

## Waste Characterization Record

To meet the waste characterization recordkeeping requirements of Rule 307 (MAC R 299.9307), consider creating a record that details your answers to the waste characterization questions provided below. This detail would ensure thorough documentation of your determination and would be in addition to the following records that should already be assembled and available at the site of generation for each waste stream requiring review:

- the waste type
- a narrative description of the waste
- the source of waste
- any test results obtained from sampling and analyzing the waste
- a description of the sampling procedure used
- details on how the sample was determined to be representative of the waste stream
- a copy of Safety Data Sheets (SDS) or other reference materials relied upon for making the waste determination, including calculations used to evaluate subpart BB and CC applicability (to determine the ppmv volatile organic compound content of the waste)

### Waste Characterization

#### Basic Steps

1. Is waste listed? Review lists of waste types & codes in rules.
2. Is waste characteristic? Analytic test or by knowledge (MSDS, knowledge of process, etc.).
3. Does an exclusion or exemption apply?
4. Do other regulations apply? (liquid industrial or solid waste, etc.).
5. Create & maintain records of characterization for at least 3 years from the date waste was last shipped offsite.
6. Re-characterize if there is a change in process or materials.



## Waste Characterization Questions

The questions below do not address radioactive waste, infectious or pathogenic medical waste, or Toxic Substance Control Act applicability. Consult with a specialist on these topics if you have a waste that may be subject to these regulations. To locate assistance on these topics, contact the Environmental Assistance Center at 1-800-662-9278 or [deg-assist@michigan.gov](mailto:deg-assist@michigan.gov). When reviewing each question, advance to the next question if you answer NO.

### Listed Hazardous Waste Review

1. Is this an unused raw material chemical product containing a sole active ingredient?  
If Yes: Is there a SDS available?  
If Yes: Is material a commercial chemical product listed in Part 111 Table 205a, 205b, or 205c (**P or U Listed**)?  
If Yes = Waste is a listed hazardous waste, advance to listed waste exclusion review.
2. Does the waste contain spent solvents or is it a wastewater treatment waste not discharged directly to the wastewater treatment plant pursuant to a permit issued by the treatment authority (**F Listed**)?  
If Yes: Does the spent solvent or process generating the waste make the waste a hazardous waste, by definition because it is listed in Part 111, Table 203a?  
If Yes = Waste is a listed hazardous waste, advance to listed waste exclusion review.
3. Does the process generating the waste make the waste a hazardous waste, by definition because the process waste is listed in Part 111 Table 204a (**K Listed**)?  
If Yes = Waste is a listed hazardous waste, advance to listed waste exclusion review.

### Listed Hazardous Waste Exclusion Review

Do any Part 111 exclusions or exemptions apply?

If Yes: Specify the exclusion found in Rule 202 (waste), Rule 203 (hazardous waste) 204 (exclusion), Rule 205 (CESQG), Rule 206 (recyclable material), Rule 228 (universal waste), etc. and include any relevant documentation substantiating the exclusion applicability in your waste characterization record, then advance to question 4 to determine if waste exhibits any characteristics that make it a hazardous waste.

If No – Waste remains a listed hazardous waste that must be managed using the listed hazardous waste code(s). Continue to step 4 if desiring to identify the hazardous waste characteristics that apply.

## Characteristic Hazardous Waste Review

4. Does the waste exhibit a characteristic that makes it a characteristic hazardous waste? Review each characteristic:
- ✓ **Ignitable** - Review whether the waste exhibits a flashpoint  $\leq 140$  F using the Penske Martin closed cup test (**D001**).
  - ✓ **Toxic** - Are there constituents on the SDS for the materials used found in Part 111, Table 201a?  
If Yes: Presume the waste exceeds the limit(s) in table 201a and manage the waste as a characteristic hazardous waste for the relevant constituent(s) and waste code(s) or sample and analyze the waste using the Toxicity Characteristic Leaching Procedure or totals test using the 20X rule to determine whether it meets or exceeds the TCLP extract concentration in Table 201a. If it meets or exceeds the limit, the waste is a characteristic hazardous waste for the relevant waste codes (**D004 through D043**).
  - ✓ **Corrosive** - Review whether the waste exhibits a pH  $\leq 2$  or  $\geq 12.5$  (**D002**).
  - ✓ **Reactive** - Review whether the waste is reactive and reacts violently at standard atmospheric conditions or meets any U.S. DOT reactive class standards.  
If Yes: Waste is a characteristic hazardous waste, be sure to use all the applicable hazardous waste codes when managing the waste (**D003**).

Ensure that the product manufacturer has listed all the hazardous constituents on the SDS and not just those relevant to occupational exposure when characterizing waste.

## Characteristic Hazardous Waste Exclusion Review

Do any Part 111 exclusions or exemptions apply?

If Yes: Specify the exclusion found in Rule 202 (waste), Rule 203 (hazardous waste), Rule 204 (exclusion), Rule 205 (CESQG), Rule 206 (recyclable material), Rule 228 (universal waste), etc. and include any relevant documentation substantiating the exclusion applicability in your waste characterization record, then advance to question 5 to determine what waste regulations apply to the waste.

## Liquid Industrial Waste Review

5. Does the waste pass through the paint filter (liquids break through the filter) using Test Method 9095 under SW-846 (e.g. the waste "fails" the paint filter test and liquids break through the filter)?  
If Yes: Manage as a liquid industrial waste to meet the applicable Part 121 requirements.

## Liquid Industrial Waste Exclusion Review

Do any exclusions or exemptions apply?

If yes: Specify the exclusion found in the Section 12101(n) (the definition of liquid industrial waste) or Section 12102a (materials not specified as liquid industrial waste), then advance to question 6.

## Solid Waste Exclusion Review

6. Is the material specifically excluded from the definition of solid waste? See Part 115, Section 11506(1).
7. Is the material an inert material as defined in Part 115? See Part 115, Section 11504(2).
8. Is the material a recyclable material under Part 115? See Part 115, Section 11505(1) and (9), and 11506(6).
9. Has the material been granted an exclusion from Part 115? See Part 115, Rule 118a or former Part 115 Rules 113 through 118.
10. Is the material a beneficial use by-product as defined under Part 115? See Part 115, Sections 11502(8), 11551, 11551a, 11552, and 11553?
11. Is the material a source separated diverted waste under Part 115? See Part 115, Section 11503(6) and 11521b.
12. Is the material a low-hazard industrial waste under Part 115? See Section 11553(7).

If analytical data exists, consider whether the process generating the waste changed since the analysis was conducted. Also consider instituting measures to ensure environmental staff is informed by operations and purchasing staff in advance of making any changes. This will allow for the waste to be evaluated prior to waste origination and the waste implications to be considered before the change. Also consider supplementing the characterization records with periodic analysis, even if process and materials are not known to have changed. This will help confirm continued proper management of the waste and that a change was not overlooked.