



Hazardous Secondary Materials

Air and Waste Management Association

March 20, 2019

Grand Rapids, Michigan

Goal of today's presentation:

Provide an overview of the hazardous secondary materials (HSM) regulations:

- **2017 rule changes**
- **HSM legitimacy requirements**
- **Receiving DEQ approval**

Hazardous Secondary Materials

Hazardous secondary material rule changes:

- Excludes certain materials from being a waste when recycled
- Adopted by EPA 2015 definition of solid waste (DSW)
- Adopted into Part 111, effective April 5, 2017
- Established legitimate recycling criteria



Hazardous Secondary Materials

HSM remains subject to Part 121

- **Part 121 shipping document requirements**
- **Report to DEQ by April 30 of each year**
- **Emergency response plan, training, etc.**
- **Act 138 credentialed transporters**



Hazardous Secondary Materials

Defined (Rule 104)



A secondary material is a “spent material, by-product, or sludge that, when discarded, would be identified as hazardous waste under Part 2 (Identification and Listing of Hazardous Waste) of these rules”... BUT is excluded when managed to meet the exclusions provided under Part 2 of the rules.

Hazardous Secondary Materials

Part 2 Definition of Waste (Rule 202(6))



Director may determine on a case by case basis that the following are not wastes:

- Hazardous secondary materials reclaimed in a continuous industrial process
- Hazardous secondary materials indistinguishable from a product or intermediate
- Hazardous secondary materials that are transferred for reclamation under Rule 204(1)(aa) and are managed at a verified reclamation facility or an intermediate facility...

Hazardous Secondary Materials

Part 2 Definition of Waste (Rule 202(6))



Hazardous secondary materials transferred for reclamation under Rule 202(6)(f) include those:

- **Under generator control (Rule 204(1)(aa))**
- **Transferred to a verified reclamation facility (Rule 204(1)(bb))**
- **Transferred to another person for the purpose of remanufacturing (Rule 204(1)(cc))**

Hazardous Secondary Materials

Under Generator Control (Rule 204(1)(aa))



A hazardous secondary material (HSM) that is generated and legitimately reclaimed within the U.S. *under the control of the generator* is excluded from regulation as a hazardous waste if certain requirements provided under the Rule 204(1)(aa) are met.

Hazardous Secondary Materials

Under Generator Control (Rule 204(1)(aa))



HSM “under the generator control” is generated and reclaimed in accordance with ANY of the following conditions:

- ✓ 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

Hazardous Secondary Materials Under Generator Control (Rule 204(1)(aa))



HSM exclusion *under the generator control* also requires:

- The HSM be contained (Rule 102(r))
- The HSM not be speculatively accumulated (Rule 107(cc))
- Filing of notification of HSM activity (40 CFR 260.42)
- The HSM is not otherwise subject to material-specific management conditions and not be a lead-acid battery
- Maintenance of legitimacy documentation at each HSM handler (Rule 232)
- Emergency preparedness and response planning (Rule 234)

Hazardous Secondary Materials

Verified Reclamation Facility(Rule 204(1)(bb))



A hazardous secondary material (HSM) that is generated and legitimately reclaimed within the U.S. *at a verified reclamation facility* is excluded from regulation as a hazardous waste if certain requirements provided under the Rule 204(1)(bb) are met.

Hazardous Secondary Materials

Verified Reclamation Facility(Rule 204(1)(bb))



HSM exclusion for materials generated and transferred to a “verified reclamation facility” requires:

- The HSM be contained (Rule 102(r))
- The HSM not be speculatively accumulated (Rule 107(cc))
- The HSM is not otherwise subject to material-specific management conditions and not be a lead-acid battery
- Maintenance of legitimacy documentation at each HSM handler (Rule 232)

Hazardous Secondary Materials

Verified Reclamation Facility(Rule 204(1)(bb))



HSM exclusion for materials generated and transferred to a “verified reclamation facility” requires:

- HSM cannot be handled by any other person or facility other than the HSM generator, transporter, intermediate facility, or reclaimer, and while in transport, the HSM cannot be stored for more than 10 days at a transfer facility and must meet US DOT regulations
- HSM generator must arrange for the HSM transport

Hazardous Secondary Materials

Verified Reclamation Facility(Rule 204(1)(bb))



HSM exclusion for materials generated and transferred to a “verified reclamation facility” requires:

- HSM generator must maintain off-site shipment records and verification of reclaimer receipt on-site for at least 3 years
- Emergency preparedness and response planning must be in place for all HSM handlers (generator, reclaimer and intermediate facilities (Rule 234)
- HSM reclaimer and any intermediate facilities must maintain records of HSM shipments for at least 3 years

Hazardous Secondary Materials

Verified Reclamation Facility(Rule 204(1)(bb))



HSM exclusion for materials generated and transferred to a “verified reclamation facility” requires:

- Intermediate facility must send HSM to the reclaimer designated by generator
- Reclaimer must send confirmation of receipt of HSM 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

Hazardous Secondary Materials

Verified Reclamation Facility(Rule 204(1)(bb))



HSM exclusion for materials generated and transferred to a “verified reclamation facility” requires:

- Reclaimer and intermediate shall have financial assurance as per Part 7 of the rules
- Reclaimer and intermediate facility have been granted a variance or operating license issued pursuant to these rules that addresses the HSM.

Hazardous Secondary Materials Transferred to Another for the Purpose of Remanufacturing (Rule 204(1)(cc))



A hazardous secondary material (HSM) that is generated and legitimately reclaimed within the U.S. by being *transferred to another person for the purpose of remanufacturing* is excluded from regulation as a hazardous waste if certain requirements provided under the Rule 204(1)(bb) are met.

Hazardous Secondary Materials Transferred to Another for the Purpose of Remanufacturing (Rule 204(1)(cc))



HSM exclusion for materials generated and transferred another person for the purpose of remanufacturing requires:

- Notification is required for all HSM handlers under 40 CFR 260.42
- HSM must be one or more of the spent solvents listed in Rule 204(1)(cc)(i)(A-R)
- HSM must have originated from using 1 or more of the solvents listed in Rule 204(1)(cc)(i)(A-R) in a commercial grade for reacting, extracting, purifying, or blending chemicals, or for rinsing out the process lines associated with these functions

Hazardous Secondary Materials Transferred to Another for the Purpose of Remanufacturing (Rule 204(1)(cc))



HSM exclusion for materials generated and transferred another person for the purpose of remanufacturing requires:

- HSM materials must have been used 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**

Hazardous Secondary Materials Transferred to Another for the Purpose of Remanufacturing (Rule 204(1)(cc))



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

Hazardous Secondary Materials Transferred to Another for the Purpose of Remanufacturing (Rule 204(1)(cc))



HSM exclusion for materials generated and transferred to another person for the purpose of remanufacturing requires both the HSM generator and remanufacturer to:

- 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 Material

Legitimate Recycling (Rule 232)



The recycling of HSM for purposes of exclusion or exemption for regulation as a hazardous waste shall be legitimate.

Legitimate recycling must meet the legitimacy provisions established in Rule 232.

If the criteria are not met, it is not legitimate recycling and the material is a waste subject to waste regulation!

Hazardous Secondary Material

Legitimate Recycling (Rule 232)



- a. The recycling of HSM must provide a useful contribution to the recycling process or to a product or intermediate of the recycling process by meeting one of the following:
- It contributes as a valuable ingredient to a product or intermediate
 - It replaces a catalyst or carrier in the recycling process
 - It is the source of a valuable constituent recovered in the recycling process
 - It is recovered or regenerated by the recycling process
 - It is used as an effective substitute for a commercial product

Hazardous Secondary Material

Legitimate Recycling (Rule 232)



- b. The recycling of HSM must produce a valuable product or intermediate by:
 - Being sold to a third party OR
 - Being used by the recycler or generator as an effective substitute for a commercial product or ingredient in the industrial process
- c. The generator and recycler manages the HSM as a valuable commodity

Hazardous Secondary Material

Legitimate Recycling (Rule 232)



- d. The product of the recycling process must be comparable to a legitimate product or intermediate by meeting one of the following:
 - i. If there is an analogous product or intermediate, the product of the recycling process is comparable to a legitimate product if both of the following are met:
 - A. Not exhibiting a hazardous characteristic per Rule 212 AND
 - B. Nor containing a hazardous constituent (in Appendix VIII of 40 CFR 261) except at levels at or below those in comparable products or at levels widely recognized in commodity standards and specifications

Hazardous Secondary Material

Legitimate Recycling (Rule 232)



- ii. If there is no analogous product, the product must meet one of the following:
 - 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

Hazardous Secondary Material

Legitimate Recycling (Rule 232)



- iii. If the product has levels of hazardous constituents that are not comparable to a legitimate product or intermediate, the recycling 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 because there is a lack of exposure from toxics in the product, lack of bioavailability of the toxics in the product, or other relevant considerations showing the product does not contain levels of hazardous constituents that are a risk AND

Hazardous Secondary Material

Legitimate Recycling (Rule 232)



If the product has levels of hazardous constituents that are not comparable to a legitimate product or intermediate, the recycling is legitimate if the following requirements are met continued...

- 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:

- At least 75 percent of the material (by volume or weight) must be recycled, or transferred to another site meeting the HSM exclusion for recycling within the calendar year
- Must keep inventory records to verify recycled materials are not speculatively accumulated
- See Part 111 “Speculative Accumulation” definition, Rule 107(cc)

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**



Notification of HSM Activity

- Determine if one of the above-listed exclusions apply for your facility.
- If so, submit a request that addresses each applicable component of that exclusion.
- Included with the request must be a summary as to the legitimacy of the exclusion. Each applicable component of Rule 232 must be addressed.
- Include with the submittal a copy of DEQ form EQP 5150 Site Identification Form with associated addendum.
- DEQ will respond in writing with approval or list of deficiencies that should be corrected.





SITE IDENTIFICATION FORM

Required under authority of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.
Failure to submit this information may result in civil or criminal penalties.

1. Reason for Submittal (Select only one)

<input type="checkbox"/>	Obtaining an initial United States Environmental Protection Agency (EPA) Identification (ID) number, as a new site or new owner, for an on-going regulated activity that will continue for a period of time. Fax this form, with a copy of the receipt from paying the \$50 fee on-line using a MasterCard, VISA, or Discover Card at (https://www.thepayplace.com/mi/deq/siteid), to fax number 517-335-0564; or mail the form with a check made payable to the State of Michigan to: Michigan Department of Environmental Quality (MDEQ), Cashier's Office – HWUC, P.O. Box 30657, Lansing, Michigan 48909-7741.
<input type="checkbox"/>	Submitting a subsequent notification to change, update, or verify site information for an existing owner of a site with a previously issued Site ID number. Mail to MDEQ, Waste Management and Radiological Protection Division (WMRPD), Management and Tracking Unit, P.O. Box 30241, Lansing, Michigan 48909-7741.
<input type="checkbox"/>	Site was a TSD facility and/or generator of less than 1,000 kilograms (kg) of hazardous waste, less than 1 kg of acute hazardous waste, or .100 kg of acute hazardous waste spill cleanup in one or more months of the reporting year.
<input type="checkbox"/>	Notifying that regulated activity is no longer occurring at this site (end date _____). NO LONGER GENERATING WASTE
<input type="checkbox"/>	Obtaining or updating an EPA ID number for conducting Electronic Manifest Broker activities.
<input type="checkbox"/>	Submitting a new or revised Part A Form.
<input type="checkbox"/>	Submitting as a component of the Hazardous Waste Biennial Report.

2. Site EPA ID Number

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3. Site Legal Name

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4. Site Specific Name

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5. Site Location Address

Street Address		
City, Town, or Village		County
State	Country	Zip Code

6. Site Mailing Address ☐ Same as Location Address

Street Address		
City, Town, or Village		County
State	Country	Zip Code

7. Site Land Type (check one)

Private <input type="checkbox"/>	County <input type="checkbox"/>	District <input type="checkbox"/>	Federal <input type="checkbox"/>	Tribal <input type="checkbox"/>	Municipal <input type="checkbox"/>	State <input type="checkbox"/>	Other <input type="checkbox"/>
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EQP 5150 Form



Site ID # _____

**ADDENDUM TO THE SITE IDENTIFICATION FORM
NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL ACTIVITY**

ONLY FILL OUT THIS FORM IF:

You are located in a State that allows you to manage excluded hazardous secondary material (HSM) under rule R 299.9204 (1)(aa), (bb) or (cc) of Part 111, (or federal equivalent);

AND

- You are or will be managing excluded HSM in compliance with rules R 299.9202 (6)(a – f), or R 299.9204 (1)(aa – cc) (or federal equivalent), or have stopped managing excluded HSM in compliance with the exclusion(s) and do not expect to manage any amount of excluded HSM under the exclusion(s) for at least one year. Do not include any information regarding your hazardous waste activities in this section. Note: if your facility was granted a solid waste variance under rules R 299.9202 (6)(a – f) prior to July 13, 2015, your management of HSM under rules R 299.9202 (6)(a – f) is grandfathered under the previous regulations and you are not required to notify for the HWM management activity excluded under rules R 299.9202 (6)(a – f).

Reason for Notification (include dates where requested)

Facility will begin managing excluded HSM as of _____. (mm/dd/yyyy)

Facility is still managing excluded HSM/re-notifying, as required, by March 1 of each even-numbered year.

Facility has stopped managing excluded HSM as of _____. (mm/dd/yyyy) and is notifying as required.

Description of Excluded HSM Activity: Please list the appropriate codes (see Code List section of the instructions) and quantities, in short tons, to describe your excluded HSM activity ONLY (do not include any information regarding your hazardous wastes). Use additional pages if more space is needed.

Facility Code	Waste Codes for HSM	Estimate Short Tons of Excluded HSM to be Managed Annually	Actual Short Tons Of Excluded HSM That Was Managed During The Most Recent Odd-numbered Year	Land-based Unit Code

EQP 5150 Form Addendum for Hazardous Secondary Materials





Thank you for protecting Michigan's environment!