

Hazardous Secondary Materials

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Goal

Provide a comprehensive overview of the hazardous secondary materials (HSM) regulations, including:

- Rule history and summary
- HSM and legitimacy requirements
- HSM shipping requirements
- Receiving DEQ concurrence on HSM and legitimacy

2017 Rule Changes

- Eleventh amendment to Part 111 rules
- Became effective April 5, 2017
- Adopted EPA 2015 definition of solid waste
- Excludes certain materials from being a waste when recycled
- Must meet legitimacy criteria (Rule 232)
- Must be recycled as specified in Rules 204(1)(aa), (bb), or (cc)

Hazardous Secondary Material Legitimate Recycling (Rule 232)

- Recycling of HSM for purposes of exclusion from being a waste must be “legitimate”
- To be “legitimate” must meet legitimacy provisions in Rule 232
- If the criteria are not met, the recycling is not legitimate, and the material is a waste subject to waste regulation!

Hazardous Secondary Material Legitimacy Criteria

1. HSM recycling must provide a useful contribution to the recycling process or to a product or intermediate of the recycling process by:
 - a. Contributing as a valuable ingredient to a product or intermediate, or
 - b. Replacing a catalyst or carrier in the recycling process, or
 - c. Being the source of a valuable constituent recovered in the recycling process, or
 - d. It is recovered or regenerated by the recycling process, or
 - e. It is used as an effective substitute for a commercial product
2. The recycling of HSM must produce a valuable product or intermediate by:
 - a. Being sold to a third-party OR
 - b. Being used by the recycler or generator as an effective substitute for a commercial product or ingredient in the industrial process
3. The generator and recycler manage the HSM as a valuable commodity
4. The product of the recycling process must be comparable to a legitimate product or intermediate by meeting one of the following:
 - i. The recycling product is comparable to a legitimate product if it:
 - a. Not exhibiting a hazardous characteristic per Rule 212 (e.g. (D001-D004 ignitable, corrosive, reactive, and toxic) AND
 - b. Not contain a hazardous constituent, found in Appendix VIII of 40 CFR 261 (LDRs), except at levels at or below those in comparable products or at levels widely recognized in commodity standards and specifications (i.e. U019 benzene, etc.)
 - ii. If there is no analogous product, the product must:
 - a. be a commodity that meets widely recognized commodity standards and specifications OR
 - b. be returned to the original process or processes from which it was generated

- iii. If the product has levels of hazardous constituents that are not comparable to a legitimate product or intermediate, it is legitimate if the following requirements are met:
 - a. The recycler conducts an assessment showing why the recycling is legitimate AND
 - b. The recycling is demonstrated to be legitimate due to lack of exposure to toxics in the product, lack of bioavailability of toxics in the product, or other considerations showing the product does not contain levels of hazardous constituents that are a risk AND
 - c. The person performing the recycling prepares documentation demonstrating why the recycling is still legitimate that include a certificate statement saying that the recycling is legitimate, and it is maintained on site for at least 3 years after the recycling operation has ceased.

Hazardous Secondary Material Speculative Accumulation

- HSM cannot be speculatively accumulated meaning:
 - at least 75 percent of the material (either by volume or weight) must be recycled or transferred to another site meeting the HSM exclusion for recycling within the calendar year beginning January 1.
 - HSM receiving facilities must keep inventory records to verify recycled materials are not speculatively accumulated, to verify exclusion from the definition of waste under Part 111.
 - Part 111 "Speculative Accumulation" definition, Rule 107(cc)

Hazardous Secondary Materials

- HSM is a liquid exempted from Part 111 and subject to Part 121, therefore:
 - All generators, transporters and designated facilities must meet Part 121 shipping document requirements
 - Receiving facilities must notify, report annually by April 30 the HSMs received in prior calendar year, and meet other designated facility requirements in Part 121 (have emergency response plan, training, etc.)
 - Use Act 138 permitted and registered liquid industrial by-products transporters

Hazardous Secondary Materials - Options for Reclamation/Remanufacturing (Rule 202(6))

- Hazardous secondary materials legitimately recycled can be transferred for reclamation under Rule 202(6)(f) (i.e. "director may determine" or "case by case" means, requires DEQ approval) if it meets the:
 - Generator control transfer provisions in Rule 204(1)(aa)
 - Verified reclamation facility transfer provisions in Rule 204(1)(bb) OR
 - Transferred to another person for remanufacturing provisions in Rule 204(1)(cc)

Hazardous Secondary Materials - Generator Control – Rule 204 (1)(aa)

- HSM is reclaimed at the generating facility
- HSM is reclaimed at a different facility but both the generating facility and reclaiming facility are controlled by the same person, and a certification meeting Rule 204(1)(aa)(i)(C) is submitted to DEQ
- HSM is reclaimed at a different facility that is controlled by the generator and a certification meeting Rule 204(1)(aa)(i)(B) is submitted to the DEQ
- HSM is generated pursuant to a written contract between a tolling contractor and tolling manufacturer and a certification meeting Rule 204(1)(aa)(i)(D) is submitted to DEQ
- HSM must be contained (Rule 102(r))
- HSM cannot be speculatively accumulated (Rule 107(cc))
- Notification of HSM activity (40 CFR 260.42)
- HSM cannot otherwise be subject to material-specific management conditions and cannot be a lead-acid battery
- Each HSM handler must maintain documentation showing legitimacy criteria are met (Rule 232)
- Emergency preparedness and response planning (Rule 234)

Contained Defined for Hazardous Secondary Materials

- Contained" for HSM means a unit, including land-based units, which are:

- in good condition, designed to prevent releases, and has no leaks or release other than those specifically authorized through a permit
- properly labeled or otherwise has a system, such as a log, to immediately identify the HSM in the unit
- compatible with other HSM placed in the unit and the materials used to construct the unit

Hazardous Secondary Materials - Verified Reclamation Facility – Rule 204 (1)(bb)

- HSM that is generated and then transferred to a verified reclamation facility for the purpose of reclamation if ALL of the following requirements are met:
 - The HSM must not be speculatively accumulated (Rule 107(cc));
 - The HSM isn't handled by anyone other than the generator, transporter, intermediate, or reclaimer, and not stored more than 10 days while in transport;
 - The HSM must not otherwise be subject to material-specific management conditions and not be a lead-acid battery;
 - Each HSM handler must maintain documentation showing legitimacy criteria are met (Rule 232);
 - HSM generator must arrange for the HSM transport;
 - The HSM generator meets all of the following conditions:
 - The HSM is contained;
 - The generator will arrange for HSM transport to a verified reclamation facility;
 - Records of HSM off-site shipments shall be maintained for at least 3 years;
 - The HSM generator shall maintain confirmation of receipt of each shipment for at least 3 years; and
 - Emergency preparedness per R299.9234
 - Reclaimers of HSM excluded from regulation under Rule 204 (1) (bb) or intermediate facilities meet all of the following:
 - HSM generator must maintain off-site shipment records and verification of reclaimer receipt on-site for at least 3 years;
 - The intermediate must send the HSM to the reclaimer selected by the generator;
 - Reclaimer must send confirmation of receipt of HSN to the generator;
 - Reclaimer and intermediate facility must manage the HSM in a manner that is at least as protective as that employed for raw material and that is contained;
 - Any residual generated from the reclamation process shall be managed to be at least as protective of human health and environment;
 - Reclaimer and intermediate must have financial assurance that meets Part 7 rules;
 - Reclaimer and intermediate facility must have a variance or operating license issued pursuant to these rules that addresses authorizes reclaiming and storing the HSM.
- Notification is required for all HSM handlers under 40 CFR 260.42

Hazardous Secondary Materials - Transferred for Remanufacturing Rule 204(1)(cc)

- HSM that is generated and then transferred to another person for the purpose of remanufacturing if all of the following requirements are met:
 - HSM must be one or more of the spent solvents listed in Rule 204(1)(cc)(i)(A-Q)
 - HSM must have originated from using 1 or more of the solvents listed in Rule 204(1)(cc)(i)(A-Q) in a commercial grade for reacting, extracting, purifying, or blending chemicals, or for rinsing out the process lines associated with these functions
 - HSM materials must have been used in pharmaceutical, organic chemical, plastics and resins, or paints and coatings manufacturing;
 - HSM materials must be reused in pharmaceutical, organic chemical, plastics and resins, or paints and coatings manufacturing;
 - After the HSM are remanufactured, the solvents cannot be used for cleaning or degreasing
 - The HSM generator must send the HSM solvents only to a remanufacturer who services the pharmaceutical, organic chemical, plastics and resins, or paints and coatings sectors
 - Once remanufactured, the solvent can only be used for reacting, extracting, purifying, or blending chemicals, or for rinsing out the process lines associate with these activities at the sectors listed

above

- Both the HSM generator and remanufacturer shall do all of the following:
 - Notify EPA or DEQ every 2 years per 40 CFR 260.42;
 - Develop and maintain an up-to-date re-manufacturing plan;
 - Maintain records of shipment and confirmations of receipt for at least 3 years;
 - Store HSM solvents in approved, properly labeled containers;
 - Certify the equipment used meets all Clean Air Act requirements;
 - Meet the requirements prohibiting speculative accumulations

Hazardous Secondary Materials - Supporting Information

- **Hazardous Secondary Materials Guidance** - www.michigan.gov/documents/deq/deq-oea-owmrpGuidance-HSM_576019_7.pdf

Hazardous Secondary Materials - Shipping Document Basics

- As of 3/16/16 law change, uniform manifests no longer required for shipping liquid industrial by-product per Part 121.
- Shipping document is required instead - can be written or electronic
- May be a log, invoice, bill of lading, or uniform hazardous waste manifest
- Must be readable, readily accessible, and have required information
- May be written or electronic
- Must meet U.S. DOT requirements
- Required information:
 - Name and address of the generator
 - Name of the transporter
 - Type and volume of by-product shipped
 - Date the by-product was shipped
 - Name, address and Site ID number of the designated facility

Hazardous Secondary Materials - Shipping Document Certification

- Generator or generator representative signs/certifies shipping document stating:
 - the shipping document fully and accurately describes the shipment
 - the shipment is in proper condition for transport
 - the shipping document information is factual
- Transporter signs/certifies shipping document stating by-product listed on shipping document:
 - was received
 - will be delivered to the designated facility identified on the shipping document
- Generator retains copy of shipping documents with generator and transporter signature
- Transporter obtains copy of shipping document with both signatures which accompanies the shipment during transport
- Designated facility – No certification or shipping document distribution is required
- Designated facility must:
 - provide confirmation of receipt to the generator or generator representative and
 - only accept delivery where accompanied by shipping document listing the designated facility
- Designated facility confirmation may be written or electronic (documented phone call, email, receipt, shipping document or manifest copy)

Hazardous Secondary Materials - Receiving DEQ concurrence on HSM and Legitimacy

- DEQ is currently revising the Site Identification and HSM Addendum forms for use to request DEQ concurrence with regards to compliance with Rule 204 (1) (aa), (bb), and/or (cc)
- Provide short submittal which speaks directly to the HSM exclusion requested
- Speak to a DEQ WMRPD staff member with any specific questions.