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Revisions to the Definition of Solid Waste Final Rule Compilations: The Legitimate Recycling Standard

Materials Recovery and Waste Management Division
Office of Resource Conservation and Recovery
U.S. Environmental Protection Agency

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INTRODUCTION

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About the 2008 DSW Rule

On October 30, 2008, the U.S. Environmental Protection Agency (EPA) published a final rule that streamlines regulation of hazardous secondary materials to encourage beneficial recycling and to help conserve resources.

The Revisions to the Definition of Solid Waste (DSW) Final Rule ("DSW rule") amends and clarifies the Resource Conservation and Recovery Act (RCRA) definition of solid waste (40 CFR 261.2). In particular, this rule establishes three self-implementing exclusions to the definition of solid waste for hazardous secondary materials that are reclaimed. One of the exclusions involves hazardous secondary materials that are legitimately reclaimed under the control of the generator (onsite reclamation, reclamation by the same company, and reclamation under certain tolling arrangements). The second exclusion involves hazardous secondary materials that are transferred to another company for reclamation. The last exclusion involves hazardous secondary materials that are exported for reclamation. In addition, the 2008 DSW rule outlines a procedure for case-by-case non-waste determinations.

For more information on the DSW rule, see EPA's DSW Federal Register Notices web page.

About the "Revisions to the Definition of Solid Waste Final Rule Compilations"

The *Revisions to the Definition of Solid Waste Final Rule Compilations* provide easy access for EPA, the states, the regulated community, and the public to important information regarding a number of the provisions in the DSW rule: legitimate recycling, reasonable efforts and the contained standard. This user-friendly reference tool reduces the need for stakeholders to search through multiple *Federal Register* notices and will improve understanding of each of these three subjects. For each compilation, EPA has

incorporated information from relevant preambles, regulations, and other materials. Please note that this reference is designed to be web-based; therefore, the usefulness of the document is maximized when it is viewed on a computer connected to the Internet.

This volume of the *Compilations* series provides information about the legitimate recycling standard under the DSW rule. A more in-depth version of this compilation, covering the history of legitimate recycling, and compilations addressing the contained standard and the reasonable efforts condition will be available at http://www.epa.gov/epawaste/hazard/dsw/impresource.htm#guide.

This document is not a rulemaking and does not change any existing solid or hazardous waste requirements. Any reformatting of regulatory language for the new exclusions is only intended to make the language easier to read. Moreover, EPA's intention is to include only that CFR language that is directly relevant to the legitimate recycling standard. Note: other relevant language to this standard may exist and may not be included in this document; users of this document are responsible for examining all CFR language and other information that may be relevant to the legitimate recycling standard. Any language in this document, including any reformatted CFR language to assist in ease of reading, is not a substitute for the CFR itself or the requirements in the CFR. In addition, we also provide links to the Government Printing Office's Electronic Code of Federal Regulations Web site (e-CFR), which is updated almost daily.

In addition, this reference document presents matters related only to the legitimate recycling standard of the federal definition of solid waste and hazardous waste recycling regulations. Most states are authorized to manage their own solid and hazardous waste regulatory programs. Therefore, states may have their own regulations that apply in lieu of the federal regulations. While most state regulations are based on the federal requirements, some states have developed regulations that are more stringent than the federal program. We direct you to the following web site to determine if your state regulatory program is different from the federal program: http://epa.gov/waste/wyl/stateprograms.htm.

For a collection of written materials about other issues related to the definition of solid waste, see the Definition of Solid Waste Compendium. For more information regarding the various regulations applied to facilities generating or managing hazardous waste, see Hazardous Waste Generators: A User Friendly Reference Document.

The *Compilations* series is also available in Microsoft Word format from EPA upon request. For more information on these versions and any other questions or comments concerning this document, please contact EPA's Office of Resource Conservation and Recovery:

Mary Beth Sheridan
sheridan.marybeth@epa.gov
703-308-4941

Kathy Lett
lett.kathy@epa.gov
703-605-0761

About "The Legitimate Recycling Standard" Compilation

Under the 2008 DSW rule, EPA requires hazardous secondary materials being reclaimed under the control of the generator (40 CFR 261.2(a)(2)(ii) and 40 CFR 261.4(a)(23)) or transferred for the purpose of reclamation (40 CFR 261.4(a)(24) and 40 CFR 261.4(a)(25)) to meet the legitimate recycling standard. Materials for which an applicant applies for a non-waste determinations at 40 CFR 260.34 must also meet the legitimacy standard. EPA has long articulated the need to distinguish between "legitimate" (i.e., true) recycling and "sham" recycling and has codified legitimacy provisions in the DSW rule. This compilation is designed for users who want to read about the legitimate recycling standard under the 2008 DSW Rule. This compilation discusses the following subjects (click a topic below to jump to a section):

The text in the following sections is taken nearly verbatim from the preamble to the 2008 final rule and from final regulatory language. The excerpts presented in this compilation do not necessarily appear in the same order as in the original source. In some cases, we have reformatted passages to improve readability. Where the language in this compilation does not exactly match preamble or regulatory language, we have indicated this by bracketing the text (with the exception of headings and bold titles). As noted above, any changes to the preamble or regulatory text are for the convenience of the reader and are not to be taken as substitutes for the actual language of the regulations or the preamble.

EPA has also developed a longer version of the legitimacy compilation. The longer version is useful for those users who want to look at the history of legitimate recycling or compare other guidance on legitimate recycling to the requirements in the 2008 final rule. The longer version is available at www.epa.gov/epawaste/hazard/dsw/impresource.htm#guide and includes excerpts from the 2003 and 2007 proposals for the DSW final rule. It also includes topics such as the rationale for codifying the legitimacy factors and a description of how these factors compare to earlier guidance such as the "Lowrance Memo."

THE LEGITIMATE RECYCLING STANDARD

Purpose of Legitimacy

Under the RCRA Subtitle C definition of solid waste, certain hazardous secondary materials, if recycled, are not solid wastes and, therefore, are not subject to RCRA's "cradle to grave" management system. The basic idea behind this principle is that recycling of these materials often closely resembles industrial manufacturing rather than waste management. However, due to economic incentives for managing hazardous secondary materials outside the RCRA regulatory system, there is a potential for some handlers to claim that they are recycling the hazardous secondary materials when, in fact, they are conducting waste treatment and/or disposal. To guard against this, EPA has long articulated the need to distinguish between "legitimate" (i.e., true) recycling and "sham" recycling, beginning with the preamble to the 1985 regulations that discussed the definition of solid waste (50 FR 638, January 4, 1985) and continuing through [the 2008 DSW] final rule. [73 FR 64670] The legitimacy provision in [the] final exclusions and non-waste determinations is designed to distinguish between real recycling activities—legitimate recycling—and "sham" recycling, an activity undertaken by an entity to avoid the requirements of managing a hazardous secondary material as a hazardous waste. [73 FR 64701]

Applicability of the Legitimacy Provision in the Final Rule

As part of [the DSW Rule], EPA has decided to codify in 40 CFR 260.43 the requirement that materials be legitimately recycled as a requirement for the exclusion for hazardous secondary materials that are legitimately reclaimed under the control of the generator (40 CFR 261.2(a)(2)(ii) and 40 CFR 261.4(a)(23)) and as a condition of the exclusion for hazardous secondary materials that are transferred for the purpose of legitimate reclamation (40 CFR 261.4(a)(24) and 40 CFR 261.4(a)(25)). EPA is also requiring that hazardous secondary materials must be legitimately recycled under the final non-waste determinations (40 CFR 260.34) for hazardous secondary materials that are (a) reclaimed in a continuous industrial process and (b) indistinguishable in all relevant aspects from a product or intermediate. [73 FR 64700] These requirements can be found in the final regulatory text at §260.34(b), §261.2(a)(2)(ii), §261.4(a)(23)(v), and §261.4(a)(24)(iv). Each of these provisions refers to §260.43, where the full requirements for determining the legitimacy of the reclamation operation can be found. [73 FR 64701]

EPA [codified] a legitimacy provision in [the] final rule as part of the final exclusions and non-waste determinations, but stresses that EPA retains its long-standing policy that all recycling of hazardous secondary materials must be legitimate. If a facility is engaged in sham recycling, this, by definition, is not real recycling and that material is being discarded. The legitimacy policy continues to apply to all hazardous secondary materials that are excluded or exempted from Subtitle C regulation because they are recycled and to recyclable hazardous wastes that remain subject to the hazardous waste regulations. This policy is well-understood throughout the regulated community and among the state implementing agencies. [73 FR 64707–64708]

EPA believes that the four legitimacy factors […] codified in 40 CFR 260.43 are substantively the same as the existing legitimacy policy. These factors are a simplification and clarification of the policy statements in the 1989 Lowrance Memo and in various Definition of Solid Waste Federal Register notices. [73 FR 64708]

Nonetheless, to avoid confusion among the regulated community and state and other implementing regulatory agencies about the status of recycling under the existing exclusions, the Agency has decided not to codify the legitimacy factors for existing exclusions and, thus, states and other implementing agencies will continue to apply the existing legitimacy policy to all recycling as they have in the past in order to ensure that recycling is real and not a sham. The legitimacy provisions of the final rule are codified only for the exclusions and non-waste determinations being promulgated [in the final rule]. In developing the codified legitimacy language, [EPA] did not intend to raise questions about the status of legitimacy determinations that underlie existing exclusions from the definition of solid waste, or about case-specific determinations that have been made by EPA or the states. Current exclusions and other prior solid waste determinations or variances, including determinations made in letters of interpretation and inspection reports, remain in effect. [73 FR 64708]

In summary, all hazardous secondary materials recycling and hazardous waste recycling, whether such recycling remains under hazardous waste regulations or is excluded from the definition of solid waste, must be legitimate. This has been our long-standing policy and it is well understood throughout the regulated community and the implementing state regulatory agencies. In order to be clear that the legitimacy provision codified at 40 CFR 260.43 under [the] final rule would not affect how the current legitimacy policy applies to recycling under existing exclusions, the legitimacy provision at 40 CFR 260.43 is explicitly designated as applying only to the exclusions and non-waste determinations being finalized in [the final] rule. [73 FR 64708]

Final Legitimacy Structure

Under the first paragraph of 40 CFR 260.43, hazardous secondary materials that are not legitimately recycled are discarded materials and, therefore, are solid wastes. This paragraph also states that anyone claiming an exclusion at §261.2(a)(2)(ii), §261.4(a)(23),

§261.4(a)(24), or §261.4(a)(25) or using a non-waste determination at §260.30(d) or (e) must be able to demonstrate that its recycling activity is legitimate.[73 FR 64701]

The design of legitimacy in the final rule has two parts. The first is a requirement that hazardous secondary materials being recycled provide a useful contribution to the recycling process or to the product of the recycling process and a requirement that the product of the recycling process is valuable. These two legitimacy factors make up the core of legitimacy and, therefore, a process that does not conform to them cannot be a legitimate recycling process, but would be considered sham recycling. [73 FR 64701]

The Four Legitimacy Factors

Core Factors:
- Factor 1—Useful Contribution
- Factor 2—Valuable Product or Intermediate

Factors that Must Be Considered:
- Factor 3—Managed as a Valuable Commodity
- Factor 4—Comparison of Toxics in the Product

The second part of legitimacy is two factors that must be considered when a recycler is making a legitimacy determination. EPA believes that these two factors are important in determining legitimacy, but has not made them factors that must be met because the Agency knows that there will be some situations in which a legitimate recycling process does not conform to one or both of these two factors, yet the reclamation activity would still be considered legitimate. EPA does not believe that this will be a common occurrence, but in recognition that legitimate recycling may occur in these situations, EPA has made management of the hazardous secondary materials and the presence of hazardous constituents in the product of the recycling process to be factors that must be considered in the overall legitimacy determination, but not factors that must always be met. [73 FR 64701]

Factor 1—Useful Contribution

‘‘Legitimate recycling must involve a hazardous secondary material that provides a useful contribution to the recycling process or to a product of the recycling process * * * The hazardous secondary material provides a useful contribution if it (i) contributes valuable ingredients to a product or intermediate; or (ii) replaces a catalyst or carrier in the recycling process; or (iii) is the source of a valuable constituent recovered in the recycling process; or (iv) is recovered or regenerated by the recycling process; or (v) is used as an effective substitute for a commercial product’’ (40 CFR 260.43(b)(1)). [73 FR 64701]

This factor, one of the two core legitimacy factors, expresses the principle that hazardous secondary materials should contribute value to the recycling process. This factor is an essential element to legitimate recycling because real recycling is not occurring if the hazardous secondary materials being added or recovered do not add anything to the process. This factor is intended to prevent the practice of adding to or recovering hazardous secondary materials from a manufacturing operation simply as a means of

disposing of them, or recovering only small amounts of a constituent, which EPA would consider sham recycling. [73 FR 64701–64702]

In response to comments received on this factor asking for more clarification on what useful contribution means, the regulatory text includes an explanation of how useful contribution might be achieved in (i) through (v) of §260.43(b)(1). EPA stresses that the ways in which hazardous secondary materials can add value and be useful in a recycling process are (i) contributing valuable ingredients to a product or intermediate; (ii) replacing a catalyst or carrier in the recycling process; (iii) providing a valuable constituent to be recovered; (iv) being regenerated; or (v) being used as an effective substitute for a commercial product. The preamble to the October 2003 proposed rule gave full descriptions of these five situations (68 FR 61585), but the Agency has also included them in the regulatory text to clarify this factor for the regulated community. [73 FR 64702]

The Agency also wants to restate for clarification that for hazardous secondary materials to meet the useful contribution factor, not every constituent or component of the hazardous secondary material has to make a contribution to the recycling activity. For example, a legitimate recycling operation involving precious metals might not recover all of the components of the hazardous secondary material, but would recover precious metals with sufficient value to consider the recycling process legitimate. In addition, the recycling activity does not have to involve the hazardous component of the hazardous secondary materials if the value of the contribution of the non-hazardous component justifies the recycling activity. One example of this factor from an existing exemption is where hazardous secondary materials containing large amounts of zinc, a non-hazardous component, are recycled into zinc micronutrient fertilizers. In cases where the hazardous component is not being used or recycled, the Agency stresses that the recycler is responsible for the management of any hazardous residuals of the recycling process. [73 FR 64702]

In a situation where more than one hazardous secondary material is used in a single recycling process and the hazardous secondary materials are mixed or blended as a part of the process, each hazardous secondary material would need to satisfy the useful contribution factor. This requirement prevents situations where a worthless hazardous secondary material could be mixed with valuable and useful hazardous secondary materials in an attempt to disguise and dispose of it. In addition, a situation in which hazardous secondary materials that can be useful to a process are added to that process in much greater amounts than are needed to make the end-product or to otherwise provide its useful contribution would also be sham recycling. [73 FR 64702]

Another way the usefulness of the hazardous secondary material's contribution could be demonstrated is by looking at the efficiency of the material's use in the recycling process—that is, how much of the constituent in a hazardous secondary material is actually being used. As an example, if there is a constituent in the hazardous secondary material that could add value to the recycling process, but, due to process design, most of

it is not being recovered but is being disposed of in the residuals, this would be a possible indicator of sham recycling. However, there are certainly recycling scenarios where a low recovery rate could still be legitimate. For example, under an existing exclusion, if the concentration in a metal-bearing hazardous secondary material is low (2%–4%) and a recycling process was able to recover a large percentage of the target metal, this factor could be met and the recycling may be legitimate (depending on the outcome of the analysis of the other legitimacy factors). [73 FR 64702]

One way to use the efficiency of the recycling process to evaluate legitimacy is to compare the process to typical industry recovery rates from raw materials to determine if the recycling process is reasonably efficient. This method should involve an examination of the overall process, not just a single step of the process. For example, if one step in the process recovers a small percentage of the constituent, but the overall process recovers a much larger percentage, the Agency would consider the overall efficiency of the recycling process in determining whether hazardous secondary materials are providing a useful contribution. [73 FR 64702]

There are various ways in which hazardous secondary materials can be useful to a recycling process and various ways are laid out in this discussion of how a facility might demonstrate conformity with this factor. In addition, we provided a number of different ways a material could contribute to the process in the regulatory text describing this factor. Any one of these would be sufficient to demonstrate that the hazardous secondary material provides a useful contribution. Overall, the Agency considers this factor to be a critical element in determining legitimacy and any recycling process that does not meet this factor cannot be considered legitimate recycling. [73 FR 64702]

Factor 2—Valuable Product or Intermediate

‘‘The recycling process must produce a valuable product or intermediate * * * The product or intermediate is valuable if it is (i) sold to a third party or (ii) used by the recycler or the generator as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process’’ (40 CFR 260.43 (b)(2)). [73 FR 64702]

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

intermediate of the recycling activity. Such a practice would be sham recycling. [73 FR 64702]

Most commenters on the proposed rule for this factor stated that this is a useful way of gauging whether recycling is actually taking place, but requested that the Agency clarify the meaning of the term valuable, as it is used in the regulatory text. [For] the purpose of this factor, a recyclable product may be considered "valuable" if it can be shown to have either economic value or a more intrinsic value to the end user. Evaluations of "valuable" for the purpose of this factor should be done on a case-by-case basis, but one way to demonstrate that the recycling process yields a valuable product would be the documented sale of a product of the recycling process to a third party. Such documentation could be in the form of receipts or contracts and agreements that establish the terms of the sale or transaction. This transaction could include money changing hands or, in other circumstances, may involve trade or barter. A recycler that has not yet arranged for the sale of its product to a third party could establish value by demonstrating that it can replace another product or intermediate that is available in the marketplace. A product of the recycling process may be sold at a loss in some circumstances, but the recycler would have to be prepared to show how the product is clearly valuable to the purchaser. [73 FR 64702–64703]

Definition of "valuable"
[A] recyclable product may be considered "valuable" if it can be shown to have either economic value or a more intrinsic value to the end user. [73 FR 64702]

However, many recycling processes produce outputs that are not sold to another party, but are instead used by the generator or recycler. A product of the recycling process may be used as a feedstock in a manufacturing process, but have no established monetary value in the marketplace. Such recycled products or intermediates would be considered to have intrinsic value, though demonstrating intrinsic value may be less straightforward than demonstrating value for products that are sold in the marketplace. Demonstrations of intrinsic value could involve showing that the product of the recycling process or intermediate replaces an alternative product that would otherwise have to be purchased or could involve a showing that the product of the recycling process or intermediate meets specific product specifications or specific industry standards. Another approach could be to compare the products or intermediates physical and chemical properties or efficacy for certain uses with those of comparable products or intermediates made from raw materials. [73 FR 64703]

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. [73 FR 64703]

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. [73 FR 64703]

Factor 3—Managed as a Valuable Commodity

''The generator and the recycler should manage the hazardous secondary material as a valuable commodity. Where there is an analogous raw material, the hazardous secondary material should be managed, at a minimum, in a manner consistent with the management of the raw material. Where there is no analogous raw material, the hazardous secondary material should be contained. Hazardous secondary materials that are released to the environment and are not recovered immediately are discarded'' (40 CFR 260.43 (c)(1)). [73 FR 64703]

The first of the additional factors that must be considered expresses the principle that hazardous secondary materials being recycled should be managed in the same manner as other valuable materials. This factor requires those making a legitimacy determination to look at how the hazardous secondary material is managed before it enters the recycling process. In EPA's view, a recycler will value hazardous secondary materials that provide an important contribution to its process or product and, therefore, will manage those hazardous secondary materials in a manner consistent with how it manages a valuable feedstock. If, on the other hand, the recycler does not manage the hazardous secondary materials as it would a valuable feedstock, that behavior may indicate that the hazardous secondary materials may not be recycled, but rather released into the environment and discarded. [73 FR 64703]

This factor may be particularly appropriate in the case where a recycler has been paid by a generator to take its materials as a result of the economic incentives in the hazardous secondary materials market. By looking at the management of the hazardous

Definition of "analogous raw material"
An "analogous raw material" is a material for which a hazardous secondary material substitutes and which serves the same function and has similar physical and chemical properties as the hazardous secondary material. A raw material that has significantly different physical or chemical properties would not be considered analogous even if it serves the same function. For example, a metal-bearing ore might serve the same function as a metal-bearing air pollution control dust, but because the physical properties of the dust would make it more susceptible to wind dispersal, the two would not be considered analogous. Similarly, hazardous secondary materials with high levels of toxic volatile chemicals would not be considered analogous to a raw material that does not have these volatile chemicals or that has only minimal levels of volatile chemicals. [73 FR 64691]

secondary material before it enters the recycler's process, the entity making the legitimacy determination can tell that a material being managed like an analogous raw material is, in fact, valued by the recycler. If the hazardous secondary material is not being managed like a valuable raw material because it is uncontrolled or is being released, that indicates that the fee the recycler obtains for taking the hazardous secondary material may be its only value to that recycler. If the fee received were the only value to the recycler, it would mean that discard was taking place. [73 FR 64703]

This factor addresses the management of hazardous secondary materials in two distinct situations. The first situation is when a hazardous secondary material is analogous to a raw material which it is replacing in the process. In this case, the hazardous secondary material should be managed prior to recycling similarly to the way the analogous raw materials are managed in the course of normal manufacturing. EPA expects that all parties handling hazardous secondary materials destined for recycling—generators, transporters, intermediate facilities and reclamation facilities—will handle them in generally the same manner in which they would handle the valuable raw materials they might otherwise be using in their process. [73 FR 64703]

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." [73 FR 64703]

Hazardous secondary materials that have significantly different physical or chemical properties when compared to the raw material would not be considered analogous even if they serve the same function because it may not be appropriate to manage them in the same way. In this situation, the hazardous secondary material would have to be contained for this factor to be met. A hazardous secondary material is "contained" if it is placed in a unit that controls the movement of that material out of the unit. This requirement is consistent with the idea that normal manufacturing processes are designed to use valuable material inputs efficiently rather to than allow them to be released into the environment. [73 FR 64703]

For example, if a manufacturer has an ingredient that is a dry raw material managed in supersacks, the Agency would expect that a hazardous secondary material that is a similar dry material also would be managed in supersacks or in a manner that would provide equivalent protection. If, on the other hand, the hazardous secondary material was instead managed in an outdoor pile without appropriate controls in place to address releases to the environment, it may indicate that it was not being handled as a valuable commodity. If, however, the manufacturer decided to replace the dry raw material in its process with a liquid having the same constituents, it would not be sufficient, nor would it make sense, for the liquid to be managed in supersacks. Instead, the liquid would have to be "contained" (for example in a tank or surface impoundment). [73 FR 64703–64704]

An important part of this factor is the statement in the regulatory text clarifying that hazardous secondary materials that are released to the environment and not recovered immediately are discarded. Valuable products should not be allowed to escape into the environment through poor management and this factor clarifies that those hazardous secondary materials that do escape (and are not immediately recovered) are clearly discarded. Either a large release or ongoing releases of smaller amounts could indicate that, in general, the hazardous secondary material is not being managed as a valuable product, which could potentially lead to the recycling process being found not to be legitimate. Hazardous secondary materials that are immediately recovered before they disperse into the environment—air, soil, or water—and are reintroduced in the recycling process are not discarded. This determination must be made on a case-by-case basis, however. [73 FR 64704]

Example where Factor 3 is not met, but recycling may be legitimate
EPA has determined that it is appropriate that this factor is one of the two that must be considered rather than a factor that must be met because there are situations in which this factor is not met, but recycling appears to be legitimate. An example of this kind of situation is described in the March 2007 supplemental proposal (72 FR 14199). In the example, a hazardous secondary material that is a powder-like material is shipped in a woven super sack and stored in an indoor containment area, whereas the analogous raw material is shipped and stored in drums. A strict reading of this factor may determine that the hazardous secondary material is not being managed in a manner consistent with the raw material even if the differences in management are not actually impacting the likelihood of a release. By designing the legitimacy factors so that this one has to be considered, but not necessarily met, the individual facts of situations like the one described here can be evaluated on a case-by-case basis to determine if they affect the legitimacy of the recycling activity. [73 FR 64704]

In summary, given the nature of the legitimacy factors and their need to apply to all the practices covered by the exclusions in this final rule, it is not appropriate or practicable for EPA to develop a specific management standard. In the absence of such a management standard, EPA is using this factor: materials must be managed as analogous raw materials or, if there are no analogous raw materials, the materials must be contained. EPA's intent with this factor is that hazardous secondary materials are managed in the same manner as materials that have been purchased or obtained at some cost, just as raw materials are. Just as it is good business practice to ensure that raw materials enter the manufacturing process rather than being spilled or released, we would expect hazardous secondary materials to be managed effectively and efficiently in order that their full value to the manufacturing process would be realized. [73 FR 64704]

Factor 4—Comparison of Toxics in the Product

''The product of the recycling process does not (i) contain significant concentrations of any hazardous constituents found in Appendix VIII of part 261 that are not found in analogous products; or (ii) contain concentrations of any hazardous constituents found in

Appendix VIII of part 261 at levels that are significantly elevated from those found in analogous products; or (iii) exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit'' (40 CFR 260.43 (c)(2)). [73 FR 64704]

The second of the additional factors that must be considered requires those making a legitimacy determination to look at the concentrations of the hazardous constituents found in the product made from hazardous secondary materials and compare them to the concentrations of hazardous constituents in analogous products. Any of the following three situations could be an indicator of sham recycling: a product that contains significant levels of hazardous constituents that are not found in the analogous products; a product with hazardous constituents that were in the analogous products, but contains them at significantly higher concentrations; or a product that exhibits a hazardous characteristic that analogous products do not exhibit. Any of these situations could indicate that sham recycling is occurring because in lieu of proper hazardous waste disposal, the recycler could have incorporated hazardous constituents into the final product when they are not needed to make that product effective in its purpose. This factor, therefore, is designed to determine when toxics that are "along for the ride" are discarded in a final product and, therefore, the hazardous secondary material is not being legitimately recycled. [73 FR 64704]

To evaluate this factor, a recycler will ordinarily compare the product of the recycling process to an analogous product made of raw materials. For example, if a recycling process produced paint, the levels of hazardous constituents in the paint will be compared with the levels of the same constituents found in similar paint made from virgin raw materials. [73 FR 64704]

A recycler is also allowed to perform this evaluation by comparing the hazardous constituents in the hazardous secondary material feedstock with those in an analogous raw material feedstock. If the hazardous secondary material feedstock does not contain significantly higher concentrations of hazardous constituents than the raw material feedstock, then the end product of the recycling process would not contain excess hazardous constituents "along for the ride" either. EPA is clarifying here that this method of showing that the product does not have "toxics along for the ride" is acceptable. There may be cases in which it is easier to compare feedstocks than it is to compare products because the recycler knows that the hazardous secondary material is very similar in profile to the raw material. A comparison of feedstocks may also be easier in cases where the recycler creates an intermediate which is later processed again and may end up in two or more products, when there is no analogous product, or when production of the product of the recycling process has not yet begun. [73 FR 64704]

This factor identifies three ways to evaluate whether or not unacceptable amounts of hazardous constituents are passed through to the products of the recycling process. (As explained above, these methods also could be used to compare the hazardous secondary material feedstock to a raw material feedstock, if the recycler prefers.) The first method

specifies that when analogous products made from raw materials do not contain hazardous constituents, the product of the recycling process should not contain significant amounts of hazardous constituents. For example, if paint made from reclaimed solvent contains significant amounts of cadmium, but the same type of paint made from virgin raw materials does not contain cadmium, it could indicate that the cadmium serves no useful purpose and is being passed though the recycling process and discarded in the product. [73 FR 64704–64705]

The second method addresses analogous products that do contain hazardous constituents and asks whether the concentrations of those hazardous constituents are significantly higher in the product of the recycling process than in the product made from raw materials. Concentrations of hazardous constituents in the product of the recycling process that are significantly higher than in the product made from virgin raw materials could again be an indicator of sham recycling. For example, if a lead-bearing hazardous secondary material was reclaimed and then that material was used as an ingredient in making ceramic tiles and the amount of lead in the tiles was significantly higher than the amount of lead found in similar tiles made from virgin raw materials, the recycler should look more closely at the factors to determine the overall legitimacy of the process. [73 FR 64705]

The third method under this factor is whether the product of the recycling process exhibits a hazardous characteristic that analogous products do not exhibit. Requiring an evaluation of hazardous characteristics ensures that products of the recycling process do not exhibit the characteristics of toxicity, ignitability, corrosivity, or reactivity when the analogous products do not. The Agency believes that most issues associated with “toxics along for the ride” will involve the presence of toxic constituents, which are addressed under the first two parts of the factor. That is, we believe that it is likely that there are few instances where hazardous secondary materials are used in the process and hazardous constituents are not present at significantly higher levels, but the product made from the hazardous secondary material nevertheless exhibits the hazardous characteristic of toxicity when the analogous product does not. It is possible, though, that the use of hazardous secondary materials as an ingredient could cause a product to exhibit a hazardous characteristic, such as corrosivity, that is not exhibited by analogous products. [73 FR 64705]

The Agency has determined that it is appropriate for this factor to be considered in legitimacy determinations under the final exclusions and in the non-waste determinations in this action, but thinks that there may be situations in which the factor is not met but the recycling would still be considered legitimate. An example of this kind of situation that has been addressed by the Agency under the current regulatory scheme would be in the use and reuse of foundry sands for mold making in a facility’s sand loop. Because of repeated exposure to metals in a foundry’s process, the sands used to make the molds may have significantly higher concentrations of hazardous constituents than virgin sand. However, because the sand is part of an industrial process where there is little chance of the hazardous constituents being released into the environment or causing damage to

human health and the environment when it is kept inside, because there is lead throughout the foundry's process, and because there is a clear value to reusing the sand, this would be an example of a situation where this factor is not met, but it does not affect the legitimacy of the recycling process. [73 FR 64705]

In fact, EPA has concluded as a general matter that foundries engaged in the reuse of lead-containing foundry sands are recycling those sands legitimately and these sands would not be regulated under RCRA Subtitle C (under the circumstances described in EPA's March 2001 memorandum on this subject).[1] Thus, while the used sands in the sand loop arguably have toxics-along-for-the ride, EPA did not raise questions about the legitimacy of the recycling, given the overall nature of the operations. If the used foundry sand were being recycled into a different product, such as a material used on the ground or in children's play sand, the legitimacy determination would be very different and significant levels of metals would likely render the recycling illegitimate. The same conclusions would be reached applying the factors codified in 260.43. [73 FR 64705]

Additional examples where Factor 4 is not met, but recycling may be legitimate
Another example of recycling that may be legitimate although this factor has not been met could be when the material has concentrations of toxics that could be considered "significantly higher" than the analogous product, but meets industry specifications for the product that include specific specifications for the hazardous constituent of concern. Meeting accepted industry standards would be a strong indication that this material is being legitimately recycled. A third example could be in the mining and mineral processing industry. In many mineral processing operations, the very nature of an operation results in hazardous constituents concentrating in the product as it proceeds through the various steps of the process. In many cases, there is not an analogous product to compare the products of these processes so this factor may not be relevant because of the nature of the operations. As with the above example, if a facility considers a factor and decides that it is not applicable to its process, the Agency suggests that the facility evaluate the presence of hazardous constituents in its product and be prepared to demonstrate both that it considered this factor and the reasons it believes the factor is not relevant. [73 FR 64705]

As discussed in more detail in the comments section of [the final rule] (section XVIII) and in the response to comments document in the docket, commenters on this factor requested clarification concerning what EPA meant by the terms used in this factor. In response to some of these comments, EPA has made two clarifications in the regulatory text by (1) specifying that the hazardous constituents referred to in the regulation are those that are found in Appendix VIII to 40 CFR part 261 and (2) clarifying that the hazardous characteristics to which EPA is referring to are those in 40 CFR part 261 subpart C. [73 FR 64705]

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

The Agency also received much comment on the term "significant" and what the Agency intended by this term. EPA has decided to keep the term in the final rule. The alternative to using "significant" or a similarly flexible term to determine when there may be hazardous constituents in the product made from recycled hazardous secondary materials that are not in the analogous products made from raw materials would be to set an absolute standard. In its discussion of legitimacy in the October 2003 proposed rule, EPA discussed possible "bright line" or risk-based approaches as a way to set absolute lines to define "significant" based on either a numerical limit or a risk level (68 FR 61587–61588). EPA recognizes that the "bright line" or the risk-based approach may provide greater clarity and predictability to the regulated community, but that in both cases the Agency would have to establish a line for what is acceptable and the line may either be somewhat arbitrary or it may exclude recycling practices that, if carefully considered, should be considered legitimate. Based on the comments received on those approaches, we are convinced that they would not be workable. [73 FR 64705]

On the other hand, a case-by-case analysis of a recycling process can take into consideration the relevant principles and facts for that activity, leading to a determination of significance based on the facts of the activity. Because this factor must apply to various different recycling activities, we believe the case-by-case approach is most appropriate. [73 FR 64705–64706]

EPA, therefore, is finalizing its proposed option of using the term "significant" in 40 CFR 260.43(c)(2)(i) and (ii). Evaluating the significance of levels of hazardous constituents in products of the recycling process may involve taking into consideration several variables, such as the type of product, how it is used and by whom, whether or not the elevated levels of hazardous constituents compromise the efficacy of the product, the availability of the hazardous constituents to the environment, and others. For example, if a hazardous secondary material has been reclaimed and made into a product that will be used by children, and that product contains hazardous constituents that are not in analogous products, that product will likely need to be closely scrutinized. On the other hand, low levels of a hazardous constituent in a product from that same reclamation operation that is used as an ingredient in an industrial process or for another industrial application may not be significant and must be evaluated in the context of the product's use. [73 FR 64706]

EPA provided several additional examples in implementing this factor in the October 2003 proposed rule which will be repeated here. If zinc galvanizing metal made from hazardous secondary materials that were reclaimed contains 500 parts per million (ppm) of lead, while the same zinc product made from raw materials typically contains 475 ppm, this difference in concentration would likely not be considered "significant" in the evaluation of this factor. If, on the other hand, the lead levels in the zinc product made from reclaimed hazardous secondary materials were 1,000 ppm, it may indicate that the product was being used to illegally dispose of lead and that the activity is sham recycling, unless other factors would demonstrate otherwise. [73 FR 64706]

In another example, if a "virgin" solvent contains no detectable amounts of barium, while spent solvent that has been reclaimed contains a minimal amount of barium (e.g., 1 ppm), this difference might not be considered significant. If, however, the barium in the reclaimed solvent were at much higher levels (such as 50 ppm), it may indicate discard of the barium and sham recycling. [73 FR 64706]

Unfortunately, because of the variety of possible recycling scenarios under the exclusions and in the non-waste determinations covered by this final rule, we cannot provide examples for how this factor might work for all possible recycling situations. The Agency stresses that the determination of legitimacy for this factor should consider both the use and the users of the product in addition to the concentration of the hazardous constituents or the presence of a hazardous characteristic, as well as other relevant information. In addition, in some cases, the implementing agency may accept a risk argument from a recycler to show that the recycling activity meets this factor. If the recycler can show that despite elevated concentrations of hazardous constituents, such constituents pose little or no risk to human health or the environment, the implementing agency may consider that as evidence that the elevated concentrations are not significant. [73 FR 64706]

Economics

Consideration of economics has long been a part of the Agency's concept of legitimacy, as is evident in the Lowrance Memo and earlier preamble text (50 FR 638 and 53 FR 522; *see also American Petroleum Institute v. EPA* ("*API II"*), 216 F.3d 50, 57-58 (DC Cir. 2000)). [The] final rule does not codify specific regulatory language on economics as part of the legitimacy provision, but EPA offers further guidance and clarification on how economics may be considered in making legitimacy determinations, which is similar to the preamble discussion in the March 2007 supplemental proposal. [73 FR 64706]

Specifically, EPA believes that consideration of the economics of a recycling activity can be used to inform and help determine whether the recycling operation is legitimate. Positive economic factors would be a strong indication of legitimate recycling, whereas negative economic factors would be an indication that further evaluation of the recycling operation may be warranted in assessing the legitimacy factors. [73 FR 64706]

Considering the economics of a recycling activity can also inform whether the hazardous secondary material inputs provide a useful contribution and whether the product of recycling is of value. Economic information that may be useful could include (1) the amount paid or revenue generated by the recycler for recycling hazardous secondary materials; (2) the revenue generated from the sale of recycled products; (3) the future cost of processing existing inventories of hazardous secondary materials; and (4) other costs and revenues associated with the recycling operation. The economics of the recycling transaction may be more of an issue when hazardous secondary materials are sent to a third-party recycler, but even when the hazardous secondary materials are recycled under the control of the generator, the generator must still show that the hazardous secondary

materials are, at a minimum, providing a useful contribution and producing a valuable product. [73 FR 64706]

Useful economic information:

(1) The **amount paid or revenue generated by the recycler** for recycling hazardous secondary materials is one example of how economic information can help support a legitimacy determination. We have three primary illustrations to exemplify this. First, the basic economic flows can suggest whether the recycling operation will process inputs, including hazardous secondary materials, and produce products over a reasonable period of time, recognizing that there will be lean and slow times. A general accounting of the major costs, revenues, and economic flows for a recycling operation over a reasonable period of time can provide information for considering whether recycling is likely to continue at a reasonable rate, compared to the rate at which inputs are received, or whether it is likely that significant amounts of hazardous secondary materials would be accumulated and then abandoned when the facility closes. Any bona fide sources of revenues would be included in this consideration, such as payments by generators to recyclers for accepting hazardous secondary materials and subsidies supporting recycling. However, in order to have some level of confidence that beneficial products are or will be produced over a reasonable time frame, we believe that at least some portion of the revenues should be from product sales (or savings due to avoided purchases of products if the hazardous secondary materials are used directly by the recycler). This is consistent with the factor requiring that the hazardous secondary material must be recycled to make a valuable product or intermediate. [73 FR 64706]

Second, when the economics of a recycling operation that uses hazardous secondary materials to produce and sell final products are similar to a manufacturing operation using raw materials to produce and sell final products, we believe that such an operation is likely to be legitimate. For instance, if the recycler pays for hazardous secondary materials as a manufacturer would pay for raw materials, the recycler sells products from the recycling process as a manufacturer would sell products from manufacturing, and the revenues generated equal or exceed costs, then the hazardous secondary materials appear to be valuable (i.e., the recycler is willing to pay for them) and appear to make a useful contribution to a valuable recycled product. [73 FR 64707]

However, we also recognize that the economics of many legitimate recycling operations that utilize hazardous secondary materials differ from the economics of more traditional manufacturing operations. For example, many recyclers are paid by generators to accept hazardous secondary materials. Generators may be willing to pay recyclers because generators can save money if the recycling is less expensive than disposing of the hazardous secondary materials in landfills or incinerators. Also, some recyclers receive subsidies that may be designed to develop recycling infrastructure and markets or to achieve other benefits of recycling. For instance, the recycling of electronic materials can be legitimate even when the recycler is subsidized for processing the material. [73 FR 64707]

Third, any analysis of the economics of a recycling operation should recognize that a recycler may be able to charge generators and still be a legitimate recycling operation. Because these hazardous secondary materials are hazardous wastes if disposed of, typically the generators' other alternative management option already carries a cost that is based on the existing market for hazardous waste transportation, treatment, and disposal. Hence, unless there is strong competition in recycling markets or the hazardous secondary materials are extremely valuable, a recycler may be able to charge generators simply because alternative disposal options cost more. [73 FR 64707]

Recognizing that such a dynamic exists can assist those making legitimacy determinations in evaluating recycling operations. For example, if a recycler is charging generators fees (or receiving subsidies from elsewhere) for taking hazardous secondary materials and receives a far greater proportion of its revenue from acceptance of the fees than from the sale of its products, both the useful contribution and the valuable product factors may warrant further review, unless other information would indicate that such recycling is legitimate. Fees and subsidies may indicate that the economic situation allows the recycler to charge high fees, regardless of the contribution provided by the inputs, including hazardous secondary materials. In this situation, recyclers may also have an increased economic incentive to over-accumulate or overuse hazardous secondary materials or to manage them less carefully than one might manage more valuable inputs. Additionally, if there is little competition in the recycling market, and/or if acceptance fees seem to be set largely to compete with the relative costs of alternative disposal options rather than to reflect the quality or usefulness of the input to the recycling operation, this may also suggest a closer look at the useful contribution factor. [73 FR 64707]

(2) A **comparison of revenue from sales of recycled products to payments by generators** is another example of how economic information can help support an evaluation of “valuable product.” It is possible that product sales revenues could be dwarfed by the acceptance of fees because markets for particular products are highly competitive or because high alternative disposal costs allow for high acceptance fees. However, relatively low sales revenues could also require a review of other factors, such as whether product sales prices are lower than other comparable products, products are being stockpiled rather than sold, or very little product is being produced relative to the amount of inputs to the recycling operation. These indicators may suggest that the product of the recycling process is not valuable and, thus, sham recycling may be occurring. [73 FR 64707]

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

acquire sufficient amounts of hazardous secondary materials to make it economically feasible to recycle them, there should be little economic incentive to over-accumulate such materials that make a useful contribution. Overly large accumulations of input materials may indicate that the hazardous secondary materials are not providing a useful contribution or that the recycler is increasing its future costs of either processing or disposing of the material, and may be faced with an unsound recycling operation in the future. However, it is important to keep in mind that possible explanations for this may exist. For example, the recycler may have acquired a large stock of hazardous secondary materials because the price was unusually low or perhaps the hazardous secondary materials are generated episodically and the recycler has few opportunities to acquire them. [73 FR 64707]

(4) **An analysis of costs and revenues specific to on-site recycling** is an additional, albeit specific, example of economic information to consider. When recycling is conducted under the control of the generator, the recycler may not account formally for some of the costs and savings of the operation. Still, when deciding whether to undertake or continue the recycling operation or to utilize alternative outside recycling or disposal options, the on-site recycler (under the control of the generator) will evaluate the basic economic factors as a part of doing business. One such factor could be an accounting of the costs of virgin materials avoided by using hazardous secondary materials. Similarly, sales of recycled products under the control of the generator that are sold to an external market may support the valuable product criterion. [73 FR 64707]

Demonstration and Enforcement of Legitimacy

Under the first paragraph of 40 CFR 260.43, hazardous secondary materials that are not legitimately recycled are discarded materials and, therefore, are solid wastes. This paragraph also states that anyone claiming an exclusion at §261.2(a)(2)(ii), §261.4(a)(23), §261.4(a)(24), or §261.4(a)(25) or using a non-waste determination at §260.30(d) or (e) must be able to demonstrate that its recycling activity is legitimate. The Agency has included the language “In determining if their recycling is legitimate, persons must address the requirements of §260.43(b) and must consider the requirements of §260.43(c)” to make it clear that the factors in paragraph (b) must be met, while the factors in paragraph (c) must be considered and evaluated in determining whether the recycling activity overall is legitimate. [73 FR 64701]

Although there is no specific recordkeeping requirement that goes with the ability to demonstrate legitimacy, EPA would expect that in the event of an inspection or an enforcement action by an implementing agency, the recycler would be able to show how it made the overall legitimacy determination per §261.2(f). In the event that the process does not conform to one of the two factors under §260.43(c), the facility should be able to show that it considered that factor and why the recycling activity overall remains legitimate. For example, under existing exclusions from the definition of solid waste, reuse of lead contaminated foundry sands may or may not be legitimate, depending on

the use. The use and reuse of foundry sands for mold making in a facility's sand loop under normal industry practices has been found to be legitimate because the sand is part of an industrial process where there is little chance of the hazardous constituents being released into the environment or causing damage to human health and the environment when it is kept inside, because there is lead throughout the foundry's process, and because there is a clear value to reusing the sand. 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. The same result would be reached when applying Factor 4. [73 FR 64701]

CFR LANGUAGE

260.34 Standards and criteria for non-waste determinations.

[*CFR text not included*]

§260.34(b): The Administrator may grant a non-waste determination for hazardous secondary material which is reclaimed in a continuous industrial process if the applicant demonstrates that the hazardous secondary material is a part of the production process and is not discarded. The determination will be based on whether the hazardous secondary material is legitimately recycled as specified in §260.43 and on the following criteria:

> (1) The extent that the management of the hazardous secondary material is part of the continuous primary production process and is not waste treatment;
>
> (2) Whether the capacity of the production process would use the hazardous secondary material in a reasonable time frame and ensure that the hazardous secondary material will not be abandoned (for example, based on past practices, market factors, the nature of the hazardous secondary material, or any contractual arrangements);
>
> (3) Whether the hazardous constituents in the hazardous secondary material are reclaimed rather than released to the air, water or land at significantly higher levels from either a statistical or from a health and environmental risk perspective than would otherwise be released by the production process; and
>
> (4) Other relevant factors that demonstrate the hazardous secondary material is not discarded.

[*CFR text not included*]

260.43 Legitimate Recycling of Hazardous Secondary Materials Regulated under §260.34, §261.2(a)(2)(ii), and §261.4(a)(23), (24), or (25).

§260.43(a) Persons regulated under §260.34 or claiming to be excluded from hazardous waste regulation under §261.2(a)(2)(ii), §261.4(a)(23), (24), or (25) because they are engaged in reclamation must be able to demonstrate that the recycling is 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 the requirements of §260.43(b) and must consider the requirements of §260.43(c) below.

(b) 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, and the recycling process must produce a valuable product or intermediate.

(1) 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 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.

(c) The following factors must be considered in making a determination as to the overall legitimacy of a specific recycling activity.

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

(2) The product of the recycling process does not

(i) Contain significant concentrations of any hazardous constituents found in Appendix VIII of part 261 that are not found in analogous products; or

(ii) Contain concentrations of any hazardous constituents found in Appendix VIII of part 261 at levels that are significantly elevated from those found in analogous products; or
(iii) Exhibit a hazardous characteristic (as defined in part 261 subpart C) that analogous products do not exhibit.

(3) In making a determination that a hazardous secondary material is legitimately recycled, persons must evaluate all factors and consider legitimacy as a whole. If, after careful evaluation of these other considerations, one or both of the factors are not met, then this fact may be an indication that the material is not legitimately recycled.

However, the factors in this paragraph do not have to be met for the recycling to be considered legitimate. In evaluating the extent to which these factors are met and in determining whether a process that does not meet one or both of these factors is still legitimate, persons can consider the protectiveness of the storage methods, exposure from toxics in the product, the bioavailability of the toxics in the product, and other relevant considerations.

261.2(a)(2)(ii) Exclusion for Hazardous Secondary Materials That Are Legitimately Reclaimed Under the Control of the Generator in Non-Land-Based Units.

§261.2(a)(2)(ii):A hazardous secondary material is not discarded if it is generated and reclaimed under the control of the generator as defined in §260.10, it is not speculatively accumulated as defined in §261.1(c)(8), it is handled only in non-land-based units and is contained in such units, it is generated and reclaimed within the United States and its territories, it is not otherwise subject to material-specific management conditions under §261.4(a) when reclaimed, it is not a spent lead acid battery (see §266.80 and §273.2), it does not meet the listing description for K171 or K172 in §261.32, and the reclamation of the material is legitimate, as specified under §260.43. (See also the notification requirements of §260.42). (For hazardous secondary materials managed in land-based units, see §261.4(a)(23)).

261.4(a)(23) Exclusion for Hazardous Secondary Materials That Are Legitimately Reclaimed Under the Control of the Generator in Land-Based Units.

§261.4(a)(23): Hazardous secondary material generated and reclaimed within the United States or its territories and managed in land-based units as defined in §260.10 of this chapter is not a solid waste provided that:

[*CFR text not included*]

(v) The reclamation of the material is legitimate, as specified under §260.43 of this chapter; and

[*CFR text not included*]

261.4(a)(24) Exclusion for Hazardous Secondary Materials That Are Transferred for the Purpose of Legitimate Reclamation.

§261.4(a)(24): Hazardous secondary material that is generated and then transferred to another person for the purpose of reclamation is not a solid waste, provided that:

> [*CFR text not included*]
>
> (iv) The reclamation of the material is legitimate, as specified under §260.43 of this chapter;
>
> [*CFR text not included*]

261.4(a)(25) Exclusion for Hazardous Secondary Materials Exported for Reclamation.

§261.4(a)(25): Hazardous secondary material that is exported from the United States and reclaimed at a reclamation facility located in a foreign country is not a solid waste, provided that the hazardous secondary material generator complies with the applicable requirements of paragraph (a)(24)(i)–(v) of this section (excepting paragraph (a)(v)(B)(2) of this section for foreign reclaimers and foreign intermediate facilities)[….]

[*CFR text not included*]

261.2 Definition of Solid Waste.

[*CFR text not included*]

§261.2(f): *Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation.* Respondents in actions to enforce regulations implementing subtitle C of RCRA who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

ACRONYMS

CFR	Code of Federal Regulations
DSW	definition of solid waste
e-CFR	electronic Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
FR	Federal Register
RCRA	Resource Conservation and Recovery Act

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