

# Waste Characterization Examples

## Example 1

Unleaded gas contaminated with 10% water and solids removed from tanks in preparation for an underground storage tank removal

Point of generation is upon removal from the tank. This is when it is generated and first becomes subject to regulation.

### Listed Review

1. Is this an unused raw material? **YES**  
If Yes: Is there a SDS available? **YES**  
If Yes: Is material a commercial chemical product listed in Part 111 Table 205a, 205b, or 205c (P or U listed)? **NO**
2. Does the waste contain 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? **NO**
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)? **NO**

### Listed Waste Exclusion Review

- **SKIP BECAUSE WASTE IS NOT A LISTED HAZARDOUS WASTE**

### Characteristic Review

4. Does the waste exhibit a characteristic that makes it a characteristic hazardous waste?
  - ✓ Ignitable – **YES, WASTE IS D001**
  - ✓ Toxic – **YES for BENZENE (CAS NO. 71-43-2), WASTE IS D018**
  - ✓ Corrosive – **NO**
  - ✓ Reactive – **NO**

Prove via testing or knowledge that gas destined for disposal is not ignitable; otherwise manage it as a D001 and D018 hazardous waste.

### Characteristic Waste Exclusion Review

**YES** – Commercial chemical products (CCP) when recycled and not speculatively accumulated are not a waste pursuant to Rule 202 (1)(b)(iv). See speculative accumulation definition in Part 1 of Part 111 rules. At least 75% of the material must be recycled and re-refined then marketed or burned as fuel meeting combustor fuel specifications in an air permit or FDA fuel standards within 1 year.

- **RECYCLED FUEL IS NOT A WASTE** under Part 111, **ADVANCE TO STEP 5**

### Other Waste Regulations Review (Liquid Industrial Waste or Solid Waste)

5. Does the waste pass the paint filter test (e.g. is solid)?  
**NO: WASTE IS LIQUID INDUSTRIAL WASTE**, manage to meet the liquid industrial waste generator requirements.

See Part 121, Section 12102a for exclusions from being a liquid industrial waste when transmix or contaminated fuel is direct shipped for re-refining and use as a fuel.

### LDR Review

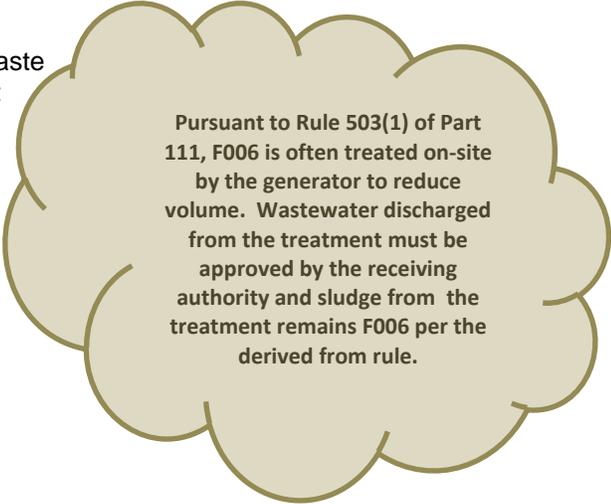
If gas was generated by a SQG or LQG and shipped for disposal, then the LDRs apply. An LDR notification is required and the UHCs is **BENZENE** per 40 CFR 268.40 which points to 40 CFR 268.48.

## Example 2

**Sludge with approximately 30% solids vacuumed from a floor drain adjacent to a non-cyanide chrome and zinc electroplating line**

### Listed Review

1. Is this an unused raw material? **NO**  
If Yes: Is there a SDS available? **NA**  
If Yes: Is material a commercial chemical product listed in Part 111 Table 205a, 205b, or 205c (P or U listed)? **NA**
2. Does the waste contain 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)?  
**YES, WASTE IS F006**
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)? **NO**



Pursuant to Rule 503(1) of Part 111, F006 is often treated on-site by the generator to reduce volume. Wastewater discharged from the treatment must be approved by the receiving authority and sludge from the treatment remains F006 per the derived from rule.

### Listed Waste Exclusion Review

Do any exclusions or exemptions apply? **NO**

### Characteristic Review

4. Does the waste exhibit a characteristic that makes it a characteristic hazardous waste?
  - ✓ Ignitable – **NO**
  - ✓ Toxic – **YES for CHROMIUM (CAS NO. 7440-47-3), WASTE IS D007**
  - ✓ Corrosive – **NO**
  - ✓ Reactive – **NO**

### Characteristic Waste Exclusion Review

**NO**

### Other Waste Regulations Review (Liquid Industrial Waste or Solid Waste)

5. Does the waste pass the paint filter test (e.g. is solid)?  
**NA, F006/D007 hazardous waste**

### LDR Implications

F-listed electroplating waste generated by SQGs and LQGs must submit a LDR notification, however there is no UHC as 40 CFR 268.40 provides the treatment limits for F006 hazardous constituents and 40 CFR 268.9 .

### Example 3

**Waste rags from a process using a solvent comprised of 7% acetone, 8% MEK, and 85% mineral spirits where the solvent is placed on the rag and used to wipe the manufactured items to remove lint and debris**

1. Is this an unused raw material? **NO**  
If Yes: Is there a SDS available? **NA**
2. Does the waste contain 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)? **YES**  
Does the solvent or process generating the waste make the waste a hazardous waste, by definition because it is listed in Part 111, Table 203a (F listed)? **NO**
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)? **NO**

#### Listed Waste Exclusion Review

Do any exclusions or exemptions apply?

SKIP because

- **WASTE IS NOT A LISTED HAZARDOUS WASTE**

#### Characteristic Review

4. Does the waste exhibit a characteristic that makes it a characteristic hazardous waste?
  - ✓ Ignitable – **YES, WASTE IS D001**
  - ✓ Toxic – **YES for MEK (CAS NO. 78-93-3), WASTE IS D035**
  - ✓ Corrosive – **NO**
  - ✓ Reactive – **NO**

#### Characteristic Waste Exclusion Review

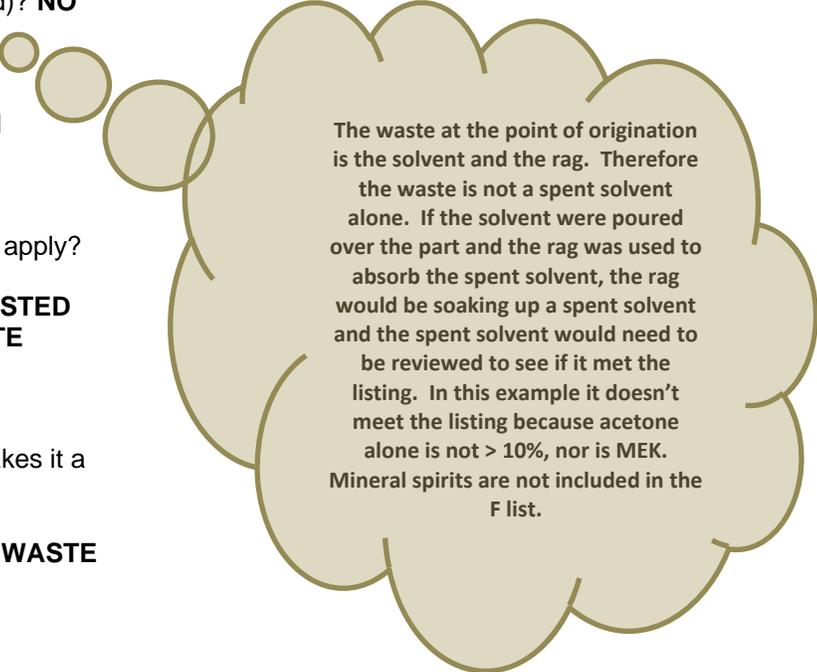
**YES** – Solvent rags when recycled and reused are excluded from hazardous waste regulation and don't have to be counted when determining generator status pursuant to Rule 206(3)(g); however they cannot contain free liquids and must be managed to meet the on-site satellite accumulation requirements until shipped for laundering. Michigan has not adopted [the new federal disposable wipes rule](#), so that exclusion is not an option in Michigan.

#### Other Waste Regulations Review (Liquid Industrial Waste or Solid Waste)

5. Does the waste pass the paint filter test (e.g. is solid)?  
**NA, D001/D035** hazardous waste if disposed (including burned for fuel) and may not have free liquids if recycled pursuant to Par 111 exclusion.

#### LDR Implications

Rags generated by SQGs and LQGs are subject to the LDR requirements and an LDR notification is required. The UHC is **MEK**.



The waste at the point of origination is the solvent and the rag. Therefore the waste is not a spent solvent alone. If the solvent were poured over the part and the rag was used to absorb the spent solvent, the rag would be soaking up a spent solvent and the spent solvent would need to be reviewed to see if it met the listing. In this example it doesn't meet the listing because acetone alone is not > 10%, nor is MEK. Mineral spirits are not included in the F list.

## Example 4

**Soil contaminated with acetone as a result of a release from an underground product tank storing 99.5% acetone**

1. Is this an unused raw material? **YES**

If Yes: Is there a SDS available? **YES**

If Yes: Is material a commercial chemical product listed in Part 111 Table 205a, 205b, or 205c (P or U listed)? **YES, WASTE IS U002**

2. Does the waste contain 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?

➤ **SKIP BECAUSE WASTE IS ALREADY LISTED**

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)?

➤ **SKIP BECAUSE WASTE IS ALREADY LISTED**

### Listed Waste Exclusion Review –

**NO** – Exclusion for contaminated media relates only to underground storage tank releases of petroleum products (fuel) and the waste cannot be ignitable and must only fail to meet the toxicity characteristics for D018 through D043. only fail Rule 204(2)(l)

### Characteristic Review.

Does the waste exhibit a characteristic that makes it a characteristic hazardous waste?

- ✓ Ignitable – **NO**
- ✓ Toxic – **NO**
- ✓ Corrosive – **NO**
- ✓ Reactive – **NO**

### Characteristic Waste Exclusion Review

**NO** as described above

### Other Waste Regulations Review (Liquid Industrial Waste or Solid Waste)

5. Does the waste pass the paint filter test (e.g. is solid)?

**NA, U002 hazardous waste**

### LDR Implications

LDR notification is required of sites generating SQG and LQG volumes, however there is no UHC.

