

# 2015 Definition of Solid Waste Final Rule

## Frequent Questions<sup>1</sup>

March 31, 2015

### Overview of the 2015 DSW Final Rule

#### 1. What specific regulatory changes did EPA finalize in the 2015 Definition of Solid Waste (DSW) Final Rule?

##### ***Generator-Controlled Recycling Exclusion***

The 2015 DSW rule retained, with revisions, the exclusion for hazardous secondary materials that are legitimately reclaimed under the control of the generator (“generator-controlled exclusion”), including recycling performed onsite, within the same company and through certain types of toll manufacturing agreements.

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, speculative accumulation provisions have been revised to add a recordkeeping requirement. This requirement applies to all persons subject to speculative accumulation.

##### ***Verified Recycler Exclusion***

The rule replaces the 2008 “transfer-based” exclusion with an exclusion for hazardous secondary materials sent to a verified recycler for reclamation. 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. (**Note:** The requirement that a recycling facility be verified applies to recycling of those materials that would otherwise be regulated as hazardous waste, and does not apply to materials excluded prior to 2008, such as scrap metal).

---

<sup>1</sup> This document is meant for public information purposes only. It describes law and regulations but does not substitute for the actual laws and regulations themselves. All persons subject to the laws and regulations mentioned in this document are advised to consult legal counsel if they have any concerns about compliance with laws or regulations mentioned in the document.

### ***Remanufacturing Exclusion***

The rule finalizes an exclusion 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.

### ***Prohibition of Sham Recycling and Revisions to the Definition of Legitimacy***

The rule codifies 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, the definition of legitimate recycling is revised to make clear that all four legitimacy factors must be met, but also to recognize the legitimacy of certain types of recycling, such as in-process recycling and recycling to produce widely-recognized commodities, such as commodity metals.

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.

### ***Revisions to Solid Waste Variances and Non-Waste Determinations***

The rule revises solid waste variances and non-waste determinations (which, in contrast to the solid waste exclusions are implemented on a case-specific basis) in order to ensure the proper handling of hazardous secondary materials 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 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.

## **2. What were the major changes from the 2011 DSW Proposal?**

EPA made a number of changes from the 2011 DSW proposed rule in response to public comments received on the proposal.

First, the verified recycler exclusion was finalized instead of the proposed Subtitle C alternative recycling standards because EPA determined that the verified recycler 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.

Second, the 2015 final rule does not revise the language in the pre-2008 recycling exclusions to add notification and the contained standard and instead recommends further study. In addition, the final rule does not revise the pre-2008 recycling exclusions to include an explicit legitimacy requirement. Instead, the 2015 final rule codifies the long-standing policy of prohibiting sham recycling.

Third, the definition of legitimate recycling is revised to add recognition of legitimacy of in-process recycling (e.g., closed loop recycling and mining and mineral processing) and widely-recognized commodities (e.g., scrap metal).

Fourth, documentation requirements for legitimacy have been reduced from what was proposed. Documentation is required for the generator-controlled exclusion and in circumstances where the recycled products have elevated levels of hazardous constituents when compared to products made from raw materials. In such cases, the facility must document why the recycling is legitimate, and notify EPA or the authorized state. This is in lieu of the proposed petition process, which would have required states to review and approve these cases.

Lastly, EPA added a condition that generators must meet emergency preparedness and response requirements under both the generator-controlled and verified recycler exclusions. This condition requires generators to demonstrate that they protect human health and the environment and to reduce potential loss of valuable hazardous secondary materials.

## **3. How does the new DSW rule advance the goals of Sustainable Materials Management (SMM)?**

Sustainable materials management is an approach to serving human needs by using/reusing resources most productively and sustainably throughout their life cycles, minimizing the amount of materials involved and the associated environmental impacts. Efficiencies gained

in a sustainable materials management approach, especially with respect to non-renewable materials, can result in less energy used, more efficient use of materials, more efficient movement of goods and services, conservation of water, and reduced volume and toxicity of waste. Sustainable materials management is a core element of RCRA's resource conservation objectives.

The DSW rule advances the goals of sustainable materials management in a number of ways. In particular, the DSW rule is structured to recognize the legitimacy of in-process recycling and commodity-grade recycled products such as metals commodities, thus aligning the RCRA regulations with the best industry practices to conserve resources.

In addition, the remanufacturing exclusion for higher value solvents being remanufactured into similar high grade solvents has considerable potential materials management benefits. For example, a pharmaceutical manufacturer may use 100 kg of solvents to make 1 kg of active pharmaceutical ingredient. Because of their origin, these solvents are only lightly contaminated and need minimal processing to be returned to a commercial-grade product under the rule. By maximizing the number of uses of a high-purity grade chemical product as an aid to chemical manufacturing and processing, the rule can produce considerable energy and resource savings.

## Effect on Pre-2008 Exclusions

### **4. In 2011, EPA solicited comment on adding new requirements to each of the pre-2008 recycling exclusions to help prevent the sorts of environmental problems documented in the damage cases. Why didn't EPA finalize these requirements?**

In EPA's July 2011 proposal, the Agency requested comment on adding three conditions to 32 pre-2008 recycling exclusions that exclude or exempt certain types of recycling from full Subtitle C regulation. Specifically, we (1) proposed revising the language of each exclusion to reference the legitimate recycling standard in 40 CFR 260.43, including the requirement to document legitimate recycling; (2) requested comment on applying the contained standard in 40 CFR 260.10 to all exclusions; and (3) requested comment on applying the notification provision in 40 CFR 260.42 to all exclusions. In addition, we also requested comment on requiring recordkeeping for speculative accumulation which would only apply to those regulatory exclusions already subject to speculative accumulation.

As public comments to the 2011 proposal indicated, EPA's record support was not adequate to justify adding new across-the-board conditions to the pre-2008 recycling exclusions without taking into account the specifics of each exclusion and the potential for unintended consequences and difficulty in implementing certain requirements. As commenters noted, EPA could only correlate 7 of the 32 recycling exclusions and exemptions to damage cases in its environmental problems study, and even in those cases, the link to the specific exclusion was largely inferred based on the material description and date of the damages. Therefore,

EPA deferred action on adding new conditions to the pre-2008 recycling exclusions until further study is completed. EPA plans to more closely review the damage cases in order to better pinpoint specific root causes of mismanagement and then engage the public, states and the regulated community in the development of a strategy for addressing the findings.

**5. EPA claims to be making no changes to the pre-2008 recycling exclusions, but at the same time is requiring that all recycling, including recycling under the pre-2008 recycling exclusions, be legitimate. How does EPA reconcile these two statements?**

In the final rule, EPA did not change the language of the pre-2008 recycling exclusions to specifically require a demonstration of legitimacy. However, since the beginning of the RCRA program, EPA has consistently asserted that hazardous secondary materials excluded from regulation must be legitimately recycled. Hazardous secondary materials that are not recycled in accordance with the legitimacy criteria are “sham recycled”; this is considered disposal performed in the guise of recycling. As such, these materials are solid wastes for Subtitle C purposes, regardless of whether an exclusion is being claimed.

Prior to the 2015 DSW final rule, EPA’s definition of legitimate recycling was included in preamble and guidance, including the preamble to the original 1985 DSW rule as well as a 1989 memorandum (“Lowrance memo”) which outlined six questions for determining whether recycling was legitimate. In the 2015 DSW final rule, EPA has codified its previous guidance on legitimacy into four straightforward factors that define legitimate recycling and placed that definition in the regulations at 40 CFR 260.43. Thus, the final rule greatly improves accessibility, understanding, and compliance with EPA’s long-standing requirement that all recycling must be legitimate recycling.

Additionally, EPA made changes in the final rule to further remove any uncertainty about how certain types of recycling meet the definition of legitimacy. Specifically, under Factor 4, there is a recognition of legitimacy for in-process recycling (e.g., concentration of metals during minerals processing) and for commodity-grade recycled products (e.g., scrap metal recycled into metal commodities). In-process recycling involves hazardous secondary materials being returned to the original production process. Additionally, recycled products that meet widely recognized commodity specifications are indistinguishable from commodities in wide use in commerce. In both of these cases, it’s clear the recycled product is legitimate.

**6. When would a company have to test its recycled product in order to determine whether it is comparable to a legitimate product under Factor 4?**

Testing is not generally required under the rule. As with any solid and hazardous waste determination, a company may use knowledge of the materials it uses and of the recycling process to make its legitimate recycling determinations.

Additionally, as stated above, EPA revised Factor 4 in the final rule to further remove any uncertainty about how certain types of recycling meet the definition of legitimacy. Collectively, these changes clarify when Factor 4 is met for a wide variety of industrial processes.

Specifically, recycling meets Factor 4 with no testing or further demonstration of meeting this legitimacy factor required under any of the following circumstances:

1. The hazardous secondary materials are returned to the original process or processes from which they were generated, such as in concentrating metals in minerals processing,
2. The recycled product meets widely-recognized commodity specifications and there is no analogous product made from raw materials (such as scrap metal being reclaimed into metal commodities). For specialty products such as specialty batch chemicals or specialty metal alloys, customer specifications would be sufficient,
3. The recycled product has an analogous product made from virgin materials, but meets widely-recognized commodity specifications which address the hazardous constituents (such as spent solvents being reclaimed into solvent products). (This is in contrast to #2, where the specifications do not need to specifically address the hazardous constituents), or
4. The person recycling has the necessary knowledge, such as knowledge about the incoming hazardous secondary material and the recycling process, to be able to demonstrate that the product of recycling does not exhibit a hazardous characteristic and contains hazardous constituents at levels comparable to or lower than those in products made from virgin materials.

Again, EPA believes that the above statements will apply to the majority of recycling and thus, the need to test in order to determine compliance with Factor 4 will be infrequent.

**7. Under factor 4, when hazardous secondary materials are returned to the original process from which they were generated, the recycled product meets factor 4, but only if there is no analogous product made from raw materials. How do I determine whether or not there is an analogous product for this purpose?**

If the hazardous secondary materials are being returned to the original production process, then there is no analogous product and legitimacy factor 4 is met. You do not need to do any further analysis for the purpose of determining compliance with this factor.

EPA considers hazardous secondary materials that are returned to the original production process from which they were generated to have no analogous product made from raw materials because the product by its nature will always be made from the hazardous

secondary materials. For example, as noted in the preamble to the final rule, recycling that takes place under the closed loop recycling exclusion at § 261.4(a)(8) is an example of manufacturing that consistently includes the hazardous secondary material being returned to the original process from which it was generated and that would therefore automatically meet legitimacy factor 4. Another example includes primary metals production where hazardous secondary materials are returned to the production process to ensure that all the valuable metals are extracted from the ore. This would be another process that would meet factor 4 with no further analysis needed.

**8. What happens if my product of recycling does have levels of hazardous constituents that are not comparable to an analogous product (or is unable to be compared to an analogous product)?**

EPA recognizes that, despite the changes in the final rule, there may still be instances where recycling is legitimate, but the hazardous secondary material 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.

In this case, the recycler can document legitimacy by demonstrating that, 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 recycling is legitimate. The recycler must also notify EPA or the authorized state in this case.

**9. If I'm operating under a pre-2008 exclusion, do I have to submit a notification?**

No, the 2015 DSW final rule did not add any new notification requirements for pre-2008 exclusions. (Note some pre-2008 exclusions, such as hazardous secondary materials used to make zinc fertilizers, have always required notification, and this is unchanged.)

**10. If I'm operating under a pre-2008 exclusion, do the new recordkeeping requirements for speculative accumulation impact me?**

The changes to speculative accumulation impact you if your pre-2008 exclusion requires compliance with the speculative accumulation provision at 40 CFR 261.2(c)(8). Specifically, under the 2015 DSW final rule, all persons subject to the speculative accumulation requirements at 40 CFR 261.1(c)(8) 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.

## 11. Is scrap metal subject to the new speculative accumulation recordkeeping requirements?

Recyclable scrap metal is not subject to speculative accumulation recordkeeping requirements, although the reason it does not apply depends on the category of scrap metal being considered.

- Scrap metal that has been excluded from the definition of solid waste under 40 CFR 261.4(a)(13) (i.e., processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) is not subject to speculative accumulation, per Table 1 in 40 CFR 261.2.
- Non-excluded scrap metal (i.e., scrap metal that is not excluded under 40 CFR 261.4(a)(13)) is a solid waste when speculatively accumulated, per Table 1 in 40 CFR 261.2. However, even when it is a solid waste, non-excluded scrap metal that is a recyclable material under 40 CFR 261.6 is not subject to hazardous waste regulation per 261.6(a)(3)(ii). As noted in the 1985 DSW rule, “The [speculative accumulation] provision does not apply to secondary materials that already are wastes when they are recycled, for example scrap metal...” (50 FR 635, January 4, 1985).” Therefore non-excluded scrap metal, while subject to 40 CFR 261.6, would not be subject to the new speculative accumulation recordkeeping requirements.

However, scrap metal that is not recyclable (e.g., that has no reasonable prospect of being recycled, has been constructively abandoned, or is disposed) would be subject to hazardous waste regulation (assuming it would be identified as hazardous waste under 40 CFR part 261 when discarded).

## 12. If I’m operating under a pre-2008 exclusion, does my material have to meet the new contained definition in 40 CFR 260.10?

In the final rule, EPA is not changing the language of the pre-2008 recycling exclusions to specifically require that the materials affected by the pre-2008 exclusions be “contained.” However, management of hazardous secondary materials is addressed in Factor 3 of the definition of legitimacy, which applies to all recycling.

Factor 3 states “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.”

Thus, for hazardous secondary materials that have no analogous raw material, the hazardous secondary materials must be contained, which is defined in 40 CFR 260.10 as follows:

- (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.
- (4) Hazardous secondary materials in units that meet the applicable requirements of 40 CFR parts 264 or 265 are presumptively contained.

**13. If my materials must be “contained,” does that mean I have to put them in a container?**

No, the contained standard does not require a specific type of management unit like a container. It is a performance-based standard whose specific technical requirements would depend on the type of material that is being managed.

For example, for a material like scrap metal, which is a solid material whose hazardous constituents are generally immobile and is unlikely to be carried off by the wind, an uncovered pile placed on the ground could be considered “contained.” In the preamble to the final rule, EPA notes that scrap metal piles 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.

On the other hand, for a hazardous spent solvent, which is both volatile and presents a risks of leaks and spills that could impact the environment, management in tanks or containers similar to how solvent products are managed would be needed to ensure the hazardous secondary materials are contained.

**14. The contained standard mentions “wind-blown dust” as a concern. Our operations involve dirt roads and industry machinery and can generate dust. How does this relate to the contained standard?**

The reference to preventing “wind-blown dust” refers to hazardous secondary material in dust form (for example, electric arc furnace (EAF) dust, which is listed as a hazardous waste (K061)). Ordinary non-hazardous dust or dirt would not be subject to the contained standard.

### **Effect on Already-Granted Variances and Non-Waste Determinations**

**15. How would facilities that have already been granted a variance or non-waste determination be affected by the revisions to these provisions in 2015 DSW rule?**

For the purpose of federal regulation, facilities that have already been granted variances or non-waste determinations under 40 CFR 260.31 or 40 CFR 260.33 would continue to operate under those provisions and would not become subject to the new provisions under the rule. However, state regulations can be more stringent than the federal regulations, so facilities that have been issued a variance or non-waste determination by a state regulatory authority should consult with their state.

### **Imports, Exports and Interstate Transport**

**16. Can I import hazardous secondary materials and manage the materials under the final rule exclusions?**

Yes. You may import hazardous secondary materials and manage the materials domestically under one or more of the final rule exclusions. As an importer, you assume the responsibilities of a generator of the hazardous secondary materials and thus must manage the materials according to the generator-specific conditions of the applicable exclusion(s) used.

**17. Can I export hazardous secondary materials under any of the rule’s exclusions?**

No. Exports of hazardous secondary materials are not allowed under the generator-controlled, verified recycler, or remanufacturing exclusions.

**18. How do interstate shipments work when one state has adopted an exclusion but another state has not adopted?**

In general, in order for a hazardous secondary material to remain excluded under any of the new exclusions in the final rule, the generator, reclaimer (or remanufacturer), and (in the case of the verified recycler exclusion) any intermediate facility must be located in a state that had

adopted the exclusion. However, for the verified recycling exclusion, a generator may send their excluded material to a RCRA hazardous waste permitted recycling facility in a state that has not adopted the exclusion if the hazardous secondary material is managed as hazardous waste in the receiving state.

In addition, if a shipment of hazardous secondary material is just being transported through a state that has not adopted the exclusion, that transit state's hazardous waste regulations could apply once the shipment reaches the border of that state. We encourage you to contact all states through which interstate transport of your hazardous secondary materials may occur in order to ensure compliance with each states regulations.