Hazardous Secondary Materials Requirements and the Definition of Solid Waste

ASTSWMO Training Section I
September 12, 2024

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What is Hazardous Secondary Material (HSM)?

- *Hazardous secondary material* (HSM) means a secondary material (e.g., spent material, by-product, or sludge) that, when discarded, would be identified as hazardous waste under 40 CFR part 261. (40 CFR 260.10)
- In other words, an HSM may or may not be a hazardous waste depending on whether it is discarded.

Note: Sometimes "HSM" is used as shorthand for excluded or exempted recyclable material. However, from regulatory perspective, HSM can include either discarded or non-discarded material. It is the "material" that is evaluated under 40 CFR 261.2 to determine whether or not is it a solid waste.

RCRA Section 1004(27)

"The term "solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include…"

Why Does It Matter if a Material is a Solid Waste?

- EPA's authority to regulate a material stems from it first being defined as a "solid waste." If a material isn't a solid waste, then RCRA doesn't regulate it – even if it is hazardous.
- There are different "definitions of solid waste" that apply in different cases. For example:
  - The statutory definition of solid waste at RCRA section 1004(27) applies to certain clean up and emergency response authorities.
  - The non-hazardous regulatory definition of solid waste at 40 CFR 241 applies to certain non-hazardous material burned as fuel (and is important for how the combustion unit is regulated under the Clean Air Act)
  - Today's focus → The hazardous regulatory definition of solid waste at 40 CFR 261.2 applies for the purposes of RCRA Subtitle C regulations (e.g., hazardous waste manifest and permitting requirements, etc).

The Basics

What do I need to know to determine if something is a solid waste for purposes of RCRA hazardous waste regulation?

(1) What is the material?
(2) What is being done with the material?

In most cases, both these questions need to be answered.

- The same material might be a solid waste in some cases, and not others.
- The same management practice might be solid waste management in some cases, and not others.

What is the material?

- Commercial Chemical Product
  - Unused product (e.g., off-specification chemical)
- Spent Materials (40 CFR 261.1(c)(1))
  - Any material that has been used and, as a result of contamination, can no longer serve the purpose for which it was produced without reprocessing.
- Sludges (40 CFR 261.1(c)(2), same as 40 CFR 260.10)
  - Any solid, semisolid, or liquid waste generated from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of treated effluent.
- By-products (40 CFR 261.1(c)(3))
  - Material that is not one of the primary products of a production process and is not solely or separately produced by the production process.
- Scrap Metal (40 CFR 261.1(c)(6))
  - Bits and pieces of metal parts or metal pieces that may be combined together with bolts or soldering. (see also “excluded scrap metal” at 40 CFR 261.1(c)(9))

Solid Waste: The Simple Determinations

There are a few cases where it's simple to determine something is a solid waste:

- It's been disposed of in a landfill.
- It's been burned in an incinerator.
- It's one of the specific types waste that EPA determined is "inherently waste-like" in 40 CFR 261.2(d).

(Okay, that third one isn't that simple, but those are rare wastes that are too dangerous to recycle and you'll hopefully never encounter them).

Everything else? It gets a little trickier.

Is it a Military Munition?

- Military munitions are a special case – they get their own definition of solid waste regulations at 40 CFR 266.202.
- Military munitions are not solid wastes when:
  - Used for the intended purpose(e.g., lead shot).
  - Recycled (e.g., reused, repaired).
- Military munitions are solid wastes when:
  - Unused munitions
    - Disposed of, removed from storage for the purpose of disposal, deteriorated to the point it cannot be used or recycled, or declared a solid waste.
  - Used munitions
    - Transported off range or from the site of use; or disposed of by burial (on or off range).
    - Fired munitions that land off-range may be statutory solid waste under RCRA section 1004(27) for the purposes of RCRA correction action or the imminent and substantial endangerment provisions of RCRA section 7003.

Is it Excluded?

- There are a lot of exclusions found in 40 CFR 261.4(a). Most are specific to certain materials and/or industries.

- Domestic sewage and mixtures of domestic sewage (261.4(a)(1))
- Industrial point source discharges (261.4(a)(2))
- Irrigation return flows (261.4(a)(3))
- Certain radioactive secondary materials (261.4(a)(4))
- In-situ mining materials (261.4(a)(5))
- Pulping liquors (261.4(a)(6))
- Spent sulfuric acid (261.4(a)(7))
- Secondary materials reclaimed in a closed-loop process in tanks (261.4(a)(8))
- Spent wood preservatives (261.4(a)(9))
- Coke by-product wastes (261.4(a)(10))
- Splash condenser residues (261.4(a)(11))
- Oil-bearing hazardous secondary materials generated and recycled within the petroleum refining industry (261.4(a)(12))
- Excluded scrap metal (261.4(a)(13))
- Shredded circuit boards ((261.4(a)(14))
- Pulping condensates derived from Kraft mill steam strippers (261.4(a)(15))
- Mineral processing spent materials being recycled (261.4(a)(17))
- Petrochemical recovered oil (261.4(a)(18))
- Spent caustic solutions from petroleum refining (261.4(a)(19))
- Hazardous secondary materials used to make zinc fertilizers (261.4(a)(20))
- Zinc fertilizers made from hazardous secondary materials (261.4(a)(21))
- Used cathode ray tubes (CRTs) (261.4(a)(22))
- Hazardous secondary materials generated and reclaimed under the control of the generator (261.4(a)(23))
- Hazardous secondary materials transferred for the purpose of reclamation (261.4(a)(24)and (25))
- Solvent-contaminated wipes that are sent for cleaning and reuse. (261.4(a)(26))
- Higher-value solvents transferred for the purpose of remanufacturing (261.4(a)(27)

Is it Excluded? (continued)

- The three most recently promulgated exclusions apply more broadly:
  1. **Generator Controlled Exclusion:** reclamation onsite of HSM, within the same company or through certain toll manufacturing agreements. (40 CFR 261.4(a)(23))
  2. **Transfer-Based Recycling Exclusion:** HSM transferred off-site for reclamation. (40 CFR 261.4(a)(24) and (25))
  3. **Remanufacturing Exclusion:** higher-valued solvents sent for remanufacturing. (40 CFR 261.4(a)(27))
- Each of these exclusions have specific conditions that must be met, including notification, tracking, contingency planning, certain management conditions and, for the transfer-based exclusion, financial assurance.

Is it Abandoned?

A material is a solid waste when it's been "abandoned." (40 CFR 261.2(b)) Abandonment is easy to show when it's been landfilled or burned in an incinerator. But how can you tell when something has been abandoned, and when someone is just storing it to be used later?

It depends on the type of material!

Is it an unused commercial chemical product (CCP)?

- Commercial chemical products don't have specific time limits attached to their storage. However, there is guidance available for determining when a CCP is a solid waste.

Checklist to Assist in Evaluating Whether Commercial Chemical Products Are Solid and Hazardous Waste under the Resource Conservation and Recovery Act (RO #14837, May 14, 2013)

Is it anything else that's a secondary material (e.g., spent material, byproduct, sludge, etc.)?

- These materials are subject to "speculative accumulation" limits, which means that (1) it must have a feasible means of recycling, and (2) 75% must be recycled or moved offsite for recycling every calendar year. The recycling timeframe must be documented. (40 CFR 261.1(c)(8))

Speculative Accumulation Case Study

- A photo developer generates 100 lbs of silver-bearing sludge precipitated from used fixer (characteristic).
- The developer sends the sludge to a recycler to recover the silver in September 2020. However, the recycler's silver recovery unit breaks down after processing 5 lbs in December 2020. Can the recycler store the sludge until the unit is fixed? For how long?
- What questions would you need to answer to determine if this material is being speculatively accumulated? What RCRA requirements would the recycler be subject to?

Is it Recycled?

- Some types of hazardous secondary materials being recycled almost always are regulated as solid waste
  - Burning for energy recovery (40 CFR 261.2(c)(2))
  - "Use constituting disposal" (use in or on the land) (40 CFR 261.2(c)(1); see also 40 CFR part 266 Subpart C)
- Some types of hazardous waste recycling are regulated under alternative hazardous waste management standards.
  - Lead acid battery recycling (40 CFR part 266 Subpart G)
  - Precious metals recycling (40 CFR part 266 Subpart F)

Is it Recycled? (continued)

- Some types of hazardous waste recycling are almost never regulated as waste management.
  - Used directly as an effective substitute for a product or ingredient (when not burned for energy recovery or used on the land). (40 CFR 261.2(e))
- Then there are specific solid waste recycling exclusions at 40 CFR 261.4(a), which are part of the list of exclusions mentioned earlier.
  - In order for an HSM to fall under one of these exclusions, all the conditions of the exclusion must be met. If not, then the HSM is a hazardous waste.

Is it Recycled? (continued)

- Regulation of reclamation (i.e., processing a hazardous secondary material to either recover usable products or regenerate the original product) depends on the material (40 CFR 261.2(c)(3)):
  - Commercial chemical products and characteristic by-products and sludges are not solid waste when reclaimed.
  - Listed by-products and sludges and spent materials are solid wastes when reclaimed.
- Exception: Reclamation performed under one of the most recent DSW exclusions:
  1. Generator Controlled Exclusion (recycling onsite, within the same company or through certain toll manufacturing agreements).
  2. Transfer-Based Recycling Exclusion (transferred off-site for recycling).
  3. Remanufacturing Exclusion (higher-valued solvents sent for remanufacturing).

40 CFR 261.2(c) Table 1

	Use constituting disposal (§261.2(c)(1))	Energy recovery/fuel (§261.2(c)(2))	Reclamation (§261.2(c)(3)), except as provided in §§261.4(a)(17), 261.4(a)(23), 261.4(a)(24) or 261.4(a)(27)	Speculative accumulation (§261.2(c)(4))
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in 40 CFR Part 261.31 or 261.32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
By-products (listed in 40 CFR 261.31 or 261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)	-	(*)
Commercial chemical products listed in 40 CFR 261.33	(*)	(*)	-	-
Scrap metal that is not excluded under 40 CFR 261.4(a)(13)	(*)	(*)	(*)	(*)

40 CFR 261.4(a)(24): A Tale of Two Exclusions

- Due to court decisions and states' ability to be more stringent than the federal program, there are currently two versions of the 40 CFR 261.4(a)(24) recycling exclusion being implemented by the states:
  - The 2015 Verified Recycler Exclusion
  - The 2018 Transfer-Based Exclusion
- Both exclusions have the same reg citation and apply to HSM transferred to a third party for legitimate recycling.
- Both have conditions that must be met, and most of the conditions are the same for both exclusions, with a couple of exceptions.
- The 2015 verified-recycler exclusion is more stringent than the 2018 version. The 2018 version reflects the current federal program.

Differences between two versions of 40 CFR 261.4(a)(24)	2015 Verified Recycler Exclusion	2018 Transfer-Based Exclusion
Generators	Must send materials to either a **RCRA permitted recycler** or to a facility with a "**verified recycler variance**"	Must send materials to either a **RCRA permitted recycler** or perform a "**reasonable efforts**" **audit** on unpermitted recycler
Recyclers	Must either be **RCRA permitted** or obtain a "**verified recycler variance**" from the state	Must either **be RCRA permitted** or pass a "**reasonable efforts**" **audit** by the generator
Exports	Not eligible	Eligible with notice and consent per 40 CFR 261.4(a)(25), among other requirements

Status of HSM Shipments Depends on which Version of 40 CFR 261.4(a)(24) Has Been Adopted		Receiving State		
		No Exclusion	2015 Verified Recycler Exclusion	2018 Transfer-Based Exclusion
Generating State	No Exclusion	Shipments are Hazardous Waste	Shipments are Hazardous Waste	Shipments are Hazardous Waste
	2015 Verified Recycler Exclusion	Shipments Excluded in Generator State but Hazardous Waste in Receiving State	Shipments are Excluded	Shipments Excluded if sent to RCRA Permitted Recycler
	2018 Transfer-Based Exclusion	Shipments Excluded in Generator State but Hazardous Waste in Receiving State	Shipments Excluded if sent to RCRA Permitted Recycler or to a Verified Recycler which passes Reasonable Efforts Audit	Shipments are Excluded

Transfer-Based Exclusion Case Study

- An HSM generator has notified under 40 CFR 261.4(a)(24) that they are sending their spent solvents to a solvent recycler as excluded HSM. They meet all the applicable conditions for the HSM managed at their site. What would they need to do to send the material:
  - To a RCRA-permitted reclamation facility?
  - To a U.S. reclamation facility without a RCRA permit?
  - To a reclamation facility in a foreign destination?

Hint: The answers to the above questions will change depending on which version of the exclusion, if any, has been adopted by the generator's state and the recycler's state.

Scrap metal recycling

In general, scrap metal recycling is not subject to RCRA hazardous waste requirements:

- Excluded scrap metal: processed scrap metal, home scrap metal and prompt scrap metal is not a solid waste when recycled. (40 CFR 261.4(a)(13))
- Other types of scrap metal are solid waste when recycled, but are exempt from hazardous waste regulations. (40 CFR 261.6(a)(3)(ii))

Solid Waste Variances and Non-Waste Determinations

- An individual hazardous secondary material may also be determined, on a case-specific basis, to not be a solid waste via a solid waste variance or non-waste determination. (40 CFR 260.30 – 260.34)
- Types of variances and non-waste determinations are:
  - Variance for speculative accumulation (one year extension of time limit) (40 CFR 260.31(a))
  - Variance for reclamation and reuse as a feedstock ((40 CFR 260.31(b))
  - Variance for partial reclamation (40 CFR 260.31(c))
  - Non-waste determination for reclamation in a continuous industrial process (40 CFR 260.34(b))
  - Non-waste determination for material indistinguishable from a product (40 CFR 260.34(c))

Solid Waste Variances and Non-Waste Determinations (continued)

- Procedures for granting or denying requests for variances and non-waste determinations are found at 40 CFR 260.33 and include public notice and comment requirements.
- In the 2015 DSW rule, EPA made several changes to the solid waste variance and non-waste determination provisions, including:
  - Tightening the criteria for granting a partial reclamation variance. (40 CFR 260.31(c))
  - Codifying EPA's ability to revoke a variance or non-waste determination in the event of a change in circumstances that affects how the HSM meets the relevant criteria. (40 CFR 260.33(c))
  - Setting a ten-year limit on variances and non-waste determinations. (40 CFR 260.33(d))
  - Requiring facilities to submit a notification on the RCRA site ID form 8700-12 every two years. (40 CFR 260.33(e))
- Facilities with variances granted prior to the effective date of the rule (July 15, 2015) are grandfathered into the previous requirements.

Other types of HSM recycling

Finally, HSM recycling facilities that do not fit into any of the exclusions, exemptions, variances, non-waste determinations or alternative standards are subject to the recyclable materials requirements of 40 CFR 261.6(c) and (d):

- Facilities that store recyclable materials prior to recycling are subject to hazardous waste storage permit requirements (although the recycling process itself is exempt from permitting).
- Facilities that do not store recyclable materials are subject to notification and manifest requirements, and if they also have a RCRA permit for other reasons, are subject to RCRA air requirements in subparts AA and BB of part 264 or 265.

Imports and Exports of Hazardous Recyclable Materials

- Most recyclable materials that are excluded from the definition of solid waste are not subject to RCRA hazardous waste import and export requirements, as long as they are going to legitimate recycling and all the conditions of the exclusions are met.
  - Imports and exports could still be subject to requirements of the other country
- Cathode Ray Tubes (CRT) are subject to specific export requirements under 40 CFR 261.39(a)(5) as a condition of the CRT exclusion.

Imports and Exports of Hazardous Recyclable Materials (cont'd)

- HSM excluded under the transfer-based exclusion is subject to specific export requirements under 40 CFR 261.4(a)(25) as a condition of the exclusion.
  - Imports of HSM under the transfer-based exclusion are not subject to regulation as long as the conditions are met. For the purpose of the exclusion, the importer is considered the "HSM generator".
- Other hazardous recyclable materials are subject to the hazardous waste import and export requirement of 40 CFR part 262 Subpart H (per 40 CFR 261.6(a)(5))
  - Examples: SLABs and hazardous recyclables utilized for precious metal recovery under 40 CFR Part 266, UW under 40 CFR Part 273, and any other regulated HW being shipped for recycling/reclamation.

Legitimate Recycling

- No matter which type of recycling we're talking about, in order to be excluded or subject to reduced requirements, the recycling must be legitimate and not sham. (40 CFR 261.2(g); 40 CFR 260.43)

<u>Legitimate</u>: Lead-contaminated foundry sands reused in foundry molds

<u>Sham</u>: Lead-contaminated foundry sands reused as playground sand

Four legitimacy factors:

Factor 1: Materials must provide a useful contribution to the recycling process or to a product or intermediate. (40 CFR 260.43(a)(1))

Factor 2: Recycling must produce a valuable product or intermediate. (40 CFR 260.43(a)(2))

Factor 3: Materials must be managed as valuable commodities. (40 CFR 260.43(a)(3))

Factor 4: Products of recycling don't contain significant concentrations of hazardous constituents. (40 CFR 260.43(b))

IMPORTANT: Must meet Factors 1-3 and must consider Factor 4 to be legitimate recycling.

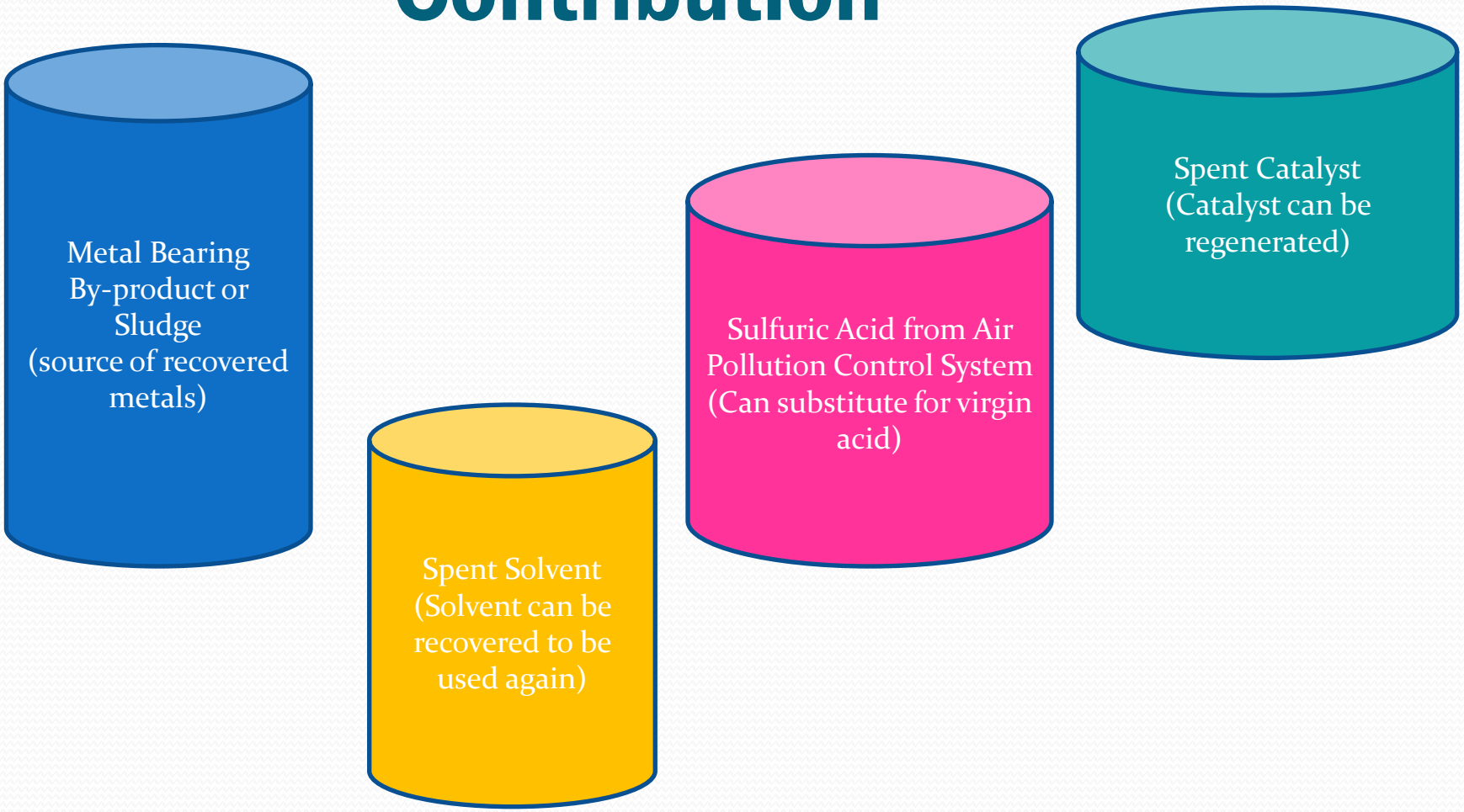
Factor 1: What does it mean to provide a useful contribution?

A material provides a <u>useful contribution</u> to the recycling process or a product or intermediate if it:

- Contributes valuable ingredients;
- Replaces a catalyst or carrier in the recycling process;
- Is a source of a valuable constituent recovered;
- Is recovered or regenerated; **<u>OR</u>**
- Is used as an effective substitute for a commercial product.

Reg citation for <u>Factor 1</u>: 40 CFR 260.43(a)(1).

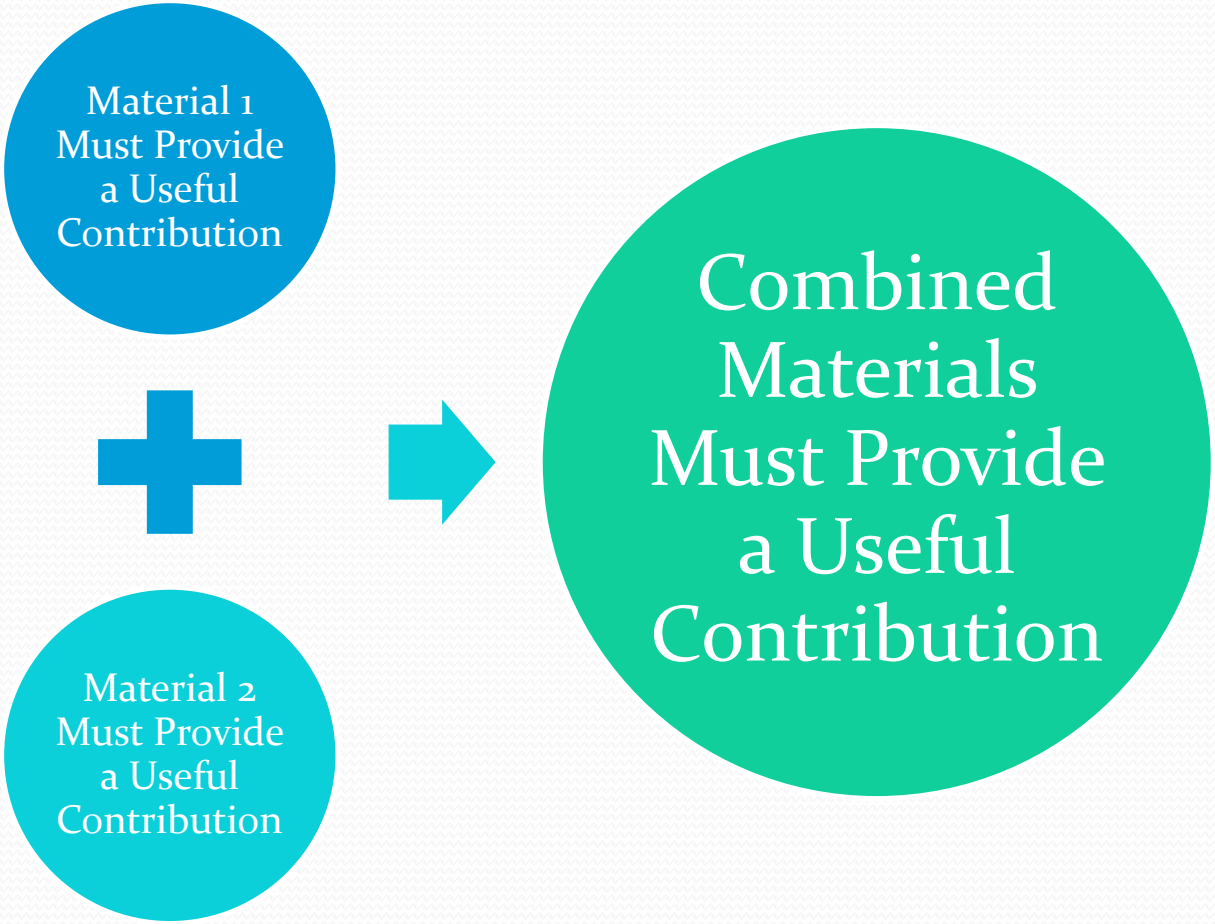
Common Examples of Useful Contribution



Factor 1: What does it mean to provide a useful contribution?

- The hazardous constituent does not have to be the component being recycled.
  - For example: zinc recycled into micronutrient fertilizer from a hazardous secondary material can meet factor 1 even though zinc is not the hazardous constituent.
  - BUT, the recycler is responsible for proper management of any hazardous residuals.
- If two or more hazardous secondary material are blended together prior to recycling, both must meet factor 1 and contribute to the final product or to the process.
  - This is in order to prevent blending to try and meet the factor.

When Blending, Both Materials Must Provide a Useful Contribution



Factor 2: What does it mean to produce a valuable product?

Recycling produces a valuable product or intermediate if it is:

- Sold to a third party; **OR**
- Used by the recycler or generator as an effective substitute for a commercial product or as an ingredient or intermediate.

A product can be a valuable intermediate if it is used in the process even if it has no value on the open market.

- However, it must have a real use in the process.
  - For example: a sub-standard cinder block being used to build a building to store more cinder blocks is not a valuable product (actual damage case).

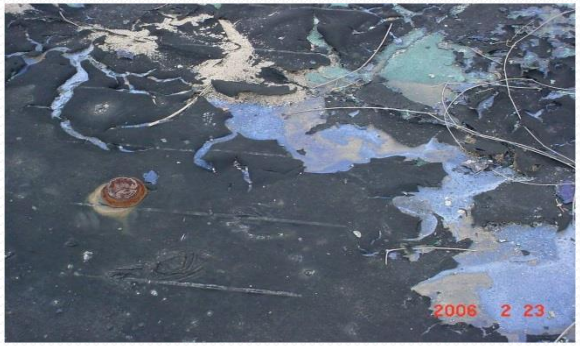
Reg citation for Factor 2: 40 CFR 260.43(a)(2).

Sham Recycling Example – "Ugly Paint"

Hazardous spent solvent contaminated with ink from screen printing process designated by generator as "ugly paint" or "used thinner" (depending on solids content).

According to the owner, he was using the ugly paint on a concrete slab for an advertisement that would be visible by airplanes. The "advertisement" was never completed. (*see picture, right*)

The facility had no records of anyone taking the free ugly paint or used thinner. Feed material for these "products" are stored outside in containers covered with corrugated plastic.



"Advertisement" painted with "ugly paint"

Factor 3: What does it mean to be managed as a valuable commodity?

Materials are <u>managed as valuable commodities</u> if:

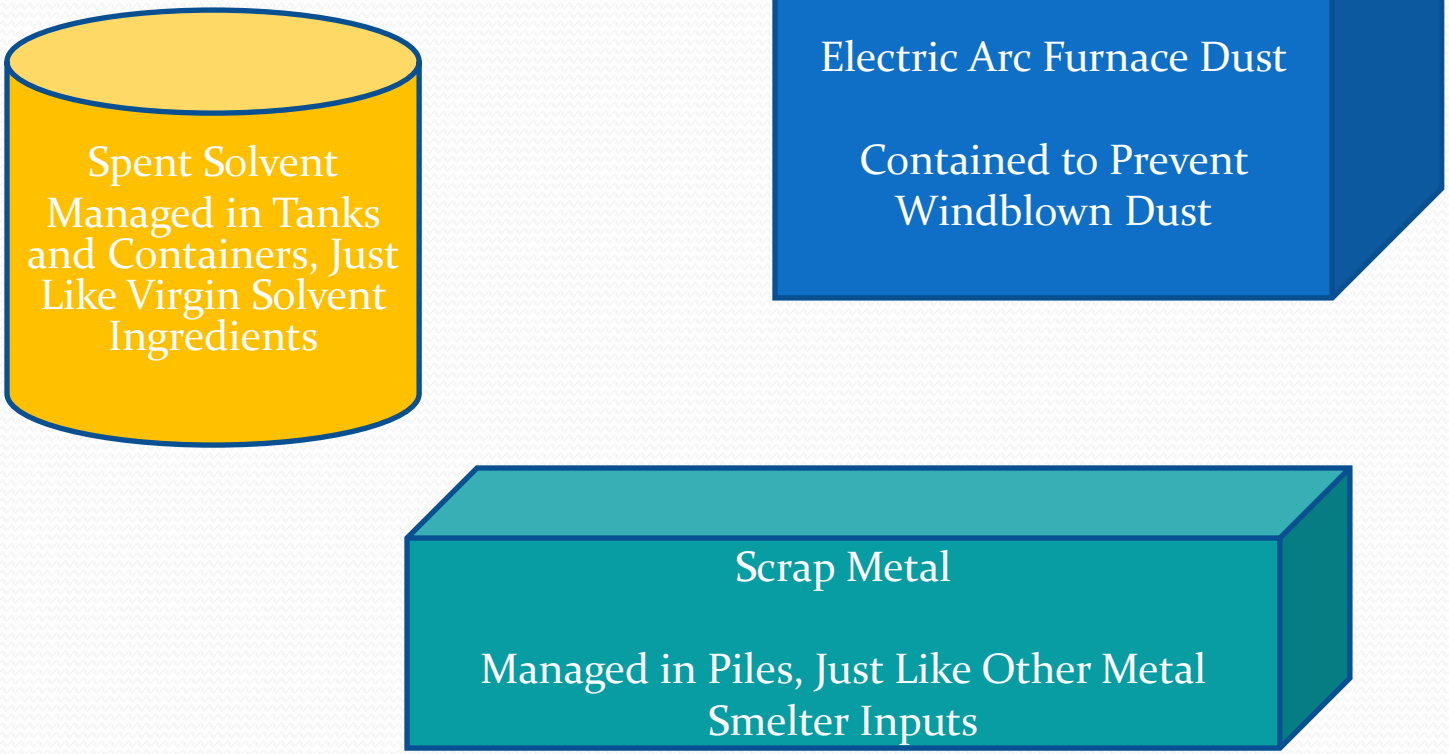
- Where there is an analogous raw material, the material is managed consistently or in an equally protective manner; **<u>OR</u>**
- Where there is no analogous raw material, the material is contained.

For example:

- If the hazardous secondary material is replacing a material that it resembles, it should be managed in the same way or in a way that is equally likely to prevent a release.
- If the hazardous secondary material is a liquid replacing a material that is a solid, it must be contained.

Reg Citation for <u>Factor 3:</u> 40 CFR 260.43(a)(3).

Common Examples of HSM Managed as a Valuable Commodity



Definition of Contained (40 CFR 260.10)

Contained means held in a unit (including a land-based unit as defined in this subpart) that meets the following criteria:

- (1) The unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment. Unpermitted releases are releases that are not covered by a permit (such as a permit to discharge to water or air) and may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures;
- (2) The unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and
- (3) The unit holds hazardous secondary materials that are compatible with other hazardous secondary materials placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions.
- (4) Hazardous secondary materials in units that meet the applicable requirements of 40 CFR parts 264 or 265 are presumptively contained.

Factor 4: What does it mean for a product of recycling to be analogous to a legitimate product (i.e., not contain significant levels of hazardous constituents)?

The answer depended on whether the product of the recycling process has an "analogous product" made from virgin materials.

- If there is an analogous product, then you can compare the levels of hazardous constituents and any hazardous characteristics of the two products. If the product made with a hazardous secondary material does not have significant concentrations of hazardous constituents and does not exhibit a hazardous characteristic that the analogous products do not exhibit, it is likely legitimate for this factor.

- If there is no analogous product, then one way to consider this factor would be to see if the product meets widely-recognized specifications.

The goal is to ensure that hazardous constituents aren't being discarded into products where they don't belong (toxics along for the ride).

Reg Citation for Factor 4: 40 CFR 260.43(b).

Examples of Recycled Products With Analogous Products Made from Raw Materials	Examples of Recycled Products Without Analogous Products Made from Raw Materials
Reclaimed Solvents (analogous product is virgin solvent)	Commodity-grade metal made from mining processes that involve by-products recycled back into mineral processing
Regenerated Acids (analogous product is virgin acid)	Products resulting from closed-loop recycling

Factor 4: What does it mean for a product of recycling to be analogous to a legitimate product or intermediate (continued)?

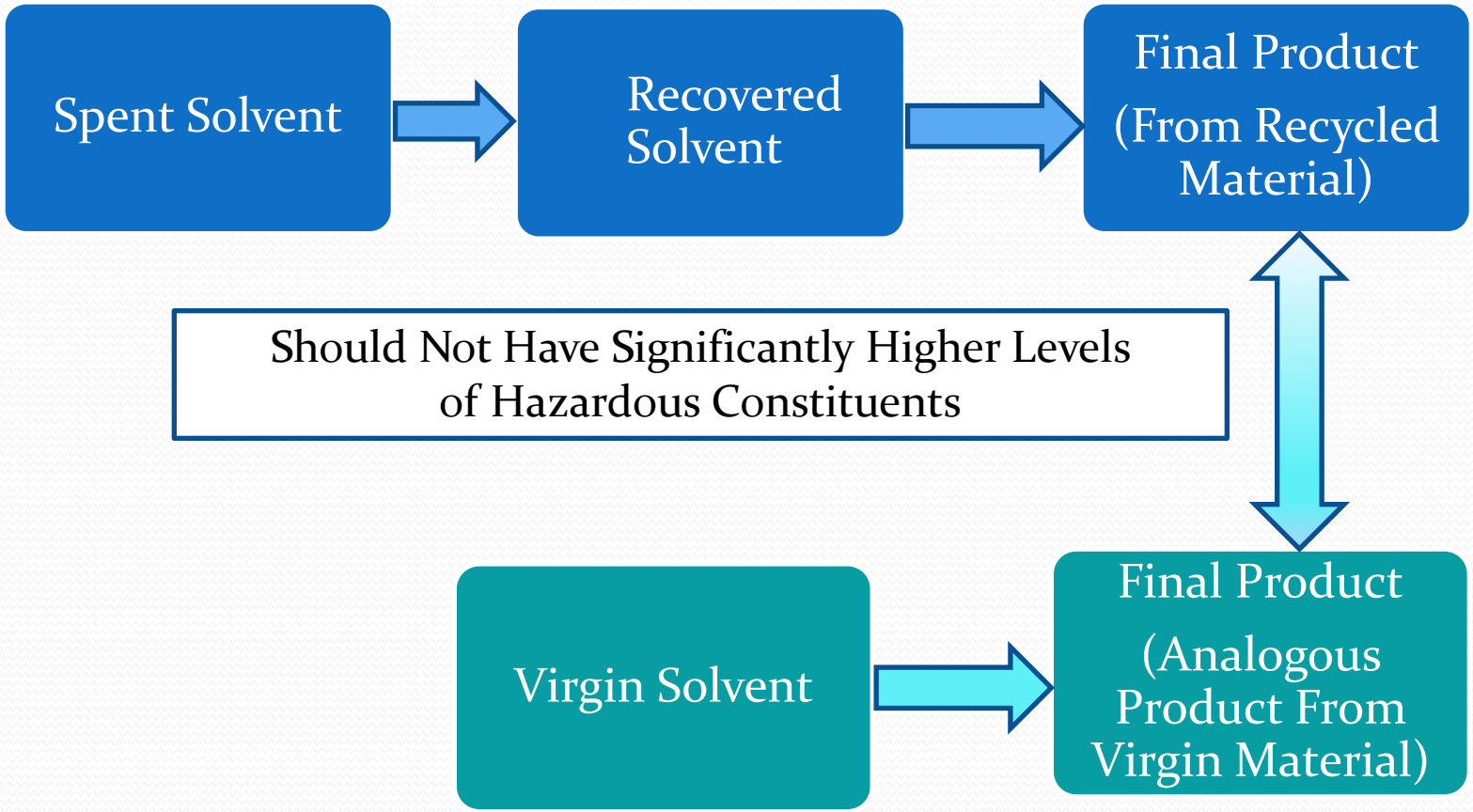
EXAMPLE 1

A manufacturer uses a recycled hazardous secondary solvent to replace a virgin solvent in the production process. The manufacturer would consider this factor by comparing the levels of hazardous constituents in the final product with the levels when it was made with the virgin solvent and whether the product has any different hazardous characteristics.

This can be done by:

- Using generator knowledge of the manufacturing process
- Using widely-recognized specifications that address the hazardous constituents
- Testing

Comparing Product of Recycling to An Analogous Product



Factor 4: What does it mean for a product of recycling to be analogous to a legitimate product or intermediate (continued)?

EXAMPLE 2

A secondary metal smelter produces metal commodities. Because there is no analogous product made from non-scrap metal, and the metal produced by the smelter meets widely-recognized standards, Factor 4 is considered to be met.

EXAMPLE 3

A foundry uses sand molds and reuses return sand in the primary production process to produce new molds (i.e., the sand loop). As long as the sand is handled as a valuable material for the manufacture of castings, the sand stored indoors that is reused in the sand loop is considered part of the ongoing production process and not a solid waste. Factor 4 is considered to be met because there is no outside exposure to the toxics in the sand.

Factor 4: What does it mean for a product of recycling to be analogous to a legitimate product (continued)?

In some rare cases, a product from recycling could have a higher level of hazardous constituents than an analogous product, but still be considered a legitimate product.

- For example, the recycling may still be legitimate due to the lack of exposure from toxics in the products, or the lack of the bioavailability of toxics in the product (e.g., the hazardous secondary material is recycled in a closed-loop setting back into a production process).

In those cases, the generator can determine its recycling is still legitimate (assuming it meets the other three factors).

There is also a clear statement in the regulations that a hazardous secondary material that is sham recycled is discarded and thus, a solid waste. (40 CFR 261.2(g))

Legitimate Recycling Cases Study

For the case study provided, consider each of the four factors:

(1) Useful contribution?

(2) Valuable product?

(3) Managed as a valuable commodity?

(4) Analogous product?

Legitimate Recycling Case Study

- A lead processor received materials with high lead concentrations that are processed on an outdoor concrete slab. The processed lead-containing materials are then mixed with other metal-bearing wastes, and the resulting mixture is tested for lead content and then shipped in hoppers via rail for lead production. The produced lead is sold for lead-acid battery manufacture.

- What questions would you need to answer to determine if this is legitimate recycling?

Documentation of Claims that HSM is not a Solid Waste

- 40 CFR 261.2(f): respondents in actions to enforce RCRA regulations who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must be prepared to demonstrate they meet the terms of the exclusion or exemption
- Documentation can include contracts, such as showing that a second person uses the material as an ingredient in a production process
- 261.2(f) applies to all HSM being recycled and includes demonstrating that the recycling is legitimate

State Authorization of DSW Rules

- The 2015 DSW final rule, as amended by the 2018 vacatur response, includes provisions that are less stringent than the base RCRA program, and provisions that are more stringent.
- States must adopt and become authorized for the more stringent provisions. These include:
  - Definition of legitimate recycling. See 40 CFR 260.43
  - Definition of "contained". See 40 CFR 260.10
  - Prohibition of sham recycling. See 40 CFR 261.2(b)(4) and 261.2(g)
  - Revised definition of speculative accumulation. See 40 CFR 261.1(c)(8)

State Authorization of DSW Rules (cont'd)

- In addition, states that have the variance and non-waste determination provisions found in 40 CFR 260.31-260.34 must adopt and become authorized for the revisions made to these provision in 2015, including:
  - Provision for notifying, and, if requested, re-applying if circumstances change from original petition. See 40 CFR 260.33(c)
  - Revised criteria for partial reclamation variances. See 40 CFR 260.31(c)
  - Ten year fixed-term. See 40 CFR 260.33(d)
  - Notification every two years using the RCRA site ID form 8700-12 . See 40 CFR 260.33(e)

State Authorization of DSW Rules (cont'd)

- States are not required to adopt the latest DSW exclusions in 40 CFR 261.4(a)(23), (24)-(25), and (27)
- States that have adopted the 2015 DSW rule are not required to revise their rules to reflect the 2018 vacatur response.
- A map showing where the DSW rule is in effect (including which version of the transfer-based exclusion) can be found at:

  https://www.epa.gov/hw/where-2018-definition-solid-waste-rule-effect

DSW Resources

- Hazardous waste identification webpage:

https://www.epa.gov/hw/criteria-definition-solid-waste-and-solid-and-hazardous-waste-exclusions#solidwaste

- 2018 DSW rulemaking webpage:

https://www.epa.gov/hw/final-rule-2018-definition-solid-waste-dsw-response-court-vacatur

- Implementation Guide for the 261.4(a)(24) DSW exclusion:

https://www.epa.gov/system/files/documents/2022-08/Implementation_Guide_for_the_DSW_Exclusion_at_40_CFR_261_4_a_24_Final_508.pdf

DSW/Legitimacy Resources

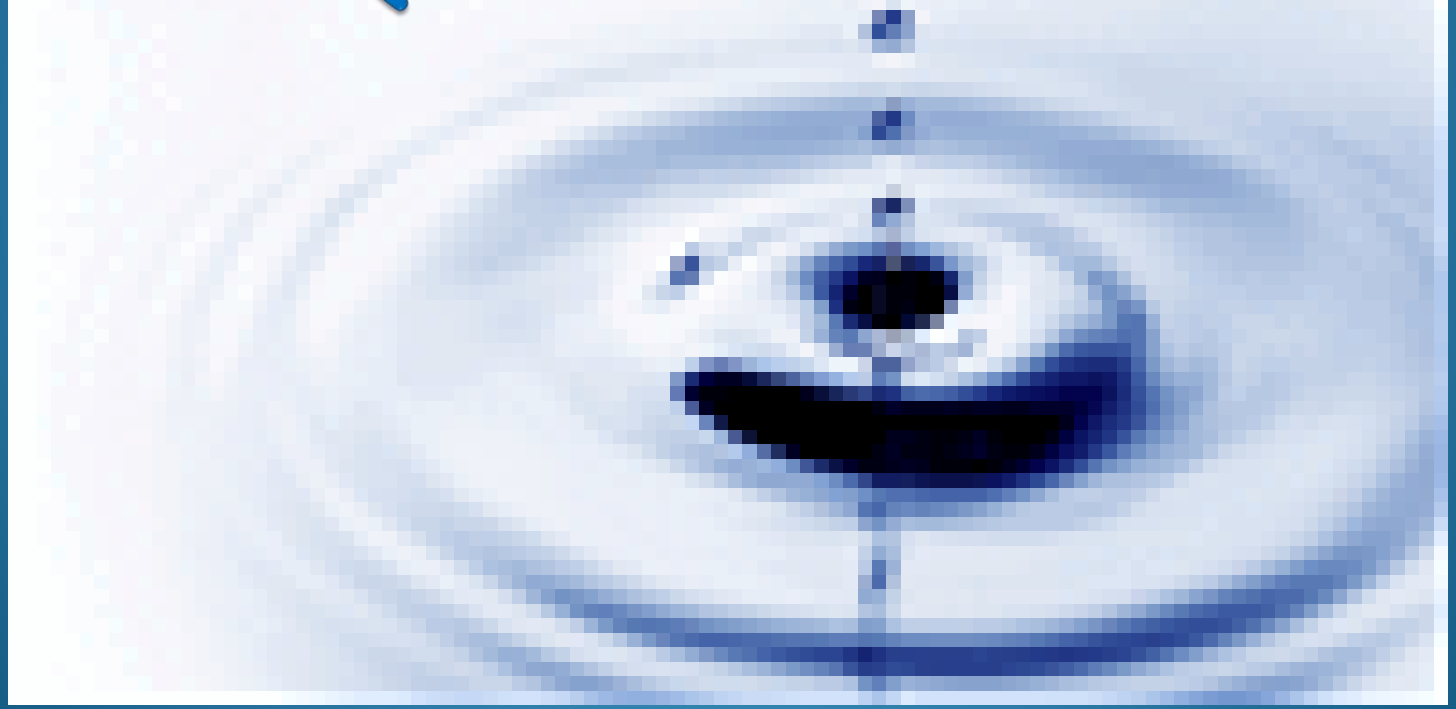
- DSW regulations: Section 261.2 provides the definition of solid waste for the purposes of hazardous waste regulations. § 261.2(g) contains the sham recycling prohibition. § 260.43 provides the legitimate recycling definition.
- Key guidance: April 26, 1989 memo on F006 recycling (aka "Lowrance Memo", RO 11426).
- Suggested Documentation of Legitimate Recycling Template: https://www.epa.gov/system/files/documents/2022-12/Legitimacy_Documentation_Template_Dec_2022.pdf
- Inspection Checklist Tool for Facilities Generating and Recycling Hazardous Secondary Materials: https://www.epa.gov/hw/inspection-checklist-tool-facilities-generating-and-recycling-hazardous-secondary-materials-2024

General RCRA Resources

- RCRA Online — An electronic database that indexes thousands of letters, memoranda, publications, and questions and answers issued by the Office of Resource Conservation and Recovery (ORCR). These documents include EPA interpretations of the RCRA regulations governing the management of solid and hazardous waste. RCRA Online allows users to locate documents through topical, full text, and advanced search functions. RCRA Online also allows users to view the actual text of the documents identified in a search.

- RCRAInfo — A national program management and inventory system about hazardous waste handlers. This system can be used to determine identification and location data for specific hazardous waste handlers, and to find a wide range of information on treatment, storage, and disposal facilities regarding permit/closure status, compliance with Federal and State regulations, and cleanup activities.

FINAL QUESTIONS?



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