

OTHER - SPENT MATERIAL 1

Description of Activity:

Spent oleum from the production of motor oil (a spent material that contains mostly sulfuric acid, and exhibits the characteristic of corrosivity) is sent off-site to produce virgin sulfuric acid that is reused in motor oil production.

What is the status of the spent oleum?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

[] yes [] no

If yes, the material is not a solid waste. If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

[] as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

[] as an effective substitute for commercial products in a particular function or application, or

[] as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste. If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

[] yes [] no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

[] a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

[] a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

[] a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

[] either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

[] a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

[] yes [] no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

EPA has specifically excluded spent sulfuric acid returned to produce virgin sulfuric acid from the definition of solid waste. Thus the spent acid is not subject to RCRA Subtitle C regulation, unless it is speculatively accumulated (see 40 CFR 261.4(a)(7)).

OTHER - SPENT MATERIAL 2

Description of Activity:

Spent pulping liquors (spent materials exhibiting the characteristic of corrosivity) from pulpmaking operations are recycled in a pulping liquor recovery furnace (on-site or off-site) and reused in the pulping process.

What is the status of the spent pulping liquors?

Questions:

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1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
 2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
 3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
 4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
 5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
 - 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
 - 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
 - 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

EPA has excluded spent pulping liquors that are recycled in a pulping liquor recovery furnace and reused in the pulping process from the definition of solid waste, unless they are speculatively accumulated (see 40 CFR 261.4(a)(6)).

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OTHER - SPENT MATERIAL 3

Description of Activity:

Waste sulfuric acid (a spent material exhibiting the characteristic of corrosivity) is decomposed into sulfur dioxide, a gas that is piped to a sulfuric acid manufacturing operation for use as a raw material in the production of virgin sulfuric acid.

What is the status of the waste sulfuric acid?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste. If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste. If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The process of decomposing sulfuric acid to recover sulfur dioxide is considered reclamation of a characteristic spent material. Normally, characteristic spent materials that are reclaimed are solid wastes. However, EPA has issued a special exclusion stating that spent sulfuric acid used to produce virgin sulfuric acid is not a solid waste, and is not subject to RCRA Subtitle C regulation, unless it is speculatively accumulated (see 40 CFR 261.4(a)(7)).

OTHER - SPENT MATERIAL 4

Description of Activity:

Spent sulfuric acid (a spent material exhibiting the characteristic of corrosivity) is used with a commercial conditioning agent as a wastewater conditioner.

What is the status of the spent sulfuric acid?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.

If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

2. The generator of the spent sulfuric acid is subject to requirements under 40 CFR 262. Transporters of the acid are subject to requirements under 40 CFR 263. Generators and other parties handling the acid may be subject to storage facility requirements under 40 CFR 264 and 265 subparts A through L. Generators who store the acid in tanks or containers for no more than 90 days are subject to requirements for accumulation under 40 CFR 262.34. Persons disposing of the waste may be subject to requirements under 40 CFR 264 and 265.

Discussion:

This is an example of sham recycling, where the spent sulfuric acid is only marginally effective for the claimed use. The fact that a commercial conditioning agent must be used along with the sulfuric acid is an indication that the claimed recycling is a sham. Thus, the spent sulfuric acid is a solid waste and is subject to RCRA subtitle C regulation.

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OTHER - NON-SECONDARY MATERIAL 1

Description of Activity:

Unused propulsion fuel from a torpedo that has been fired and retrieved must be reclaimed before reuse for its original purpose because it has been contaminated with salt water.

What is the status of the unused propulsion fuel?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

[] yes [] no

If yes, the material is not a solid waste. If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations below.

9. Is the material used or reused

[] as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

[] as an effective substitute for commercial products in a particular function or application, or

[] as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse; and the material is not a solid waste. If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

[] yes [] no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

[] a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

[] a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

[] a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

[] either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

[] a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

[] yes [] no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The fuel is not a secondary material, but unreacted raw material (an unburned fuel). Because it is not a secondary material, it cannot be a solid waste, and is not subject to RCRA Subtitle C regulation.

OTHER - NON-SECONDARY MATERIAL 2

Description of Activity:

Column bottoms and heavy ends containing hexachlorobutadiene from the production of perchloroethylene (a by-product that is listed under EPA Hazardous Waste No. K030) are stripped of volatile materials (which are recycled back into the perchloroethylene process). The residue is further distilled to recover marketable hexachlorobutadiene.

What is the status of the recovered hexachlorobutadiene?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The hexachlorobutadiene is the product of the reclamation of a listed by-product. Such products are not themselves solid wastes unless they (a) are burned as a fuel, (b) are placed on the land in a manner constituting disposal, or (c) require further processing to complete the reclamation process. In this case, the hexachlorobutadiene is reused without further reclamation. Thus, the hexachlorobutadiene is not a solid waste and is not subject to RCRA Subtitle C regulation.

See Also:

Reclamation - By-Product 2
Other - Non-Secondary Material 5

OTHER - NON-SECONDARY MATERIAL 3

Description of Activity:

Toluene originally used in press and roller cleanup in printing and coating operations is segregated by ink type and reused as a thinner at the same facility.

What is the status of the contaminated toluene?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The activity of segregating by ink type does not constitute reclamation, because the toluene is not regenerated. Because the material is used without being reclaimed, it is not a spent material, and thus not a secondary material. Materials that are not spent are not solid wastes and are not subject to RCRA Subtitle C regulation.

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OTHER - NON-SECONDARY MATERIAL 4

Description of Activity:

Solvents (exhibiting the characteristic of ignitability) originally used to clean circuit boards but no longer pure enough for that purpose, are reused as is as metal degreasers.

What is the status of the contaminated solvents?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

Solvents commonly are produced and used as degreasers. As long as the solvents (in this case) are used as degreasers, without being reclaimed, they are serving a purpose for which they originally were manufactured; since they are not "spent", they are not secondary materials. Materials that are not secondary materials are not solid wastes and thus are not subject to RCRA Subtitle C regulation.

See Also: Other - Non-Secondary Material 6

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OTHER - NON-SECONDARY MATERIAL 5

Description of Activity:

Column bottoms and heavy ends containing hexachlorobutadiene from the production of perchloroethylene (a by-product that is listed under EPA Hazardous Waste No. K030) are stripped of volatile materials (which are recycled back into the perchloroethylene process). The residue is distilled to recover marketable hexachlorobutadiene.

What is the status of the volatile materials?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation. (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The volatile materials are products of reclamation of a listed by-product. Such products are not themselves solid wastes unless they (a) are burned as a fuel, (b) are placed on the land in a manner constituting disposal, or (c) require further processing to complete the reclamation process. In this case, the volatile materials are reused in the perchloroethylene process without further reclamation. Thus, they are not solid wastes and are not subject to RCRA Subtitle C regulation.

See Also:

Reclamation - By-Product 2
Other - Non-Secondary Material 2

OTHER - NON-SECONDARY MATERIAL 6

Description of Activity:

Spent acid from a brass mill (a spent material exhibiting the characteristic of corrosivity) is reclaimed for its copper content. The copper is then reused in the mill as an ingredient in the production of brass. The regenerated acid is returned to its original use.

What is the status of the copper?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

[] yes [] no

If yes, the material is not a solid waste. If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

[] as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

[] as an effective substitute for commercial products in a particular function or application, or

[] as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste. If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

[] yes [] no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

[] a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

[] a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

[] a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

[] either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

[] a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

[] yes [] no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The copper is a product of the reclamation of a characteristic spent material. Such products are not solid wastes themselves unless they exhibit a hazardous waste characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) must be further reclaimed before they can be reused. In this case, the copper is reused in the production of brass. Therefore it is not a solid waste and is not subject to RCRA Subtitle C regulation.

See Also:

Reclamation - Spent Material 11

OTHER - NON-SECONDARY MATERIAL 7

Description of Activity:

An acid etching solution (a spent material exhibiting the characteristic of corrosivity) is reclaimed for its zinc content. The zinc, which does not exhibit any hazardous waste characteristics, is then used as an ingredient in paint manufacture.

What is the status of the zinc?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned—as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.
If no, the material is regulated. See item (2), below.

Discussion:

The zinc is a product of the reclamation of a characteristic spent material. Such products are not solid wastes themselves unless they exhibit a hazardous waste characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) must be further reclaimed before they can be reused. In this case, the zinc does not exhibit a hazardous waste characteristic and is directly used as an ingredient in paint. Therefore, it is not a solid waste and is not subject to RCRA Subtitle C regulation.

See Also:

Use Constituting Disposal - Spent Material 1
Reclamation - Spent Material 13
Other - Non-Hazardous Secondary Material 3
Other - Non-Hazardous Secondary Material 4

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OTHER - NON-SECONDARY MATERIAL 8

Description of Activity:

A spent cyanide plating bath solution from electroplating operations (a spent material listed under EPA Hazardous Waste No. F007) goes through an evaporation process to separate its liquid and solid constituents. The liquids are purified in activated carbon beds, yielding water, which is recycled to the rinsing operations. The solids are directly reused in the plating operation.

What is the status of the solids that are recycled to the plating operation?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

[] yes [] no

If yes, the material is not a solid waste. If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

- [] as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),
[] as an effective substitute for commercial products in a particular function or application, or
[] as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste. If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

[] yes [] no

If yes, the activity is reclamation. Go on to question (10a). If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

- [] a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),
[] a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or
[] a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

[] either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

[] a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

[] yes [] no

If yes, the material is not regulated. If no, the material is regulated. See item (2), below.

Discussion:

The solids are a product of the reclamation of a listed hazardous waste. Such products are not solid wastes themselves unless they (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) must be further reclaimed before they can be reused. In this case, the solids are reused in the plating operations. Therefore, they are not a solid waste and are not subject to Subtitle C regulation.

See Also: Reclamation - Spent Material 19
Reclamation - Spent Material 20

OTHER - NON-SECONDARY MATERIAL 9

Description of Activity:

Spent chromic acid from metal finishing plating baths (a spent material listed under EPA Hazardous Waste No. F007) is neutralized and goes through an ion exchange process that removes the chromium. The acid is regenerated and returned to the metal finishing plating bath. The ion exchange resin (a listed sludge -- the residue derived from the treatment of a listed waste) is treated with sodium hydroxide solution to remove any impurities. The resin is then returned to the ion exchange column.

What is the status of the regenerated acid that is returned to the metal finishing plating bath?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

[] yes [] no

If yes, the material is not a solid waste. If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

[] as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

[] as an effective substitute for commercial products in a particular function or application, or

[] as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste. If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

[] yes [] no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

[] a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

[] a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

[] a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

[] either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

[] a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

[] yes [] no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The acid is the product of the reclamation of a listed spent material. Such products are not themselves solid wastes unless they (a) are burned as a fuel, (b) are placed on the land in a manner constituting disposal, or (c) require further processing to complete the reclamation process. In this case, the acid is reused in metal plating without further reclamation. Thus, it is not a solid waste and is not subject to RCRA Subtitle C regulation.

See Also:

Reclamation - Spent Material 4

Reclamation - Sludge 3

Other - Non-Secondary Material 12

OTHER - NON-SECONDARY MATERIAL 10

Description of Activity:

A waste stream containing hexachlorobenzene and hexachlorobutadiene from the manufacture of chloromethanes (by-products exhibiting the characteristic of ignitability) is distilled. The distillate, which is also ignitable, is chlorinated in a nickel tube to produce carbon tetrachloride. The carbon tetrachloride is then marketed.

What is the status of the distillate?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The distillate is a product of the reclamation of a characteristic by-product. Such products are not solid wastes themselves unless they exhibit a hazardous waste characteristic and (a) are placed on the ground in a manner constituting disposal or (b) are burned as a fuel. In this case, the distillate is directly used as an ingredient in the production of carbon tetrachloride. Therefore, it is not a solid waste and is not subject to RCRA Subtitle C regulation.

See Also: Reclamation - By-Product 8

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OTHER - NON-SECONDARY MATERIAL 11

Description of Activity:

Used methyl ethyl ketone from coated fabric production (a material listed under EPA Hazardous Waste No. F005 when spent) is used to wash equipment in the synthetic rubber industry.

What is the status of the used methyl ethyl ketone?

Questions:

1. Is the material that is recycled a secondary material?
[] yes [X] no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
[] yes [] no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
[] yes [] no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
[] yes [] no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
[] yes [] no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
[] yes [] no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
[] yes [] no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
[] yes [] no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
[] yes [] no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
[] yes [] no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
[] yes [] no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.
If no, the material is regulated. See item (2), below.

Discussion:

Solvents such as methyl ethyl ketone are commonly produced and used as cleaning agents. As long as the methyl ethyl ketone (in this case) is used as a cleaner/degreaser, it is serving a purpose for which it originally was manufactured; since it is not "spent", it is not a secondary material. Materials that are not secondary materials are not solid wastes and are not subject to RCRA Subtitle C regulation.

OTHER - NON-SECONDARY MATERIAL 12

Description of Activity:

Spent chromic acid from metal finishing plating baths (a spent material listed under EPA Hazardous Waste No. F007) is neutralized and goes through an ion exchange process that removes the chromium. The acid is regenerated and returned to the metal finishing plating bath. The ion exchange resin (a listed sludge -- the residue derived from a treatment of a listed waste) is regenerated with sodium hydroxide solution and then neutralized and treated, and returned to the ion exchange column.

What is the status of the resin that is returned to the ion exchange column?

Questions:

1. Is the material that is recycled a secondary material?
[] yes [X] no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
[] yes [] no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
[] yes [] no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
[] yes [] no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
[] yes [] no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?

[] yes [] no

If yes, go on to question (6a).
If no, go on to question (6b).

- 6a. Is at least 75 percent of the material recycled within one calendar year?

[] yes [] no

If yes, go on to question (7).
If no, go on to question (6b).

- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?

[] yes [] no

If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.

7. Is the material placed on the ground or used in a product that is placed on the ground?

[] yes [] no

If yes, go on to question (7a).
If no, go on to question (8).

- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?

[] yes [] no

If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.

8. Is the material used as a fuel or used to produce a fuel?

[] yes [] no

If yes, go on to question (8a).
If no, go on to question (9).

8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.
If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.
If no, the material is regulated. See item (2), below.

Discussion:

The regenerated resin is the product of the reclamation of a listed sludge. Such products are not themselves solid wastes unless they (a) are burned as a fuel, (b) are placed on the land in a manner constituting disposal, or (c) require further processing to complete the reclamation process. In this case, the resin is reused in the ion exchange column without further reclamation. Thus, it is not a solid waste and is not subject to RCRA Subtitle C regulation.

See Also: Reclamation - Spent Material 4
 Reclamation - Sludge 3
 Other Non-Secondary Material 9

OTHER - NON-SECONDARY MATERIAL 13

Description of Activity:

Amorphous polypropylene residues (by-products exhibiting the characteristic of ignitability) go through a processor that extracts residual solvents for reuse as degreasers. The polymeric residues, which do not exhibit any hazardous characteristics, are blended with asphaltic materials to make (a more crack-resistant) asphalt for sale. The asphalt also does not exhibit any hazardous waste characteristics.

What is the status of the extracted residual solvents?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste. If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste. If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The solvents are a product of the reclamation of a characteristic by-product that is a solid waste because another product of reclamation (the polymeric residues) is used in a manner constituting disposal. The solvents, however, are not solid wastes themselves unless they exhibit a hazardous waste characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) require further processing to complete the reclamation process. In this case, the solvents are reused as degreasers, so they are not solid wastes and are not subject to RCRA Subtitle C regulation.

See Also:

Other - Non-Hazardous Secondary Material 6
Other - Non-Hazardous Secondary Material 7
Use Constituting Disposal - By-Product 4

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OTHER - NON-SECONDARY MATERIAL 14

Description of Activity:

Plating bath rinsewaters from copper and zinc electroplating operations (spent materials exhibiting the characteristic of EP-toxicity) are concentrated in a reverse osmosis system and an evaporator. The distillate, which does not exhibit any hazardous waste characteristics, is recycled as process water. The concentrate, which exhibits the characteristic of EP-toxicity, is recycled to the plating baths.

What is the status of the concentrate?

Questions:

1. Is the material that is recycled a secondary material?
[] yes [X] no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
[] yes [] no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
[] yes [] no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
[] yes [] no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
[] yes [] no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
[] yes [] no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
[] yes [] no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
[] yes [] no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
[] yes [] no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
[] yes [] no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
[] yes [] no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The concentrate is a product of the reclamation of a characteristic spent material. Such products are not solid wastes themselves unless they exhibit a hazardous waste characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) must be further reclaimed before they can be reused. In this case, the concentrate is directly reused in the plating baths. Thus, it is not a solid waste and is not subject to RCRA Subtitle C regulation.

See Also:

Reclamation - Spent Material 23

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OTHER - NON-SECONDARY MATERIAL 15

Description of Activity:

Spent methanol that was used as a solvent in pharmaceutical manufacturing operations (a spent material listed under EPA Hazardous Waste No. P003) goes through a reclamation process on site that regenerates the methanol to better than 99.5 percent purity. When sent off-site for reuse in a variety of manufacturing processes, it must undergo further reclamation.

What is the status of the 99.5 percent pure methanol?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste. If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste. If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The 99.5 percent pure methanol is a product of the reclamation of a characteristic spent material. Such products are not solid wastes themselves unless they exhibit a hazardous waste characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) must be further reclaimed before they can be reused. In this case, the methanol undergoes further reclamation off-site. However, because it is better than 99.5 percent pure, EPA has ruled that in this case the reclamation is substantially complete and the material is more product-like than waste-like. (A similar situation would be metals that must undergo further refining before they are used.) The methanol is a commercial chemical product, not a solid waste, and is not subject to RCRA Subtitle C regulation.

See Also: Reclamation - Spent Material 24

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OTHER - NON-HAZARDOUS SECONDARY MATERIAL 1

Description of Activity:

Spent activated carbon (a non-listed sludge that does not exhibit a hazardous waste characteristic) from the treatment of a characteristic waste is regenerated.

What is the status of the spent carbon?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

In this case, the spent activated carbon does not exhibit any hazardous waste characteristics. Secondary materials that are recycled but are not hazardous are not solid wastes and are not subject to RCRA Subtitle C regulation.

See Also: Reclamation - Sludge 1

OTHER - NON-HAZARDOUS SECONDARY MATERIAL 2

Description of Activity:

Toxic metal-containing sludges from the chemical industry (sludges exhibiting the characteristic of EP-toxicity) go through a reclamation process that results in a soil-like solid that can be used for landfill cover material, levees, berms, or fertilizer. This resulting material does not exhibit any hazardous waste characteristics.

What is the status of the non-hazardous resulting material?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The products of reclamation of characteristic sludges are not themselves solid wastes unless they exhibit a hazardous waste characteristic and are (a) burned for energy recovery or (b) used in a manner constituting disposal. This product is placed on the land, but because the product is not hazardous it is not a solid waste and is not subject to Subtitle C regulation.

See Also: Use Constituting Disposal - Sludge 1

OTHER - NON-HAZARDOUS SECONDARY MATERIAL 3

Description of Activity:

An acid etching solution (a spent material exhibiting the characteristic of corrosivity) is reclaimed for its zinc content. The zinc (which does not exhibit any hazardous waste characteristics) is then used in a fertilizer that does not exhibit any hazardous waste characteristics. The recycler uses the fertilizer on his own land but does not market it to the general public.

What is the status of the fertilizer?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.
If no, the material is regulated. See item (2), below.

Discussion:

The fertilizer is derived from a characteristic waste but is not itself hazardous because it does not exhibit any hazardous waste characteristics. Recycled secondary materials that are not hazardous are not solid wastes and are not subject to RCRA Subtitle C regulation.

See Also:

Use Constituting Disposal - Spent Material 1
Reclamation - Spent Material 13
Other - Non-Secondary Material 7
Other - Non-Hazardous Secondary Material 4

OTHER - NON-HAZARDOUS SECONDARY MATERIAL 4

Description of Activity:

An acid etching solution (a spent material exhibiting the characteristic of corrosivity) is reclaimed for its zinc content. The zinc (which does not exhibit any hazardous waste characteristics) is then used in a fertilizer that also does not exhibit any hazardous waste characteristics. The recycler uses the fertilizer on his own land but does not market it to the general public.

What is the status of the zinc?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.

If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The zinc is a product of the reclamation of a characteristic spent material. Such products are not solid wastes themselves unless they exhibit a hazardous characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) must be further reclaimed before they can be reused. In this case, because the zinc does not exhibit any hazardous characteristics, it is not a solid waste and is not subject to RCRA Subtitle C regulation (even though it is being used as an ingredient for a product that is placed on the land for beneficial use).

See Also:

Use Constituting Disposal - Spent Materials 1
Reclamation - Spent Material 13
Other - Non-Secondary Material 7
Other - Non-Hazardous Secondary Material 3

OTHER - NON-HAZARDOUS SECONDARY MATERIAL 5

Description of Activity:

Filter press sludge from the manufacture of organo-tin products (a non-listed sludge that does not exhibit any hazardous waste characteristics) is reclaimed for its tin content by secondary tin smelters.

What is the status of the sludge?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).
If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.
If no, the material is regulated. See item (2), below.

Discussion:

The filter press sludge is not listed and does not exhibit any hazardous waste characteristics; therefore it is not hazardous. Recycled secondary materials that are not hazardous are not solid wastes, and are not subject to RCRA Subtitle C regulation.

OTHER - NON-HAZARDOUS SECONDARY MATERIAL 6

Description of Activity:

Amorphous polypropylene residues (by-products exhibiting the characteristic of ignitability) go through a processor that extracts residual solvents for reuse as degreasers. The polymeric residues, which do not exhibit any hazardous waste characteristics, are blended with asphaltic materials to make (a more crack-resistant) asphalt for sale. The asphalt also does not exhibit hazardous waste characteristics.

What is the status of the polymeric residues?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?

yes no

If yes, go on to question (6a).
If no, go on to question (6b).

- 6a. Is at least 75 percent of the material recycled within one calendar year?

yes no

If yes, go on to question (7).
If no, go on to question (6b).

- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?

yes no

If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.

7. Is the material placed on the ground or used in a product that is placed on the ground?

yes no

If yes, go on to question (7a).
If no, go on to question (8).

- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?

yes no

If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.

8. Is the material used as a fuel or used to produce a fuel?

yes no

If yes, go on to question (8a).
If no, go on to question (9).

8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The polymeric residues are a product of the reclamation of a characteristic by-product. Such products are not solid wastes unless they exhibit a hazardous characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) require further processing to complete the reclamation process. In this case, the polymeric residues are used in asphalt that is placed on the ground for beneficial use; however, these residues do not exhibit any hazardous characteristics. Thus, the residues are not solid wastes and are not subject to RCRA Subtitle C regulation.

See Also:

Other - Non-Hazardous Secondary Material 7
Other - Non-Secondary Material 13
Use Constituting Disposal - By-Product 4

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OTHER - NON-HAZARDOUS SECONDARY MATERIAL 7

Description:

Amorphous polypropylene residues (by-products exhibiting the characteristic of ignitability) go through a processor that extracts residual solvents for reuse as degreasers. The polymeric residues, which do not exhibit any hazardous waste characteristics, are blended with asphaltic materials to make (a more crack-resistant) asphalt for sale. The asphalt also does not exhibit any hazardous waste characteristics.

What is the status of the asphalt?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

- as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),
- as an effective substitute for commercial products in a particular function or application, or
- as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).
If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

- a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),
- a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or
- a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.
If none of the above apply, go on to question (10b).

10b. Is the material

- either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or
- a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.
If no, the material is regulated. See item (2), below.

Discussion:

This asphalt is produced by blending asphaltic materials with the polymeric residues. Such products are not solid wastes unless they exhibit a hazardous characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) require further processing to complete the reclamation process. In this case, the asphalt is placed on the ground for beneficial use; however, the asphalt does not exhibit hazardous waste characteristics. Thus the asphalt is not a solid waste and is not subject to RCRA Subtitle C regulation.

See Also: Other - Non-Hazardous Secondary Material 6
 Other - Non-Secondary Material 13
 Use Constituting Disposal - By-Product 4

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OTHER - NON-HAZARDOUS SECONDARY MATERIAL 8

Description of Activity:

Waste etchants containing chromium and sulfuric acid from surface-finishing operations (a spent material exhibiting the characteristics of EP-toxicity and corrosivity), are treated with a substrate, producing trivalent chromium. The other metals (which do not exhibit any hazardous waste characteristics) are transferred to a catholyte and then sold to a secondary smelter for reclamation, leaving a regenerated etchant.

What is the status of the metals that are transferred to the catholyte?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations:

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The metals are the product of the reclamation of a characteristic spent material. Such products are not solid wastes themselves unless they exhibit a hazardous waste characteristic and (a) are placed on the ground in a manner constituting disposal, (b) are burned as a fuel, or (c) must be further reclaimed before they can be reused. In this case, the metals do not exhibit hazardous waste characteristics. Thus they are not solid wastes and are not subject to RCRA Subtitle C regulation.

See Also:

Reclamation - Spent Material 25

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OTHER - NON-HAZARDOUS SECONDARY MATERIAL 9

Description of Activity:

Spent platinum catalysts used in chemicals manufacturing (non-listed spent materials that do not exhibit any hazardous waste characteristics) are returned to the manufacturer, who regenerates them.

What is the status of the spent catalysts?

Questions:

1. Is the material that is recycled a secondary material?
 yes no
If yes, go on to question (2).
If no, the material is not a solid waste.
2. Is the material hazardous? (A material is hazardous if it is listed under 40 CFR 261.30-.33 or exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and is not specifically excluded from the definition of hazardous waste under 40 CFR 261.4(b).)
 yes no
If yes, go on to question (3).
If no, the material is not a solid waste.
3. Is the material specifically excluded from the definition of solid waste under 40 CFR 261.4(a) (see the list in Exhibit 5)?
 yes no
If yes, the material is not a solid waste.
If no, go on to question (4).
4. Is the material inherently waste-like (see the list in Exhibit 4)?
 yes no
If yes, the material is a solid waste. See applicable regulations, below.
If no, go on to question (5).
5. Does the activity serve a beneficial use?
 yes no
If yes, go on to question (6).
If no, the activity is not recycling, and the material is a solid waste. See applicable regulations, below.

6. Is there a feasible means for recycling the waste?
 yes no
If yes, go on to question (6a).
If no, go on to question (6b).
- 6a. Is at least 75 percent of the material recycled within one calendar year?
 yes no
If yes, go on to question (7).
If no, go on to question (6b).
- 6b. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed as a hazardous waste in 40 CFR 261.33?
 yes no
If yes, go on to question (7).
If no, the practice is speculative accumulation, and the material is a solid waste. See applicable regulations, below.
7. Is the material placed on the ground or used in a product that is placed on the ground?
 yes no
If yes, go on to question (7a).
If no, go on to question (8).
- 7a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 that is produced for application to the land?
 yes no
If yes, the material is not a solid waste.
If no, the activity results in use constituting disposal and the material is a solid waste. See applicable regulations, below.
8. Is the material used as a fuel or used to produce a fuel?
 yes no
If yes, go on to question (8a).
If no, go on to question (9).

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8a. Is the material a commercial chemical product that exhibits a hazardous waste characteristic or is listed in 40 CFR 261.33 and that is produced to be burned as fuel?

yes no

If yes, the material is not a solid waste.
If no, the activity results in burning for energy recovery, and the material is a solid waste. See applicable regulations, below.

9. Is the material used or reused

as an ingredient in an industrial process to make a new product without intermediate reclamation (regeneration or recovery of materials),

as an effective substitute for commercial products in a particular function or application, or

as a substitute for raw material feedstock in the primary production process from which it was generated, without being first reclaimed (a closed-loop process)?

If any of the above apply, the activity is use or reuse, and the material is not a solid waste.
If none of the above apply, go on to question (10).

10. Is the material regenerated or are materials with value recovered from the original material?

yes no

If yes, the activity is reclamation. Go on to question (10a).

If no, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

10a. Is the material

a hazardous waste listed under 40 CFR 261.31 or 261.32 (this provision excludes commercial chemical products, which are listed under 40 CFR 261.33),

a spent material exhibiting one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, or

a scrap metal?

If any of the above apply, the material is a solid waste. See applicable regulations, below.

If none of the above apply, go on to question (10b).

10b. Is the material

either a sludge or a by-product that exhibits one of the characteristics of a hazardous waste given in 40 CFR 261.20-.24, and that is not listed under 40 CFR 261.31-.32, or

a commercial chemical product that exhibits a hazardous waste characteristic or is listed under 40 CFR 261.33?

If any of the above apply, the material is not a solid waste.

If none of the above apply, please review the definitions of activities in this manual and reconsider your answers, or call the RCRA Hotline for assistance.

Applicable Regulations

1. Is the waste exempt from regulation (see the list in Exhibit 6)?

yes no

If yes, the material is not regulated.

If no, the material is regulated. See item (2), below.

Discussion:

The catalysts are not listed and do not exhibit any characteristics of hazardous wastes; therefore, they are not hazardous. Recycled secondary materials that are not hazardous are not solid wastes and are not subject to RCRA Subtitle C regulation.

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