.1064(g)(2), for no

detectable emissions as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of paragraphs (a) through (h) of this section if the compressor:

(1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 261.1063(c).

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.

§ 261.1054 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 261.1063(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in § 261.1059.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 261.1063(c).

(c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in § 261.1060 is exempt from the requirements of paragraphs (a) and (b) of this section.

§ 261.1055 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. This system shall collect the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall meet one of the following requirements:

(1) Return the purged process fluid directly to the process line;

(2) Collect and recycle the purged process fluid; or

(3) Be designed and operated to capture and transport all the purged process fluid to a material management unit that complies with the applicable requirements of §§ 261.1084 through 264.1086 of this subpart or a control device that complies with the requirements of § 261.1060 of this subpart.

(c) *In-situ* sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

§ 261.1056 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous secondary material stream flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous secondary material stream end is closed before the second valve is closed.

(c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this section at all other times.

§ 261.1057 Standards: Valves in gas/vapor service or in light liquid service.

(a) Each valve in gas/vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in § 261.1063(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section and §§ 261.1061 and 261.1062.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months,

(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in § 261.1059.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts.

(2) Replacement of bonnet bolts.

(3) Tightening of packing gland nuts.

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in § 261.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:

(1) Has no external actuating mechanism in contact with the hazardous secondary material stream.

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in § 261.1063(c).

(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator.

(g) Any valve that is designated, as described in § 261.1064(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in § 261.1064(h)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The hazardous secondary material management unit within which the valve is located was in operation before January 13, 2015.

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

§ 261.1058 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors.

(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within five days by the method specified in § 261.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 261.1059.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under § 261.1057(e).

(e) Any connector that is inaccessible or is ceramic or ceramic-lined (*e.g.,* porcelain, glass, or glass-lined) is exempt from the monitoring requirements of paragraph (a) of this section and from the recordkeeping requirements of § 261.1064 of this subpart.

§ 261.1059 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous secondary material management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous secondary material management unit shutdown.

(b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous secondary material management unit and that does not continue to contain or contact hazardous secondary material with organic concentrations at least 10 percent by weight.

(c) Delay of repair for valves will be allowed if:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with § 261.1060.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system.

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a hazardous secondary material management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous secondary material management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous secondary material management unit shutdown will not be allowed unless the next hazardous secondary material management unit shutdown occurs sooner than 6 months after the first hazardous secondary material management unit shutdown.

§ 261.1060 Standards: Closed-vent systems and control devices.

(a) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management units using closed-vent systems and control devices subject to this subpart shall comply with the provisions of § 261.1033 of this part.

(b)(1) The remanufacturer or other person that stores or treats the hazardous secondary material at an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(2) Any unit that begins operation after July 13, 2015 and is subject to the provisions of this subpart when operation begins, must comply with the rules immediately (*i.e.,* must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material at any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The remanufacturer or other person that stores or treats the hazardous secondary material shall keep a copy of the implementation schedule at the facility.

(4) Remanufacturers or other persons that store or treat the hazardous secondary materials at facilities and units that become newly subject to the requirements of this subpart after January 13, 2015, due to an action other than those described in paragraph (b)(3) of this section must comply with all applicable requirements immediately (*i.e.,* must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

§ 261.1061 Alternative standards for valves in gas/vapor service or in light liquid service: percentage of valves allowed to leak.

(a) A remanufacturer or other person that stores or treats the hazardous secondary material subject to the requirements of § 261.1057 may elect to have all valves within a hazardous secondary material management unit comply with an alternative standard that allows no greater than 2 percent of the valves to leak.

(b) The following requirements shall be met if a remanufacturer or other person that stores or treats the hazardous secondary material decides to comply with the alternative standard of allowing 2 percent of valves to leak:

(1) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Regional Administrator.

(2) If a valve leak is detected, it shall be repaired in accordance with § 261.1057(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves subject to the requirements in § 261.1057 within the

hazardous secondary material management unit shall be monitored within 1 week by the methods specified in § 261.1063(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves subject to the requirements in § 261.1057 for which leaks are detected by the total number of valves subject to the requirements in § 261.1057 within the hazardous secondary material management unit.

§ 261.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.

(a) A remanufacturer or other person that stores or treats the hazardous secondary material subject to the requirements of § 261.1057 may elect for all valves within a hazardous secondary material management unit to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(b)(1) A remanufacturer or other person that stores or treats the hazardous secondary material shall comply with the requirements for valves, as described in § 261.1057, except as described in paragraphs (b)(2) and (3) of this section.

(2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, a remanufacturer or other person that stores or treats the hazardous secondary material may begin to skip one of the quarterly leak detection periods (*i.e.,* monitor for leaks once every six months) for the valves subject to the requirements in § 261.1057 of this subpart.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, a remanufacturer or other person that stores or treats the hazardous secondary material may begin to skip three of the quarterly leak detection periods (*i.e.,* monitor for leaks once every year) for the valves subject to the requirements in § 261.1057 of this subpart.

(4) If the percentage of valves leaking is greater than two percent, the remanufacturer or other person that stores or treats the hazardous secondary material shall monitor monthly in compliance with the requirements in § 261.1057, but may again elect to use this section after meeting the requirements of § 261.1057(c)(1).

§ 261.1063 Test methods and procedures.

(a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

(b) Leak detection monitoring, as required in §§ 261.1052–261.1062, shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air).

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(c) When equipment is tested for compliance with no detectable emissions, as required in §§ 261.1052(e), 261.1053(i), 261.1054, and 261.1057(f), the test shall comply with the following requirements:

(1) The requirements of paragraphs (b)(1) through (4) of this section shall apply.

(2) The background level shall be determined as set forth in Reference Method 21.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) A remanufacturer or other person that stores or treats the hazardous secondary material must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous secondary material with organic concentration that equals or exceeds 10 percent by weight using the following:

(1) Methods described in ASTM Methods D 2267–88, E 169–87, E 168–88, E 260–85 (incorporated by reference under § 260.11);

(2) Method 9060A (incorporated by reference under 40 CFR 260.11) of "Test Methods for Evaluating Solid Waste," EPA Publication SW–846, for computing total organic concentration of the sample, or analyzed for its individual organic constituents; or

(3) Application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced. Documentation of a material determination by knowledge is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the material is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same material stream where it can also be documented that no process changes have occurred since that analysis that could affect the material total organic concentration.

(e) If a remanufacturer or other person that stores or treats the hazardous secondary material determines that a piece of equipment contains or contacts a hazardous secondary material with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in paragraph (d)(1) or (2) of this section.

(f) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Regional Administrator do not agree on whether a piece of equipment contains or contacts a hazardous secondary material with organic concentrations at least 10 percent by weight, the procedures in paragraph (d)(1) or (2) of this section can be used to resolve the dispute.

(g) Samples used in determining the percent organic content shall be representative of the highest total organic content hazardous secondary material that is expected to be contained in or contact the equipment.

(h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D–2879–86 (incorporated by reference under § 260.11).

(i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of § 261.1034(c)(1) through (4).

§ 261.1064 Recordkeeping requirements.

(a)(1) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) A remanufacturer or other person that stores or treats the hazardous secondary material in more than one hazardous secondary material management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous secondary material management units in one recordkeeping system if the system identifies each record by each hazardous secondary material management unit.

(b) Remanufacturer's and other person's that store or treat the hazardous secondary material must record and keep the following information at the facility:

(1) For each piece of equipment to which subpart BB of part 261 applies:

(i) Equipment identification number and hazardous secondary material management unit identification.

(ii) Approximate locations within the facility (*e.g.,* identify the hazardous secondary material management unit on a facility plot plan).

(iii) Type of equipment (*e.g.,* a pump or pipeline valve).

(iv) Percent-by-weight total organics in the hazardous secondary material stream at the equipment.

(v) Hazardous secondary material state at the equipment (*e.g.,* gas/vapor or liquid).

(vi) Method of compliance with the standard (*e.g.,* ''monthly leak detection and repair'' or ''equipped with dual mechanical seals'').

(2) For facilities that comply with the provisions of § 261.1033(a)(2), an implementation schedule as specified in § 261.1033(a)(2).

(3) Where a remanufacturer or other person that stores or treats the hazardous secondary material chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in § 261.1035(b)(3).

(4) Documentation of compliance with § 261.1060, including the detailed design documentation or performance test results specified in § 261.1035(b)(4).

(c) When each leak is detected as specified in §§ 261.1052, 261.1053, 261.1057, and 261.1058, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with § 261.1058(a), and the date the leak was detected, shall be attached to the leaking equipment.

(2) The identification on equipment, except on a valve, may be removed after it has been repaired.

(3) The identification on a valve may be removed after it has been monitored for two successive months as specified in § 261.1057(c) and no leak has been detected during those two months.

(d) When each leak is detected as specified in §§ 261.1052, 261.1053, 261.1057, and 261.1058, the following information shall be recorded in an inspection log and shall be kept at the facility:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date evidence of a potential leak was found in accordance with § 261.1058(a).

(3) The date the leak was detected and the dates of each attempt to repair the leak.

(4) Repair methods applied in each attempt to repair the leak.

(5) ''Above 10,000'' if the maximum instrument reading measured by the methods specified in § 261.1063(b) after each repair attempt is equal to or greater than 10,000 ppm.

(6) ''Repair delayed'' and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(7) Documentation supporting the delay of repair of a valve in compliance with § 261.1059(c).

(8) The signature of the remanufacturer or other person that stores or treats the hazardous secondary material (or designate) whose decision it was that repair could not be effected without a hazardous secondary material management unit shutdown.

(9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(10) The date of successful repair of the leak.

(e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of § 261.1060 shall be recorded and kept up-to-date at the facility as specified in § 261.1035(c). Design documentation is specified in § 261.1035(c)(1) and (2) and monitoring, operating, and inspection information in § 261.1035(c)(3) through (8).

(f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Regional Administrator will specify the appropriate recordkeeping requirements.

(g) The following information pertaining to all equipment subject to the requirements in §§ 261.1052 through 261.1060 shall be recorded in a log that is kept at the facility:

(1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that the remanufacturer or other person that stores or treats the hazardous secondary material elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of §§ 261.1052(e), 261.1053(i), and 261.1057(f).

(ii) The designation of this equipment as subject to the requirements of §§ 261.1052(e), 261.1053(i), or 261.1057(f) shall be signed by the remanufacturer or other person that stores or treats the hazardous secondary material.

(3) A list of equipment identification numbers for pressure relief devices required to comply with § 261.1054(a).

(4)(i) The dates of each compliance test required in §§ 261.1052(e), 261.1053(i), 261.1054, and 261.1057(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) Identification, either by list or location (area or group) of equipment that contains or contacts hazardous secondary material with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year.

(h) The following information pertaining to all valves subject to the requirements of § 261.1057(g) and (h) shall be recorded in a log that is kept at the facility:

(1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

(2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

(i) The following information shall be recorded in a log that is kept at the facility for valves complying with § 261.1062:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(j) The following information shall be recorded in a log that is kept at in the facility:

(1) Criteria required in §§ 261.1052(d)(5)(ii) and 261.1053(e)(2) and an explanation of the design criteria.

(2) Any changes to these criteria and the reasons for the changes.

(k) The following information shall be recorded in a log that is kept at the facility for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:

(1) An analysis determining the design capacity of the hazardous secondary material management unit.

(2) A statement listing the hazardous secondary material influent to and effluent from each hazardous secondary material management unit subject to the requirements in §§ 261.1052 through 261.1060 and an analysis determining whether these hazardous secondary materials are heavy liquids.

(3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in §§ 261.1052 through 261.1060. The record shall include supporting documentation as required by § 261.1063(d)(3) when application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced is used. If the remanufacturer or other person that stores or treats the hazardous secondary material takes any action (*e.g.,* changing the process that produced the material) that could result in an increase in the total organic content of the material contained in or contacted by equipment determined not to be subject to the requirements in §§ 261.1052 through 261.1060, then a new determination is required.

(l) Records of the equipment leak information required by paragraph (d) of this section and the operating information required by paragraph (e) of this section need be kept only three years.

(m) The remanufacturer or other person that stores or treats the hazardous secondary material at a facility with equipment that is subject to this subpart and to regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with this subpart either by documentation pursuant to § 261.1064 of this subpart, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available at the facility.

§§ 261.1065–261.1079 [Reserved]

Subpart CC—Air Emission Standards for Tanks and Containers

§ 261.1080 Applicability.

(a) The regulations in this subpart apply to tanks and containers that contain hazardous secondary materials excluded under the remanufacturing exclusion at § 261.4(a)(27), unless the tanks and containers are equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulations codified under 40 CFR part 60, part 61, or part 63.

(b) [Reserved]

§ 261.1081 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given to them in the Resource Conservation and Recovery Act and parts 260 through 266 of this chapter.

Average volatile organic concentration or *average VO concentration* means the mass-weighted average volatile organic concentration of a hazardous secondary material as determined in accordance with the requirements of § 261.1084 of this subpart.

Closure device means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover such that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover (*e.g.,* a sampling port cap), manually operated (*e.g.,* a hinged access lid or hatch), or automatically operated (*e.g.,* a spring-loaded pressure relief valve).

Continuous seal means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

Cover means a device that provides a continuous barrier over the hazardous secondary material managed in a unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment which can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

Empty hazardous secondary material container means:

(1) A container from which all hazardous secondary materials have been removed that can be removed using the practices commonly employed to remove materials from that type of container, *e.g.,* pouring, pumping, and aspirating, and no more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner;

(2) A container that is less than or equal to 119 gallons in size and no more than 3 percent by weight of the total capacity of the container remains in the container or inner liner; or

(3) A container that is greater than 119 gallons in size and no more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner.

Enclosure means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

External floating roof means a pontoon-type or double-deck type cover that rests on the surface of the material managed in a tank with no fixed roof.

Fixed roof means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

Floating membrane cover means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous secondary material being managed in a surface impoundment.

Floating roof means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the material being contained, and is equipped with a continuous seal.

Hard-piping means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

In light material service means the container is used to manage a material for which both of the following conditions apply: The vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20 °C; and the total concentration of the pure organic

constituents having a vapor pressure greater than 0.3 kPa at 20 °C is equal to or greater than 20 percent by weight.

Internal floating roof means a cover that rests or floats on the material surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof.

Liquid-mounted seal means a foam or liquid-filled primary seal mounted in contact with the hazardous secondary material between the tank wall and the floating roof continuously around the circumference of the tank.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Material determination means performing all applicable procedures in accordance with the requirements of § 261.1084 of this subpart to determine whether a hazardous secondary material meets standards specified in this subpart. Examples of a material determination include performing the procedures in accordance with the requirements of § 261.1084 of this subpart to determine the average VO concentration of a hazardous secondary material at the point of material origination; the average VO concentration of a hazardous secondary material at the point of material treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous secondary material; the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous secondary material and comparing the results to the applicable standards; or the maximum volatile organic vapor pressure for a hazardous secondary material in a tank and comparing the results to the applicable standards.

Maximum organic vapor pressure means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank, at the maximum vapor pressure-causing conditions (*i.e.,* temperature, agitation, pH effects of combining materials, etc.) reasonably expected to occur in the tank. For the purpose of this subpart, maximum organic vapor pressure is determined using the procedures specified in § 261.1084(c) of this subpart.

Metallic shoe seal means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

No detectable organic emissions means no escape of organics to the atmosphere as determined using the procedure specified in § 261.1084(d) of this subpart.

Point of material origination means as follows:

(1) When the remanufacturer or other person that stores or treats the hazardous secondary material is the generator of the hazardous secondary material, the point of material origination means the point where a material produced by a system, process, or material management unit is determined to be a hazardous secondary material excluded under § 261.4(a)(27).

Note to paragraph (1) of the definition of *Point of material origination:* In this case, this term is being used in a manner similar to the use of the term ''point of generation'' in air standards established under authority of the Clean Air Act in 40 CFR parts 60, 61, and 63.

(2) When the remanufacturer or other person that stores or treats the hazardous secondary material is not the generator of the hazardous secondary material, point of material origination means the point where the remanufacturer or other person that stores or treats the hazardous secondary material accepts delivery or takes possession of the hazardous secondary material.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials.

Single-seal system means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

Vapor-mounted seal means a continuous seal that is mounted such that there is a vapor space between the hazardous secondary material in the unit and the bottom of the seal.

Volatile organic concentration or *VO concentration* means the fraction by weight of the volatile organic compounds contained in a hazardous secondary material expressed in terms of parts per million (ppmw) as determined by direct measurement or by knowledge of the material in accordance with the requirements of § 261.1084 of this subpart. For the purpose of determining the VO concentration of a hazardous secondary material, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in the liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6}atmospheres/gram-mole/m^3) at 25 degrees Celsius must be included.

§ 261.1082 Standards: General.

(a) This section applies to the management of hazardous secondary material in tanks and containers subject to this subpart.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from each hazardous secondary material management unit in accordance with standards specified in §§ 261.1084 through 261.1087 of this subpart, as applicable to the hazardous secondary material management unit, except as provided for in paragraph (c) of this section.

(c) A tank or container is exempt from standards specified in §§ 261.1084 through 261.1087 of this subpart, as applicable, provided that the hazardous secondary material management unit is a tank or container for which all hazardous secondary material entering the unit has an average VO concentration at the point of material origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in § 261.1083(a) of this subpart. The remanufacturer or other person that stores or treats the hazardous secondary

material shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous secondary material streams entering the unit.

§ 261.1083 Material determination procedures.

(a) *Material determination procedure to determine average volatile organic (VO) concentration of a hazardous secondary material at the point of material origination.* (1) *Determining average VO concentration at the point of material origination.* A remanufacturer or other person that stores or treats the hazardous secondary material shall determine the average VO concentration at the point of material origination for each hazardous secondary material placed in a hazardous secondary material management unit exempted under the provisions of § 261.1082(c)(1) of this subpart from using air emission controls in accordance with standards specified in §§ 261.1084 through 261.1087 of this subpart, as applicable to the hazardous secondary material management unit.

(i) An initial determination of the average VO concentration of the material stream shall be made before the first time any portion of the material in the hazardous secondary material stream is placed in a hazardous secondary material management unit exempted under the provisions of § 261.1082(c)(1) of this subpart from using air emission controls, and thereafter an initial determination of the average VO concentration of the material stream shall be made for each averaging period that a hazardous secondary material is managed in the unit; and

(ii) Perform a new material determination whenever changes to the source generating the material stream are reasonably likely to cause the average VO concentration of the hazardous secondary material to increase to a level that is equal to or greater than the applicable VO concentration limits specified in § 261.1082 of this subpart.

(2) *Determination of average VO concentration using direct measurement or knowledge.* For a material determination that is required by paragraph (a)(1) of this section, the average VO concentration of a hazardous secondary material at the point of material origination shall be determined using either direct measurement as specified in paragraph (a)(3) of this section or by knowledge as specified in paragraph (a)(4) of this section.

(3) *Direct measurement to determine average VO concentration of a hazardous secondary material at the point of material origination*—(i) *Identification.* The remanufacturer or other person that stores or treats the hazardous secondary material shall identify and record in a log that is kept at the facility the point of material origination for the hazardous secondary material.

(ii) *Sampling.* Samples of the hazardous secondary material stream shall be collected at the point of material origination in a manner such that volatilization of organics contained in the material and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(A) The averaging period to be used for determining the average VO concentration for the hazardous secondary material stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the remanufacturer or other person that stores or treats the hazardous secondary material determines is appropriate for the hazardous secondary material stream but shall not exceed 1 year.

(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous secondary material determination. All of the samples for a given material determination shall be collected within a one-hour period. The average of the four or more sample results constitutes a material determination for the material stream. One or more material determinations may be required to represent the complete range of material compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous secondary material stream. Examples of such normal variations are seasonal variations in material quantity or fluctuations in ambient temperature.

(C) All samples shall be collected and handled in accordance with written procedures prepared by the remanufacturer or other person that stores or treats the hazardous secondary material and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous secondary material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained at the facility. An example of acceptable sample collection and handling procedures for a total volatile organic constituent concentration may be found in Method 25D in 40 CFR part 60, appendix A.

(D) Sufficient information, as specified in the "site sampling plan" required under paragraph (a)(3)(ii)(C) of this section, shall be prepared and recorded to document the material quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous secondary material represented by the samples.

(iii) *Analysis.* Each collected sample shall be prepared and analyzed in accordance with Method 25D in 40 CFR part 60, appendix A for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed material concentration accounts for and reflects all organic compounds in the material with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6}atmospheres/gram-mole/m^3] at 25 degrees Celsius. At the discretion of the remanufacturer or other person that stores or treats the hazardous secondary material, the test data obtained may be adjusted by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25 degrees Celsius. To adjust these data, the measured concentration of each individual chemical constituent contained in the material is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}). If the remanufacturer or other person that stores or treats the hazardous secondary material elects to adjust the test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 degrees Celsius contained in the material. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in paragraph (a)(3)(iii)(A) or (B) of this section and provided the requirement to reflect all organic compounds in the material with Henry's law constant values greater than or equal to 0.1 Y/X [which can also be

expressed as 1.8×10^{-6}atmospheres/gram-mole/m^3] at 25 degrees Celsius, is met.

(A) Any EPA standard method that has been validated in accordance with ''Alternative Validation Procedure for EPA Waste and Wastewater Methods,'' 40 CFR part 63, appendix D.

(B) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR part 63, appendix A. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

(iv) *Calculations.* (A) The average VO concentration (C) on a mass-weighted basis shall be calculated by using the results for all material determinations conducted in accordance with paragraphs (a)(3)(ii) and (iii) of this section and the following equation:

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

Where:

C = Average VO concentration of the hazardous secondary material at the point of material origination on a mass-weighted basis, ppmw.

i = Individual material determination ''i'' of the hazardous secondary material.

n = Total number of material determinations of the hazardous secondary material conducted for the averaging period (not to exceed 1 year).

Q_i = Mass quantity of hazardous secondary material stream represented by C_i, kg/hr.

Q_T = Total mass quantity of hazardous secondary material during the averaging period, kg/hr.

C_i = Measured VO concentration of material determination ''i'' as determined in accordance with the requirements of paragraph (a)(3)(iii) of this section (*i.e.* the average of the four or more samples specified in paragraph (a)(3)(ii)(B) of this section), ppmw.

(B) For the purpose of determining C_i, for individual material samples analyzed in accordance with paragraph (a)(3)(iii) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(*1*) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A.

(*2*) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the material that has a Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6}atmospheres/gram-mole/m^3] at 25 degrees Celsius.

(4) *Use of knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material to determine average VO concentration of a hazardous secondary material at the point of material origination.* (i) Documentation shall be prepared that presents the information used as the basis for the knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material of the hazardous secondary material stream's average VO concentration. Examples of information that may be used as the basis for knowledge include: Material balances for the source or process generating the hazardous secondary material stream; constituent-specific chemical test data for the hazardous secondary material stream from previous testing that are still applicable to the current material stream; previous test data for other locations managing the same type of material stream; or other knowledge based on information included in shipping papers or material certification notices.

(ii) If test data are used as the basis for knowledge, then the remanufacturer or other person that stores or treats the hazardous secondary material shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, a remanufacturer or other person that stores or treats the hazardous secondary material may use organic concentration test data for the hazardous secondary material stream that are validated in accordance with Method 301 in 40 CFR part 63, appendix A as the basis for knowledge of the material.

(iii) A remanufacturer or other person that stores or treats the hazardous secondary material using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous secondary material may adjust the test data to the corresponding average VO concentration value which would have been obtained had the material samples been analyzed using Method 25D in 40 CFR part 60, appendix A. To adjust these data, the measured concentration for each individual chemical constituent contained in the material is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}).

(iv) In the event that the Regional Administrator and the remanufacture or other person that stores or treats the hazardous secondary material disagree on a determination of the average VO concentration for a hazardous secondary material stream using knowledge, then the results from a determination of average VO concentration using direct measurement as specified in paragraph (a)(3) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Regional Administrator may perform or request that the remanufacturer or other person that stores or treats the hazardous secondary material perform this determination using direct measurement. The remanufacturer or other person that stores or treats the hazardous secondary material may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of paragraph (a)(3)(iii) of this section.

(b) [Reserved]

(c) *Procedure to determine the maximum organic vapor pressure of a hazardous secondary material in a tank.* (1) A remanufacturer or other person that stores or treats the hazardous secondary material shall determine the maximum organic vapor pressure for each hazardous secondary material placed in a tank using Tank Level 1 controls in accordance with standards specified in § 261.1084(c) of this subpart.

(2) A remanufacturer or other person that stores or treats the hazardous secondary material shall use either direct measurement as specified in paragraph (c)(3) of this section or knowledge of the waste as specified by paragraph (c)(4) of this section to determine the maximum organic vapor pressure which is representative of the hazardous secondary material composition stored or treated in the tank.

(3) Direct measurement to determine the maximum organic vapor pressure of a hazardous secondary material.

(i) *Sampling.* A sufficient number of samples shall be collected to be representative of the hazardous secondary material contained in the tank. All samples shall be collected and handled in accordance with written procedures prepared by the remanufacturer or other person that stores or treats the hazardous secondary

material and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous secondary material are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained at the facility. An example of acceptable sample collection and handling procedures may be found in Method 25D in 40 CFR part 60, appendix A.

(ii) *Analysis.* Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous secondary material:

(A) Method 25E in 40 CFR part 60 appendix A;

(B) Methods described in American Petroleum Institute Publication 2517, Third Edition, February 1989, ''Evaporative Loss from External Floating-Roof Tanks,'' (incorporated by reference—refer to § 260.11 of this chapter);

(C) Methods obtained from standard reference texts;

(D) ASTM Method 2879–92 (incorporated by reference—refer to § 260.11 of this chapter); and

(E) Any other method approved by the Regional Administrator.

(4) Use of knowledge to determine the maximum organic vapor pressure of the hazardous secondary material. Documentation shall be prepared and recorded that presents the information used as the basis for the knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material that the maximum organic vapor pressure of the hazardous secondary material is less than the maximum vapor pressure limit listed in § 261.1085(b)(1)(i) of this subpart for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous secondary material is generated by a process for which at other locations it previously has been determined by direct measurement that the hazardous secondary material's waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

(d) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart:

(1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (*i.e.,* a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: The interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure relief valve.

(2) The test shall be performed when the unit contains a hazardous secondary material having an organic concentration representative of the range of concentrations for the hazardous secondary material expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.

(3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the hazardous secondary material placed in the hazardous secondary management unit, not for each individual organic constituent.

(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(5) Calibration gases shall be as follows:

(i) Zero air (less than 10 ppmv hydrocarbon in air), and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.

(6) The background level shall be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21 of 40 CFR part 60, appendix A. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (*e.g.,* some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison shall be as specified in paragraph (d)(9) of this section. If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

(9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

§ 261.1084 Standards: tanks.

(a) The provisions of this section apply to the control of air pollutant emissions from tanks for which § 261.1082(b) of this subpart references the use of this section for such air emission control.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from each tank subject to this section in accordance with the following requirements as applicable:

(1) For a tank that manages hazardous secondary material that meets all of the conditions specified in paragraphs (b)(1)(i) through (iii) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in paragraph (c) of this section or the Tank Level 2 controls specified in paragraph (d) of this section.

(i) The hazardous secondary material in the tank has a maximum organic vapor pressure which is less than the maximum organic vapor pressure limit for the tank's design capacity category as follows:

(A) For a tank design capacity equal to or greater than 151 m^3, the maximum organic vapor pressure limit for the tank is 5.2 kPa.

(B) For a tank design capacity equal to or greater than 75 m^3 but less than 151 m^3, the maximum organic vapor pressure limit for the tank is 27.6 kPa.

(C) For a tank design capacity less than 75 m^3, the maximum organic vapor pressure limit for the tank is 76.6 kPa.

(ii) The hazardous secondary material in the tank is not heated by the

remanufacturer or other person that stores or treats the hazardous secondary material to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous secondary material is determined for the purpose of complying with paragraph (b)(1)(i) of this section.

(2) For a tank that manages hazardous secondary material that does not meet all of the conditions specified in paragraphs (b)(1)(i) through (iii) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section. An example of tanks required to use Tank Level 2 controls is a tank for which the hazardous secondary material in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category as specified in paragraph (b)(1)(i) of this section.

(c) Remanufacturers or other persons that store or treats the hazardous secondary material controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in paragraphs (c)(1) through (4) of this section:

(1) The remanufacturer or other person that stores or treats that hazardous secondary material shall determine the maximum organic vapor pressure for a hazardous secondary material to be managed in the tank using Tank Level 1 controls before the first time the hazardous secondary material is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in § 261.1083(c) of this subpart. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform a new determination whenever changes to the hazardous secondary material managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in paragraph (b)(1)(i) of this section, as applicable to the tank.

(2) The tank shall be equipped with a fixed roof designed to meet the following specifications:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous secondary material in the tank. The fixed roof may be a separate cover installed on the tank (*e.g.,* a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (*e.g.,* a horizontal cylindrical tank equipped with a hatch).

(ii) The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

(iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:

(A) Equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

(B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous secondary material is managed in the tank, except as provided for in paragraphs (c)(2)(iii)(B)(*1*) and (*2*) of this section.

(*1*) During periods when it is necessary to provide access to the tank for performing the activities of paragraph (c)(2)(iii)(B)(*2*) of this section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

(*2*) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.

(iv) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the hazardous secondary material or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(3) Whenever a hazardous secondary material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:

(i) Opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of tank.

(ii) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

(iii) Opening of a safety device, as defined in § 261.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect the air emission control equipment in accordance with the following requirements.

(i) The fixed roof and its closure devices shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform the inspections at least once every year except under the special conditions provided for in paragraph (l) of this section.

(iii) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of paragraph (k) of this section.

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in § 261.1089(b) of this subpart.

(d) Remanufacturers or other persons that store or treat the hazardous secondary material controlling air pollutant emissions from a tank using Tank Level 2 controls shall use one of the following tanks:

(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in paragraph (e) of this section;

(2) A tank equipped with an external floating roof in accordance with the requirements specified in paragraph (f) of this section;

(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (g) of this section;

(4) A pressure tank designed and operated in accordance with the requirements specified in paragraph (h) of this section; or

(5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in paragraph (i) of this section.

(e) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank using a fixed roof with an internal floating roof shall meet the requirements specified in paragraphs (e)(1) through (3) of this section.

(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in § 261.1081; or

(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

(iii) The internal floating roof shall meet the following specifications:

(A) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.

(D) Each automatic bleeder vent and rim space vent shall be gasketed.

(E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed (*i.e.,* no visible gaps). Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect the internal floating roof in accordance with the procedures specified as follows:

(i) The floating roof and its closure devices shall be visually inspected by the remanufacture or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: The internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the hazardous secondary material surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect the internal floating roof components as follows except as provided in paragraph (e)(3)(iii) of this section:

(A) Visually inspect the internal floating roof components through openings on the fixed-roof (*e.g.,* manholes and roof hatches) at least once every 12 months after initial fill, and

(B) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 10 years.

(iii) As an alternative to performing the inspections specified in paragraph (e)(3)(ii) of this section for an internal floating roof equipped with two continuous seals mounted one above the

other, the remanufacturer or other person that stores or treats the hazardous secondary material may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every five years.

(iv) Prior to each inspection required by paragraph (e)(3)(ii) or (iii) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Regional Administrator of the date and location of the inspection as follows:

(A) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (e)(3)(iv)(B) of this section.

(B) When a visual inspection is not planned and the remanufacturer or other person that stores or treats the hazardous secondary material could not have known about the inspection 30 calendar days before refilling the tank, the remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Regional Administrator as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least seven calendar days before refilling the tank.

(v) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of paragraph (k) of this section.

(vi) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in § 261.1089(b) of this subpart.

(4) Safety devices, as defined in § 261.1081, may be installed and operated as necessary on any tank complying with the requirements of paragraph (e) of this section.

(f) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in paragraphs (f)(1) through (3) of this section.

(1) The remanufacturer or other person that stores or treats the hazardous secondary material shall design the external floating roof in accordance with the following requirements:

(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be a liquid-mounted seal or a metallic shoe seal, as defined in 40 CFR 261.1081. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 3.8 centimeters (cm). If a metallic shoe seal is used for the primary seal, the metallic shoe seal shall be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters above the liquid surface.

(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters (cm).

(iii) The external floating roof shall meet the following specifications:

(A) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.

(C) Each access hatch and each gauge float well shall be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

(D) Each automatic bleeder vent and each rim space vent shall be equipped with a gasket.

(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.

(H) Each slotted guide pole shall be equipped with a gasketed float or other device which closes off the liquid surface from the atmosphere.

(I) Each gauge hatch and each sample well shall be equipped with a gasketed cover.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure device must be open for access.

(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.

(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well must be opened for access.

(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect the external floating roof in accordance with the procedures specified as follows:

(i) The remanufacturer or other person that stores or treats the hazardous secondary material shall measure the external floating roof seal gaps in accordance with the following requirements:

(A) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years.

(B) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

(C) If a tank ceases to hold hazardous secondary material for a period of 1 year or more, subsequent introduction of hazardous secondary material into the tank shall be considered an initial operation for the purposes of paragraphs (f)(3)(i)(A) and (B) of this section.

(D) The remanufacturer or other person that stores or treats the hazardous secondary material shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure:

(*1*) The seal gap measurements shall be performed at one or more floating roof levels when the roof is floating off the roof supports.

(*2*) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter (cm) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.

(*3*) For a seal gap measured under paragraph (f)(3) of this section, the gap surface area shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(*4*) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in paragraph (f)(1)(ii) of this section.

(E) In the event that the seal gap measurements do not conform to the specifications in paragraph (f)(1)(ii) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of paragraph (k) of this section.

(F) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in § 261.1089(b) of this subpart.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the external floating roof in accordance with the following requirements:

(A) The floating roof and its closure devices shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: Holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(B) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform the inspections at least once every year except for the special conditions provided for in paragraph (l) of this section.

(C) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of paragraph (k) of this section.

(D) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in § 261.1089(b) of this subpart.

(iii) Prior to each inspection required by paragraph (f)(3)(i) or (ii) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The remanufacturer or other person that stores or treats the hazardous secondary material shall notify the Regional Administrator of the date and location of the inspection as follows:

(A) Prior to each inspection to measure external floating roof seal gaps as required under paragraph (f)(3)(i) of this section, written notification shall be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Regional Administrator at least 30 calendar days before the date the measurements are scheduled to be performed.

(B) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (f)(3)(iii)(C) of this section.

(C) When a visual inspection is not planned and the remanufacturer or other person that stores or treats the hazardous secondary material could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Regional Administrator as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator

at least seven calendar days before refilling the tank.

(4) Safety devices, as defined in § 261.1081, may be installed and operated as necessary on any tank complying with the requirements of paragraph (f) of this section.

(g) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank by venting the tank to a control device shall meet the requirements specified in paragraphs (g)(1) through (3) of this section.

(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.

(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of § 261.1087 of this subpart.

(2) Whenever a hazardous secondary material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of a tank.

(ii) Opening of a safety device, as defined in § 261.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(i) The fixed roof and its closure devices shall be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the procedures specified in § 261.1087 of this subpart.

(iii) The remanufacturer or other person that stores or treats the hazardous secondary material shall perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material shall perform the inspections at least once every year except for the special conditions provided for in paragraph (l) of this section.

(iv) In the event that a defect is detected, the remanufacture or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of paragraph (k) of this section.

(v) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain a record of the inspection in accordance with the requirements specified in § 261.1089(b) of this subpart.

(h) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions by using a pressure tank shall meet the following requirements.

(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

(2) All tank openings shall be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in § 261.1083(d) of this subpart.

(3) Whenever a hazardous secondary material is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except under either or the following conditions as specified in paragraph (h)(3)(i) or (h)(3)(ii) of this section.

(i) At those times when opening of a safety device, as defined in § 261.1081 of this subpart, is required to avoid an unsafe condition.

(ii) At those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of § 261.1087 of this subpart.

(i) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device shall meet the requirements specified in paragraphs (i)(1) through (4) of this section.

(1) The tank shall be located inside an enclosure. The enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in ''Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure'' under 40 CFR 52.741, appendix B. The enclosure may have

permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The remanufacturer or other person that stores or treats the hazardous secondary material shall perform the verification procedure for the enclosure as specified in Section 5.0 to ''Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure'' initially when the enclosure is first installed and, thereafter, annually.

(2) The enclosure shall be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in § 261.1087 of this subpart.

(3) Safety devices, as defined in § 261.1081, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of paragraphs (i)(1) and (2) of this section.

(4) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect and monitor the closed-vent system and control device as specified in § 261.1087 of this subpart.

(j) The remanufacturer or other person that stores or treats the hazardous secondary material shall transfer hazardous secondary material to a tank subject to this section in accordance with the following requirements:

(1) Transfer of hazardous secondary material, except as provided in paragraph (j)(2) of this section, to the tank from another tank subject to this section shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous secondary material to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR—National Emission Standards for Individual Drain Systems.

(2) The requirements of paragraph (j)(1) of this section do not apply when transferring a hazardous secondary material to the tank under any of the following conditions:

(i) The hazardous secondary material meets the average VO concentration conditions specified in § 261.1082(c)(1) of this subpart at the point of material origination.

(ii) The hazardous secondary material has been treated by an organic destruction or removal process to meet the requirements in § 261.1082(c)(2) of this subpart.

(iii) The hazardous secondary material meets the requirements of § 261.1082(c)(4) of this subpart.

(k) The remanufacturer or other person that stores or treats the hazardous secondary material shall repair each defect detected during an inspection performed in accordance with the requirements of paragraph (c)(4), (e)(3), (f)(3), or (g)(3) of this section as follows:

(1) The remanufacturer or other person that stores or treats the hazardous secondary material shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (k)(2) of this section.

(2) Repair of a defect may be delayed beyond 45 calendar days if the remanufacturer or other person that stores or treats the hazardous secondary material determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous secondary material normally managed in the tank. In this case, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect the next time the process or unit that is generating the hazardous secondary material managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this subpart, subsequent inspection and monitoring may be performed at intervals longer than 1 year under the following special conditions:

(1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the remanufacturer or other person that stores or treats the hazardous secondary material may designate a cover as an ''unsafe to inspect and monitor cover'' and comply with all of the following requirements:

(i) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(ii) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable section of this subpart, as frequently as practicable during those times when a worker can safely access the cover.

(2) In the case when a tank is buried partially or entirely underground, a remanufacturer or other person that stores or treats the hazardous secondary material is required to inspect and monitor, as required by the applicable provisions of this section, only those portions of the tank cover and those connections to the tank (*e.g.,* fill ports, access hatches, gauge wells, etc.) that are located on or above the ground surface.

§ 261.1085 [Reserved]

§ 261.1086 Standards: containers.

(a) *Applicability.* The provisions of this section apply to the control of air pollutant emissions from containers for which § 261.1082(b) of this subpart references the use of this section for such air emission control.

(b) *General requirements.* (1) The remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from each container subject to this section in accordance with the following requirements, as applicable to the container.

(i) For a container having a design capacity greater than 0.1 m^3 and less than or equal to 0.46 m^3, the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in paragraph (c) of this section.

(ii) For a container having a design capacity greater than 0.46 m^3 that is not in light material service, the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in paragraph (c) of this section.

(iii) For a container having a design capacity greater than 0.46 m^3 that is in light material service, the remanufacturer or other person that stores or treats the hazardous secondary material shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in paragraph (d) of this section.

(2) [Reserved]

(c) *Container Level 1 standards.* (1) A container using Container Level 1 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on

packaging hazardous materials for transportation as specified in paragraph (f) of this section.

(ii) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (*e.g.,* a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (*e.g.,* a ''portable tank'' or bulk cargo container equipped with a screw-type cap).

(iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous secondary material in the container such that no hazardous secondary material is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

(2) A container used to meet the requirements of paragraph (c)(1)(ii) or (iii) of this section shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous secondary material to the atmosphere and to maintain the equipment integrity, for as long as the container is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of contact with the hazardous secondary material or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

(3) Whenever a hazardous secondary material is in a container using Container Level 1 controls, the remanufacturer or other person that stores or treats the hazardous secondary material shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous secondary material or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the hazardous secondary material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous secondary material from the container as follows:

(A) For the purpose of meeting the requirements of this section, an empty hazardous secondary material container may be open to the atmosphere at any time (*i.e.,* covers and closure devices on such a container are not required to be secured in the closed position).

(B) In the case when discrete quantities or batches of material are removed from the container, but the container is not an empty hazardous secondary material container, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous secondary material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the remanufacturer or other persons that stores or treats the hazardous secondary material based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in 40 CFR 261.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous secondary material already is in the container at the time the remanufacturer or other person that stores or treats the hazardous secondary material first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (*i.e.,* is not an empty hazardous secondary material container) the remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are

secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (*i.e.,* the date the container becomes subject to the subpart CC container standards).

(ii) In the case when a container used for managing hazardous secondary material remains at the facility for a period of 1 year or more, the remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of paragraph (c)(4)(iii) of this section.

(iii) When a defect is detected for the container, cover, or closure devices, the remanufacturer or other person that stores or treats the hazardous secondary material shall make first efforts at repair of the defect no later than 24 hours after detection and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous secondary material shall be removed from the container and the container shall not be used to manage hazardous secondary material until the defect is repaired.

(5) The remanufacturer or other person that stores or treats the hazardous secondary material shall maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m^3 or greater, which do not meet applicable DOT regulations as specified in paragraph (f) of this section, are not managing hazardous secondary material in light material service.

(d) *Container Level 2 standards.* (1) A container using Container Level 2 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.

(ii) A container that operates with no detectable organic emissions as defined in § 261.1081 and determined in accordance with the procedure specified in paragraph (g) of this section.

(iii) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance with the procedure specified in paragraph (h) of this section.

(2) Transfer of hazardous secondary material in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, considering the physical properties of the hazardous secondary material and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the EPA considers to meet the requirements of this paragraph include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous secondary material is filled and subsequently purging the transfer line before removing it from the container opening.

(3) Whenever a hazardous secondary material is in a container using Container Level 2 controls, the remanufacturer or other person that stores or treats the hazardous secondary material shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous secondary material or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the remanufacture or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous secondary material from the container as follows:

(A) For the purpose of meeting the requirements of this section, an empty hazardous secondary material container may be open to the atmosphere at any time (*i.e.,* covers and closure devices are not required to be secured in the closed position on an empty container).

(B) In the case when discrete quantities or batches of material are removed from the container, but the container is not an empty hazardous secondary materials container, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous secondary material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed

position whenever the internal pressure of the container is within the internal pressure operating range determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in § 261.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The remanufacture or other person that stores or treats the hazardous secondary material using containers with Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous secondary material already is in the container at the time the remanufacturer or other person that stores or treats the hazardous secondary material first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (*i.e.,* is not an empty hazardous secondary material container), the remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (*i.e.,* the date the container becomes subject to the subpart CC container standards).

(ii) In the case when a container used for managing hazardous secondary material remains at the facility for a period of 1 year or more, the remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material shall repair the defect in accordance with the requirements of paragraph (d)(4)(iii) of this section.

(iii) When a defect is detected for the container, cover, or closure devices, the remanufacturer or other person that stores or treats the hazardous secondary material shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous secondary material shall be removed from the container and the container shall not be used to manage hazardous secondary material until the defect is repaired.

(e) *Container Level 3 standards.* (1) A container using Container Level 3 controls is one of the following:

(i) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of paragraph (e)(2)(ii) of this section.

(ii) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (e)(2)(i) and (ii) of this section.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material shall meet the following requirements, as applicable to the type of air emission control equipment selected by the remanufacturer or other person that stores or treats the hazardous secondary material:

(i) The container enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in ''Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure'' under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The remanufacturer or other person that stores or treats the hazardous secondary material shall perform the verification procedure for the enclosure as specified in Section 5.0 to ''Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure'' initially when the enclosure is first installed and, thereafter, annually.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of § 261.1087 of this subpart.

(3) Safety devices, as defined in § 261.1081, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of paragraph (e)(1) of this section.

(4) Remanufacturers or other persons that store or treat the hazardous secondary material using Container Level 3 controls in accordance with the provisions of this subpart shall inspect and monitor the closed-vent systems and control devices as specified in § 261.1087 of this subpart.

(5) Remanufacturers or other persons that store or treat the hazardous secondary material that use Container Level 3 controls in accordance with the provisions of this subpart shall prepare and maintain the records specified in § 261.1089(d) of this subpart.

(6) Transfer of hazardous secondary material in or out of a container using Container Level 3 controls shall be conducted in such a manner as to minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, considering the physical properties of the hazardous secondary material and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the EPA considers to meet the requirements of this paragraph include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous secondary material is filled and subsequently purging the transfer line before removing it from the container opening.

(f) For the purpose of compliance with paragraph (c)(1)(i) or (d)(1)(i) of this section, containers shall be used that meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178 or part 179.

(2) Hazardous secondary material is managed in the container in accordance with the applicable requirements

specified in 49 CFR part 107, subpart B and 49 CFR parts 172, 173, and 180.

(3) For the purpose of complying with this subpart, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed.

(g) To determine compliance with the no detectable organic emissions requirement of paragraph (d)(1)(ii) of this section, the procedure specified in § 261.1083(d) of this subpart shall be used.

(1) Each potential leak interface (*i.e.,* a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to: the interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous secondary materials expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.

(h) Procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with paragraph (d)(1)(iii) of this section.

(1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A of this chapter.

(2) A pressure measurement device shall be used that has a precision of ±2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

(3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

§ 261.1087 Standards: Closed-vent systems and control devices.

(a) This section applies to each closed-vent system and control device installed and operated by the remanufacturer or other person who stores or treats the hazardous secondary material to control air emissions in accordance with standards of this subpart.

(b) The closed-vent system shall meet the following requirements:

(1) The closed-vent system shall route the gases, vapors, and fumes emitted from the hazardous secondary material in the hazardous secondary material management unit to a control device that meets the requirements specified in paragraph (c) of this section.

(2) The closed-vent system shall be designed and operated in accordance with the requirements specified in § 261.1033(k) of this part.

(3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a flow indicator as specified in paragraph (b)(3)(i) of this section or a seal or locking device as specified in paragraph (b)(3)(ii) of this section. For the purpose of complying with this paragraph, low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

(i) If a flow indicator is used to comply with paragraph (b)(3) of this section, the indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For this paragraph, a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.

(ii) If a seal or locking device is used to comply with paragraph (b)(3) of this section, the device shall be placed on the mechanism by which the bypass device position is controlled (*e.g.,* valve handle, damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The remanufacturer or other person that stores or treats the hazardous secondary material shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

(4) The closed-vent system shall be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the procedure specified in § 261.1033(l).

(c) The control device shall meet the following requirements:

(1) The control device shall be one of the following devices:

(i) A control device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight;

(ii) An enclosed combustion device designed and operated in accordance with the requirements of § 261.1033(c) of this part; or

(iii) A flare designed and operated in accordance with the requirements of § 261.1033(d) of this part.

(2) The remanufacturer or other person that stores or treats the hazardous secondary material who elects to use a closed-vent system and control device to comply with the requirements of this section shall comply with the requirements specified in paragraphs (c)(2)(i) through (vi) of this section.

(i) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of paragraph (c)(1)(i), (ii), or (iii) of this section, as applicable, shall not exceed 240 hours per year.

(ii) The specifications and requirements in paragraphs (c)(1)(i) through (iii) of this section for control devices do not apply during periods of planned routine maintenance.

(iii) The specifications and requirements in paragraphs (c)(1)(i) through (iii) of this section for control devices do not apply during a control device system malfunction.

(iv) The remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate compliance with the requirements of paragraph (c)(2)(i) of this section (*i.e.,* planned routine maintenance of a control device, during which the control device does not meet the specifications of paragraph (c)(1)(i), (ii), or (iii) of this section, as applicable, shall not exceed 240 hours per year) by recording the information specified in § 261.1089(e)(1)(v) of this subpart.

(v) The remanufacturer or other person that stores or treats the hazardous secondary material shall correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.

(vi) The remanufacturer or other person that stores or treats the hazardous secondary material shall operate the closed-vent system such that gases, vapors, or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction (*i.e.,* periods when the control device is not operating or not operating normally) except in cases when it is necessary to

vent the gases, vapors, and/or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.

(3) The remanufacturer or other person that stores or treats the hazardous secondary material using a carbon adsorption system to comply with paragraph (c)(1) of this section shall operate and maintain the control device in accordance with the following requirements:

(i) Following the initial startup of the control device, all activated carbon in the control device shall be replaced with fresh carbon on a regular basis in accordance with the requirements of § 261.1033(g) or (h) of this part.

(ii) All carbon that is hazardous waste and that is removed from the control device shall be managed in accordance with the requirements of § 261.1033(n), regardless of the average volatile organic concentration of the carbon.

(4) A remanufacturer or other person that stores or treats the hazardous secondary material using a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with paragraph (c)(1) of this section shall operate and maintain the control device in accordance with the requirements of § 261.1033(j) of this part.

(5) The remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate that a control device achieves the performance requirements of paragraph (c)(1) of this section as follows:

(i) A remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate using either a performance test as specified in paragraph (c)(5)(iii) of this section or a design analysis as specified in paragraph (c)(5)(iv) of this section the performance of each control device except for the following:

(A) A flare;

(B) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;

(C) A boiler or process heater into which the vent stream is introduced with the primary fuel;

(ii) A remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate the performance of each flare in accordance with the requirements specified in § 261.1033(e).

(iii) For a performance test conducted to meet the requirements of paragraph (c)(5)(i) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall use the test methods and procedures specified in § 261.1034(c)(1) through (4).

(iv) For a design analysis conducted to meet the requirements of paragraph (c)(5)(i) of this section, the design analysis shall meet the requirements specified in § 261.1035(b)(4)(iii).

(v) The remanufacturer or other person that stores or treats the hazardous secondary material shall demonstrate that a carbon adsorption system achieves the performance requirements of paragraph (c)(1) of this section based on the total quantity of organics vented to the atmosphere from all carbon adsorption system equipment that is used for organic adsorption, organic desorption or carbon regeneration, organic recovery, and carbon disposal.

(6) If the remanufacturer or other person that stores or treats the hazardous secondary material and the Regional Administrator do not agree on a demonstration of control device performance using a design analysis then the disagreement shall be resolved using the results of a performance test performed by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the requirements of paragraph (c)(5)(iii) of this section. The Regional Administrator may choose to have an authorized representative observe the performance test.

(7) The closed-vent system and control device shall be inspected and monitored by the remanufacture or other person that stores or treats the hazardous secondary material in accordance with the procedures specified in § 261.1033(f)(2) and (l). The readings from each monitoring device required by § 261.1033(f)(2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements of this section.

§ 261.1088 Inspection and monitoring requirements.

(a) The remanufacturer or other person that stores or treats the hazardous secondary material shall inspect and monitor air emission control equipment used to comply with this subpart in accordance with the applicable requirements specified in §§ 261.1084 through 261.1087 of this subpart.

(b) The remanufacture or other person that stores or treats the hazardous secondary material shall develop and implement a written plan and schedule to perform the inspections and monitoring required by paragraph (a) of this section. The remanufacturer or other person that stores or treats the hazardous secondary material shall keep the plan and schedule at the facility.

§ 261.1089 Recordkeeping requirements.

(a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to requirements of this subpart shall record and maintain the information specified in paragraphs (b) through (j) of this section, as applicable to the facility. Except for air emission control equipment design documentation and information required by paragraphs (i) and (j) of this section, records required by this section shall be maintained at the facility for a minimum of 3 years. Air emission control equipment design documentation shall be maintained at the facility until the air emission control equipment is replaced or otherwise no longer in service. Information required by paragraphs (i) and (j) of this section shall be maintained at the facility for as long as the hazardous secondary material management unit is not using air emission controls specified in §§ 261.1084 through 261.1087 of this subpart in accordance with the conditions specified in § 261.1080(b)(7) or (d) of this subpart, respectively.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material using a tank with air emission controls in accordance with the requirements of § 261.1084 of this subpart shall prepare and maintain records for the tank that include the following information:

(1) For each tank using air emission controls in accordance with the requirements of § 261.1084 of this subpart, the remanufacturer or other person that stores or treats the hazardous secondary material shall record:

(i) A tank identification number (or other unique identification description as selected by the remanufacturer or other person that stores or treats the hazardous secondary material).

(ii) A record for each inspection required by § 261.1084 of this subpart that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of § 261.1084 of this subpart, the remanufacturer or other person that stores or treats the hazardous secondary

material shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(2) In addition to the information required by paragraph (b)(1) of this section, the remanufacturer or other person that stores or treats the hazardous secondary material shall record the following information, as applicable to the tank:

(i) The remanufacturer or other person that stores or treats the hazardous secondary material using a fixed roof to comply with the Tank Level 1 control requirements specified in § 261.1084(c) of this subpart shall prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous secondary material in the tank performed in accordance with the requirements of § 261.1084(c) of this subpart. The records shall include the date and time the samples were collected, the analysis method used, and the analysis results.

(ii) The remanufacturer or other person that stores or treats the hazardous secondary material using an internal floating roof to comply with the Tank Level 2 control requirements specified in § 261.1084(e) of this subpart shall prepare and maintain documentation describing the floating roof design.

(iii) Remanufacturer or other persons that store or treat the hazardous secondary material using an external floating roof to comply with the Tank Level 2 control requirements specified in § 261.1084(f) of this subpart shall prepare and maintain the following records:

(A) Documentation describing the floating roof design and the dimensions of the tank.

(B) Records for each seal gap inspection required by § 261.1084(f)(3) of this subpart describing the results of the seal gap measurements. The records shall include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in § 261.1084(f)(1) of this subpart, the records shall include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

(iv) Each remanufacturer or other person that stores or treats the hazardous secondary material using an enclosure to comply with the Tank Level 2 control requirements specified in § 261.1084(i) of this subpart shall prepare and maintain the following records:

(A) Records for the most recent set of calculations and measurements performed by the remanufacturer or other person that stores or treats the hazardous secondary material to verify that the enclosure meets the criteria of a permanent total enclosure as specified in ''Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure'' under 40 CFR 52.741, appendix B.

(B) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section.

(c) [Reserved]

(d) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 3 air emission controls in accordance with the requirements of § 261.1086 of this subpart shall prepare and maintain records that include the following information:

(1) Records for the most recent set of calculations and measurements performed by the remanufacturer or other person that stores or treats the hazardous secondary material to verify that the enclosure meets the criteria of a permanent total enclosure as specified in ''Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure'' under 40 CFR 52.741, appendix B.

(2) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section.

(e) The remanufacturer or other person that stores or treats the hazardous secondary material using a closed-vent system and control device in accordance with the requirements of § 261.1087 of this subpart shall prepare and maintain records that include the following information:

(1) Documentation for the closed-vent system and control device that includes:

(i) Certification that is signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material stating that the control device is designed to operate at the performance level documented by a design analysis as specified in paragraph (e)(1)(ii) of this section or by performance tests as specified in paragraph (e)(1)(iii) of this section when the tank or container is or would be operating at capacity or the highest level reasonably expected to occur.

(ii) If a design analysis is used, then design documentation as specified in § 261.1035(b)(4). The documentation shall include information prepared by the remanufacturer or other person that stores or treats the hazardous secondary material or provided by the control device manufacturer or vendor that describes the control device design in accordance with § 261.1035(b)(4)(iii) and certification by the remanufacturer or other person that stores or treats the hazardous secondary material that the control equipment meets the applicable specifications.

(iii) If performance tests are used, then a performance test plan as specified in § 261.1035(b)(3) and all test results.

(iv) Information as required by §§ 261.1035(c)(1) and 261.1035(c)(2), as applicable.

(v) A remanufacturer or other person that stores or treats the hazardous secondary material shall record, on a semiannual basis, the information specified in paragraphs (e)(1)(v)(A) and (B) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of § 261.1087(c)(1)(i), (ii), or (iii) of this subpart, as applicable.

(A) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6-month period. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6-month period. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of § 261.1087(c)(1)(i), (ii), or (iii) of this subpart, as applicable, due to planned routine maintenance.

(vi) A remanufacturer or other person that stores or treats the hazardous secondary material shall record the information specified in paragraphs (e)(1)(vi)(A) through (C) of this section for those unexpected control device system malfunctions that would require the control device not to meet the requirements of § 261.1087(c)(1)(i), (ii), or (iii) of this subpart, as applicable.

(A) The occurrence and duration of each malfunction of the control device system.

(B) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the hazardous secondary material management unit through the closed-vent system to the control device while the control device is not properly functioning.

(C) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

(vii) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with § 261.1087(c)(3)(ii) of this subpart.

(f) The remanufacturer or other person that stores or treats the hazardous secondary material using a tank or container exempted under the hazardous secondary material organic concentration conditions specified in § 261.1082(c)(1) or (c)(2)(i) through (vi) of this subpart, shall prepare and maintain at the facility records documenting the information used for each material determination (*e.g.,* test results, measurements, calculations, and other documentation). If analysis results for material samples are used for the material determination, then the remanufacturer or other person that stores or treats the hazardous secondary material shall record the date, time, and location that each material sample is collected in accordance with applicable requirements of § 261.1083 of this subpart.

(2) [Reserved]

(g) A remanufacturer or other person that stores or treats the hazardous secondary material designating a cover as ''unsafe to inspect and monitor'' pursuant to § 261.1084(l) or § 261.1085(g) of this subpart shall record and keep at facility the following information: The identification numbers for hazardous secondary material management units with covers that are designated as ''unsafe to inspect and monitor,'' the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

(h) The remanufacturer or other person that stores or treats the hazardous secondary material that is subject to this subpart and to the control device standards in 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to demonstrate compliance with the applicable sections of this subpart by documentation either pursuant to this subpart, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by this section.

§ 261.1090 [Reserved]

[FR Doc. 2014–30382 Filed 1–12–15; 8:45 am]

BILLING CODE 6560–50–P

Zilpaterol in grams/ton	Combination in grams/ton	Indications for use	Limitations	Sponsor
*	*	*	*	*
(9) 6.8 to 24	Monensin 10 to 40, plus tylosin 8 to 10, plus melengestrol acetate to provide 0.25 to 0.5 mg/head/day.	Heifers fed in confinement for slaughter: For increased rate of weight gain, improved feed efficiency, and increased carcass leanness in cattle fed in confinement for slaughter during the last 20 to 40 days on feed; for prevention and control of coccidiosis due to *Eimeria bovis* and *E. zuernii;* and for reduction of incidence of liver abscesses caused by *Fusobacterium necrophorum* and *Arcanobacterium (Actinomyces) pyogenes;* and for suppression of estrus (heat).	Feed continuously to heifers during the last 20 to 40 days on feed to provide 60 mg zilpaterol hydrochloride per head per day. See §§ 558.342(d), 558.355(d), and 558.625(c). Monensin and tylosin as provided by No. 000986; melengestrol acetate as provided by No. 054771 in § 510.600(c) of this chapter. Withdrawal period: 3 days.	000061

Dated: April 3, 2015.

Bernadette Dunham,

Director, Center for Veterinary Medicine.

[FR Doc. 2015–08025 Filed 4–7–15; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 522

[Docket No. FDA–2015–N–0002]

Implantation or Injectable Dosage Form New Animal Drugs; Withdrawal of Approval of New Animal Drug Application; Fomepizole

AGENCY: Food and Drug Administration, HHS.

ACTION: Notification of withdrawal.

SUMMARY: The Food and Drug Administration (FDA) is withdrawing approval of a new animal drug application (NADA) for a fomepizole injectable solution used as an antidote for ethylene glycol poisoning in dogs. This action is being taken at the sponsor's request because this product is no longer manufactured or marketed.

DATES: Withdrawal of approval is effective April 20, 2015.

FOR FURTHER INFORMATION CONTACT: Sujaya Dessai, Center for Veterinary Medicine (HFV–212), Food and Drug Administration, 7519 Standish Pl., Rockville, MD 20855, 240–276–9075, *sujaya.dessai@fda.hhs.gov.*

SUPPLEMENTARY INFORMATION: Paladin Labs (USA), Inc., 160 Greentree Dr., suite 101, Dover, DE 19904 has requested that FDA withdraw approval of NADA 141–075 for ANTIZOL–VET (fomepizole) Injection because the product is no longer manufactured or marketed.

Therefore, under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, and in accordance with § 514.116 *Notice of withdrawal of approval of application* (21 CFR 514.116), notice is given that approval of NADA 141–075, and all supplements and amendments thereto, is hereby withdrawn.

Elsewhere in this issue of the **Federal Register,** FDA is amending the animal drug regulations to reflect the voluntary withdrawal of approval of this application.

Dated: April 3, 2015.

Bernadette Dunham,

Director, Center for Veterinary Medicine.

[FR Doc. 2015–08024 Filed 4–7–15; 8:45 am]

BILLING CODE 4164–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 260 and 261

[EPA–HQ–RCRA–2015–0118; FRL_9923–12–OSWER]

Response to Vacaturs of the Comparable Fuels Rule and the Gasification Rule

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is revising regulations associated with the comparable fuels exclusion and the gasification exclusion, originally issued by EPA under the Resource Conservation and Recovery Act (RCRA). These revisions implement vacaturs ordered by the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit), on June 27, 2014.

DATES: Effective April 8, 2015.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–RCRA–2015–0118. All documents in the docket are listed in the *www.regulations.gov* index. 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 through *www.regulations.gov* or in hard copy at the EPA Docket Center, EPA/DC, WJC West Building, 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 RCRA Docket is (202) 566–0270.

FOR FURTHER INFORMATION CONTACT: Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, MC 5304P, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460, Tracy Atagi, at (703) 308–8672, (*atagi.tracy@epa.gov*) or Frank Behan, at (703) 308–8476, *behan.frank@epa.gov.*

SUPPLEMENTARY INFORMATION:

Preamble Outline

I. General Information
II. Statutory Authority
III. Which regulations is EPA removing?
IV. Background on the Comparable Fuels Rule and the Gasification Rule
V. When will the final rule become effective?
VI. State Authorization
VII. Statutory and Executive Order (EO) Reviews

I. General Information

A. Does this action apply to me?

Today's final rule applies to generators, transporters, and facilities treating, storing, disposing or otherwise managing hazardous wastes previously excluded from RCRA regulation under the comparable fuels rule or previously excluded from RCRA regulation under the gasification rule. EPA has not identified any entities currently operating under the gasification rule, but has identified 31 facilities that appear to be managing previously-excluded comparable fuels. A list of these facilities is available in the docket for today's rule (Docket ID no. EPA–HQ–RCRA–2015–0118).

B. Why is EPA issuing a final rule?

Section 553 of the Administrative Procedure Act, 5 U.S.C. 553(b)(3)(B), provides that, when an agency for good cause finds that notice and public procedure are impracticable, unnecessary or contrary to the public interest, the Agency may issue a rule without providing notice and an opportunity for public comment. EPA has determined that there is good cause for removing these provisions without prior proposal and opportunity for comment, because these revisions are consistent with court orders vacating these rules. As a matter of law, the orders issued by the United States Court of Appeals for the District of Columbia Circuit on June 27, 2014, vacated the "comparable fuels rule" and the gasification rule issued by EPA under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901, *et seq.* It is, therefore, unnecessary to provide notice and an opportunity for comment on this action, which merely carries out the court's orders. For the same reasons, EPA finds that it has good cause to make the revisions effective under 5 U.S.C. 553(d) and section 3010(b) of RCRA 42 U.S.C. 6930(b).

II. Statutory Authority

These regulations are promulgated under the authority of sections 2002, 3001, 3002, 3003, 3004, 3006, 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. 6921, 6922, 6923, and 6924. This statute is commonly referred to as "RCRA."

III. Which regulations is EPA removing?

EPA is removing provisions at 40 CFR 261.4(a)(16) and 40 CFR 261.38 related to comparable fuels, and revising 40 CFR 261.4(a)(12)(i) by removing gasification from the list of specific petroleum refining processes into which oil-bearing hazardous secondary materials may be inserted. The effect of the removal of 40 CFR 261.4(a)(16) and 261.38 will be to make comparable fuels that were previously excluded from the RCRA definition of solid waste subject to regulation under RCRA subtitle C. The removal of gasification from 40 CFR 261.4(a)(12)(i) will prevent hazardous secondary materials generated at petroleum refineries from being inserted into gasifiers at refineries without being deemed hazardous wastes and therefore being subject to hazardous waste regulations under RCRA subtitle C. As a result of these previously excluded materials now being identified as hazardous waste under 40 CFR 261.3, facilities burning these materials will be subject to regulation as Hazardous Waste Combustors under 40 CFR part 63 subpart EEE, as well as applicable regulations under RCRA subtitle C.

IV. Background on the Comparable Fuels Rule and the Gasification Rule

A. The Comparable Fuels Rule

EPA promulgated the Comparable Fuels Rule in 1998.[1] The rule provided that fuels made from materials identified as hazardous wastes were excluded from the RCRA definition of solid waste if, as generated or after treatment and blending, they were sufficiently comparable to commercial fossil fuels for which they were substituted with respect to levels of hazardous constituents and physical properties that affect fuel burning efficiency, such as viscosity and heating value. Because the fuels, as burned, would contain contaminants no greater than commercial fossil fuels, and were otherwise indistinguishable from the fossil fuels that would be burned in their place, EPA found that the comparable fuels would pose no greater risk than commercial fuels when burned, and could be legitimately classified as non-waste fuels rather than as solid and hazardous waste fuels.

The Agency took the position that comparable fuels were not being "discarded" within the meaning of the definition of solid waste in RCRA section 1004(27), 42 U.S.C. 6903(27). RCRA defines solid wastes, for relevant purposes, as materials that have been discarded in the plain sense of the term, meaning that the material has been thrown away, disposed of or abandoned. Under RCRA a material regulated as a hazardous waste must first be a solid waste—that is, a discarded material. Thus, even though the comparable fuels were derived from materials that are listed hazardous wastes, EPA had concluded that fuels that met specified comparability criteria were not solid wastes because they looked no different from commercial fuels.

The comparable fuels rule was vacated by United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit), on June 27, 2014 (*Natural Resources Defense Council* v. *EPA*, 755 F. 3d 1010 (June 27, 2014)). In its decision, the court held that the unambiguous language of section 3004(q) requires that fuels produced from hazardous wastes must remain classified as hazardous wastes under subtitle C (other than in limited specified instances not relevant here). Section 3004(q), according to the court, unequivocally provides that EPA "shall" promulgate regulations as "may" be necessary to protect human health and the environment for the production of fuels from "any" materials identified as hazardous waste under RCRA. All hazardous secondary materials from which the comparable fuels were made were identified in RCRA regulations as hazardous wastes.

On November 3, 2014, the court granted EPA's motion to stay the issuance of the mandate for the comparable fuels rule until March 30, 2015, in order to allow affected facilities time to come into compliance with applicable subtitle C regulations.

B. Gasification Rule

Under the gasification rule, which was promulgated in 2008,[2] EPA determined that oil-bearing hazardous secondary materials, even though otherwise identified as hazardous wastes under RCRA if discarded, are not in fact discarded and not solid wastes if they are inserted into a gasification unit located at a petroleum refinery to produce synthesis gas.[3] Therefore, they were excluded from hazardous waste regulation.

The gasification rule was vacated by United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit), on June 27, 2014. (*Sierra Club*

[1] See "Hazardous Waste Combustors; Revised Standards," 63 FR 33782 (June 19, 1998).

[2] See "Regulation of Oil-Bearing Hazardous Secondary Materials From the Petroleum Refining Industry Processed in a Gasification System To Produce Synthesis Gas," 73 FR 57–72 (Jan. 2, 2008).

[3] Synthesis gas is a type of fuel that may be burned for the recovery of energy.

v. *EPA*, 755 F. 3d 968).The court held, similar to its decision on the Comparable Fuels Rule, that the Gasification Rule violates the plain language of RCRA section 3004(q) because fuels produced from hazardous wastes remain solid and hazardous wastes. Thus, all hazardous wastes inserted into a gasification unit at petroleum refineries remain subject to RCRA regulations as hazardous wastes.

The court issued its mandate for the vacatur of the gasification rule on November 3, 2014.

V. When will the final rule become effective?

The removal of the comparable fuels exclusion and the revisions removing gasification as an exclusion are effective immediately.

VI. State Authorization

A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize a qualified state to administer and enforce a hazardous waste program within the state in lieu of the federal program, and to issue and enforce permits in the state. A state may receive authorization by following the approval process described in 40 CFR 271.21 (see 40 CFR part 271 for the overall standards and requirements for authorization). EPA continues to have independent authority to bring enforcement actions under RCRA sections 3007, 3008, 3013, and 7003. An authorized state also continues to have independent authority to bring enforcement actions under state law.

After a state receives initial authorization, new federal requirements promulgated under RCRA authority existing prior to the 1984 Hazardous and Solid Waste Amendments (HSWA) do not apply in that state until the state adopts and receives authorization for equivalent state requirements. In contrast, under RCRA section 3006(g) (42 U.S.C. 6926(g)), new federal requirements and prohibitions imposed under subtitle C pursuant to HSWA provisions take effect in authorized states at the same time that they take effect in unauthorized states. As such, EPA carries out the HSWA requirements and prohibitions in authorized states, including the issuance of new permits implementing those requirements, until EPA authorizes the state to do so.

Authorized states are required to modify their programs only when EPA enacts federal requirements that are more stringent or broader in scope than the existing federal requirements. RCRA section 3009 allows the states to impose standards more stringent than those in the federal program (see also 40 CFR 271.1(i)). Therefore, authorized states are not required to adopt federal regulations that are considered less stringent than previous federal regulations or that narrow the scope of the RCRA program. Previously authorized hazardous waste regulations would continue to apply in those states.

B. Effect on State Authorization of D.C. Circuit Court Vacaturs

On March 30, 2015, the D.C. Circuit Court issued its mandate, effectuating the vacatur of the comparable fuels rule, as described earlier in this document. The mandate for the gasification rule was issued on November 3, 2014. The court's vacaturs mean that these federal rules are legally null and void. Therefore, the court's mandates reinstate the regulatory status of the materials previously in effect as if the vacated rules never existed. Because excluded comparable fuels and gasified hazardous waste were, or would have been, previously regulated as discarded solid waste, these materials, if hazardous, must be handled as hazardous waste in compliance with requirements applicable to the generation, transportation, treatment, storage, or disposal of hazardous waste after March 30, 2015. At the federal level, because the effect of the vacaturs means, in essence, that these rules should not have been promulgated, this document simply removes them from the exclusions in the federal regulations. At the state level, because no state rules were challenged in the litigation, the court decision does not affect any state exclusions. However, the vacaturs do have an impact on the authorization status of states. The multiple scenarios that exist in the states are discussed below.

1. States Without Final RCRA Authorization

For states that have no RCRA authorization status (Iowa, Alaska), the vacaturs simply mean that the federal rules will no longer be in effect in those states and by this document, EPA is alerting interested parties of the removal of the vacated rules from the Code of Federal Regulations. The subject materials are federally regulated and EPA may bring enforcement actions under RCRA Section 3008 at facilities that do not comply with the RCRA hazardous waste regulations. The state programs are completely unaffected by the vacaturs and these states do not have to modify their programs in any way regardless of how they currently regulate the materials.

2. States That Have Final Authorization but Did Not Promulgate Similar Rules

For states that have been authorized under RCRA but did not adopt rules similar to the comparable fuels and gasification rules (and therefore were not authorized for them), there were no federal comparable fuels and gasification rules in effect prior to vacatur because the federal comparable fuels and gasification rules were less stringent than the federal hazardous waste regulations and states were not required to adopt or become authorized for these rules. Therefore, these vacaturs will have no effect on the authorization status in these states. The subject materials remain regulated under the authorized state hazardous waste program and EPA may continue to bring enforcement actions under RCRA Section 3008 at facilities that do not comply with the RCRA hazardous waste regulations. These states do not have to modify their programs.

3. States That Adopted Similar Rules But Are Not Yet Authorized for Them

For states that have adopted similar rules but have not yet been authorized for them, the vacatur of the federal rules will not change the authorization status of the state programs. The authorization status that was established prior to the adoption of the state counterpart rules remains in effect and EPA may continue to bring enforcement actions under RCRA Section 3008 at facilities that do not comply with the RCRA hazardous waste regulations. The vacaturs and subsequent removal of the federal rules will result in state programs that are less stringent than the federal program as long as state provisions that exclude the subject materials from regulation remain in effect in the state programs. EPA encourages these states to expeditiously remove these rules from their programs.

4. States That Adopted Similar Rules and Have Been Authorized for Them

For states that have previously been authorized for the comparable fuels and gasification rules, the effect of the vacaturs is that the previously authorized comparable fuels and gasification rules from the state program will no longer be considered part of the federally authorized program. Thus, EPA may bring enforcement actions under RCRA Section 3008 at facilities that do not comply with the RCRA hazardous waste regulations. In other words, the authorization status of the state program that was in place prior to authorization of the state comparable fuels and gasification rules is reinstated with regard to these rules. EPA strongly

encourages these states to proceed expeditiously to remove these counterpart rules. Once the counterpart rules are removed, these states should notify their EPA regional office by letter to verify the status of the state program.

VII. Statutory and Executive Order (EO) Reviews

Under Executive Order 12866 (58 FR 51735, October 4, 1993) and Executive Order 13563 (76 FR 3821, January 21, 2011), this action is not a ''significant regulatory action'' and is therefore not subject to OMB review. Because this action is not subject to notice and comment requirements under the Administrative Procedures Act or any other statute, it is not subject to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) or Sections 202 and 205 of the Unfunded Mandates Reform Act of 1999 (UMRA) (Pub. L. 104–4). In addition, this action does not significantly or uniquely affect small governments. This action does not create new binding legal requirements that substantially and directly affect Tribes under Executive Order 13175 (65 FR 67249, November 9, 2000). This action does not have significant Federalism implications under Executive Order 13132 (64 FR 43255, August 10, 1999). Because this final rule has been exempted from review under Executive Order 12866, this final rule is not subject to Executive Order 13211, entitled Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use (66 FR 28355, May 22, 2001) or Executive Order 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997). This final rule does not contain any information collections subject to OMB approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, nor does it require any special considerations under Executive Order 12898, entitled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629, February 16, 1994). This action does not involve technical standards; thus, the requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply.

Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, generally provides that before certain actions may take effect, the agency promulgating the action must submit a report, which includes a copy of the action, to each House of the Congress and to the Comptroller General of the United States. This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects

40 CFR Part 260

Environmental protection, Administrative practice and procedure, Confidential business information, Hazardous waste, Reporting and recordkeeping requirements.

40 CFR Part 261

Environmental protection, Hazardous waste, Recycling, Solid Waste.

Dated: April 1, 2015.

Mathy Stanislaus,

Assistant Administrator, Office of Solid Waste and Emergency Response.

For the reasons stated in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

■ 1. The authority citation for part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921–6927, 6930, 6934, 6935, 6937, 6938, 6939 and 6974.

Subpart B—Definitions

§ 260.10 [Amended]

■ 2. Section 260.10 is amended by removing the definition of ''Gasification.''

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

■ 3. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, 6924(y), and 6938.

■ 4. Section 261.4 is amended by revising paragraph (a)(12)(i), and removing and reserving paragraph (a)(16) to read as follows:

§ 261.4 Exclusions.

(a) * * *

* * * * *

(12)(i) Oil-bearing hazardous secondary materials (*i.e.*, sludges, byproducts, or spent materials) that are generated at a petroleum refinery (SIC code 2911) and are inserted into the petroleum refining process (SIC code 2911—including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (*i.e.*, cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph, provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery and still be excluded under this provision. Except as provided in paragraph (a)(12)(ii) of this section, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (*i.e.*, from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph (a)(12)(i), where such materials as generated would have otherwise met a listing under subpart D of this part, are designated as F037 listed wastes when disposed of or intended for disposal.

* * * * *

(16) [Reserved]

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§ 261.38 [Removed and Reserved]

■ 5. Remove and reserve § 261.38.

[FR Doc. 2015–07992 Filed 4–7–15; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[EPA–HQ–SFUND–1991–0006; FRL–9925–83–Region 8]

National Oil and Hazardous Substances Pollution Contingency Plan National Priorities List: Deletion of the Midvale Slag Superfund Site

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) Region 8 announces the deletion of the Midvale Slag Superfund Site (Site), located in Salt Lake County, Utah, from the National Priorities List (NPL). The NPL, promulgated pursuant to section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, is an appendix of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The EPA and the State of Utah, through the Utah Department of Environmental Quality (UDEQ), have determined that all