

US EPA ARCHIVE DOCUMENT

USE/REUSE - SPENT MATERIAL 1,

Description of Activity:

Spent pink/red water from the production of TNT (a sulfite-containing spent material listed under EPA Hazardous Waste No. K047) is used by the paper industry as a pulping liquor in a chemical-based pulping process.

What is the status of the pink/red water?

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:

Because the pink/red water is used as a substitute for a commercial product in a manufacturing process, the activity is classified as use/reuse. Materials that are used/reused in this manner are not solid wastes and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in manner constituting disposal, or burned as a fuel.

USE/REUSE - SPENT MATERIAL 2

Description of Activity:

Spent pickle liquor (a spent material listed under EPA Hazardous Waste No. K062) is used directly as a wastewater conditioner.

What is the status of the spent pickle liquor?

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),

[X] 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:

Because dumping secondary materials into water to serve as fill or structural support is similar to land disposal, this activity normally is use constituting disposal; thus, materials added to water ordinarily are considered solid wastes. The use of secondary materials as wastewater conditioners, however, is not use constituting disposal. Using secondary materials as wastewater conditioners is not similar to land disposal because the secondary material is chemically combined as part of the conditioning process and is subsumed as an ingredient in the conditioned water. In this case, the pickle liquor is directly reused without any reclamation as a substitute for a commercial product. Materials that are used/reused are not considered solid wastes and thus are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SPENT MATERIAL 3

Description of Activity:

A spent electrolyte from the primary copper production process (a spent material that exhibits the characteristic of EP-toxicity) is returned without being reclaimed to the copper production process as a feedstock.

What is the status of the spent electrolyte?

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:

Because the spent electrolyte is directly reintroduced without intermediate reclamation as a substitute for raw material feedstock in the primary production process from which it was generated, the activity is classified as use/reuse in a closed loop process. Materials that are used/reused are not solid wastes and are not subject to Subtitle C regulations, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SPENT MATERIAL 4

Description of Activity:

A spent Friedel Crafts catalyst solution from a chemical manufacturing plant (a spent material exhibiting the characteristic of corrosivity) is used as an ingredient in aluminum production processes.

What is the status of the spent catalyst?

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 catalyst is directly used without intermediate reclamation as an ingredient in making aluminum. Materials that are used/reused are not solid wastes, and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SPENT MATERIAL 5

Description of Activity:

A spent olefin polymerization catalyst consisting of phosphoric acid impregnated Kieselguhr clay from petroleum fractionalization in the chemicals industry (a spent material exhibiting the characteristic of corrosivity) is supplied to a wet process phosphoric acid producer for use as a feedstock in the production of food-grade phosphoric acid.

What is the status of the spent catalyst?

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 261.337?
 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 catalyst is directly used without intermediate reclamation as an ingredient in making food-grade phosphoric acid. Materials that are used/reused are not solid wastes and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SPENT MATERIAL 6

Description of Activity:

A spent hydrofluoric acid etching solution from metallurgical industries (a spent material exhibiting the characteristic of corrosivity) is reacted with potassium hydroxide to produce an impure potassium fluoride solution, which goes through filtration and evaporation to purify the potassium fluoride, which is sold for use as a preservative.

What is the status of the etching solution?

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 etching solution is directly reused without intermediate reclamation as an ingredient in making potassium fluoride. The activity is not classified as reclamation because potassium fluoride does not exist in the original substance and thus is not recovered from the substance. Materials that are used/reused are not solid wastes, and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SPENT MATERIAL 7

Description of Activity:

Spent sulfuric acid (a spent material exhibiting the characteristic of corrosivity) is used as a raw material in the manufacture of iron oxide products.

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.

Discussion:

The spent sulfuric acid is directly used as an ingredient in a manufacturing process. Hence, the activity qualifies as use/reuse. Materials that are used/reused are not solid wastes and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SPENT MATERIAL 8

Description of Activity:

Waste hydrochloric acid from the production of chlorinated organic solvents such as methylene chloride (a spent material exhibiting the characteristic of corrosivity), is used as a pickle liquor in steel pickling.

What is the status of the waste hydrochloric 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.

Discussion:

Because the spent hydrochloric acid is used as a substitute for a commercial product in steel pickling, the activity is classified as use/reuse. Materials that are used/reused are not solid wastes and are not subject to RCRA Subtitle C regulation unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SLUDGE 1

Description of Activity:

A metal finishing sludge containing chromium hydroxide (a sludge listed under EPA Hazardous Waste No. F006) is treated with sulfuric acid, yielding chromium sulfate which is used in the leather tanning industry.

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 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 sludge is directly used without intermediate reclamation as an ingredient in making chromium sulfate. The activity is not classified as reclamation because chromium sulfate does not exist in the original substance and thus is not recovered from the substance. Materials that are used/reused are not solid wastes, and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SLUDGE 2

Description of Activity:

Emission control dust from a primary zinc smelting furnace (a sludge exhibiting the characteristic of EP-toxicity) is returned to the zinc production process without being reclaimed; the emission control dust is returned to either the smelting furnace in the pyrolytic plant or the dross furnace.

What is the status of the emission control dust?

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:

Because the emission control dust is reintroduced, without prior reclamation, as a substitute for raw material feedstock in the primary production process from which it was generated, the activity is defined as a closed-loop process. Materials that are recycled in a closed-loop process are not solid wastes and thus are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, burned as a fuel, or used in a manner constituting disposal.

USE/REUSE - SLUDGE 3

Description of Activity:

Hydrofluorosilicic acid, an air emission control dust (a sludge that exhibits the characteristic of EP-toxicity), is used as a fluoridating agent in drinking water.

What is the status of the 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.

Discussion:

Because dumping secondary materials into water to serve as fill or structural support is similar to land disposal, this activity normally is use constituting disposal; thus, materials added to water ordinarily are considered solid wastes. The use of secondary materials as fluoridating agents, however, is not use constituting disposal. Using secondary materials as fluoridating agents is not similar to land disposal because the secondary material is chemically combined as part of the fluoridating process and is subsumed as an ingredient in the fluoridated water. In this case, the hydrofluorosilicic acid is directly reused without any reclamation as a substitute for a commercial product. Materials that are used/reused are not considered solid wastes and thus are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SLUDGE 4

Description of Activity:

Emission control dust from the primary copper production process (a sludge that exhibits the characteristic of EP-toxicity) is returned without being reclaimed to the copper production process in the roaster, converter, or tank house as a feedstock.

What is the status of the emission control dust?

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:

Because the emission control dust is directly reintroduced without intermediate reclamation as a substitute for raw material feedstock in the primary production process from which it was generated, the activity is classified as a closed loop process. Materials that are recycled in a closed-loop process are not solid wastes and thus are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SLUDGE 5

Description of Activity:

Bag filter and ventilation materials from the manufacture of pentachlorophenol (sludges listed under EPA Hazardous Waste No. F021) are reused as a substitute for virgin feedstock in the pentachlorophenol manufacturing process.

What is the status of the bag filter and ventilation 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:

Materials that are listed under EPA Hazardous Waste No. F021 are usually considered inherently waste-like, unless they are directly used/reused in a production process at the site of production, as they are here (see 40 CFR 261.2(d)(1)). In this case, the process is use/reuse and the bag filter and ventilation materials are not solid wastes and are not subject to RCRA Subtitle C regulation.

USE/REUSE - SLUDGE 6

Description of Activity:

Emission control dust from steel production (a sludge exhibiting the characteristic of EP toxicity) is returned to the sintering plant for processing before being charged to the blast furnace.

What is the status of the emission control dust?

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:

Processing steps that do not themselves regenerate or recover material values and are not necessary to material recovery are not reclamation. Therefore, sintering operations, which thermally agglomerate iron-bearing materials before charging to a blast furnace, are not reclamation. In this case, return of emission control dusts to the blast furnace as a substitute for raw material feedstock meets the specifications of closed-loop recycling. Materials that are recycled in a closed-loop process are not solid wastes and are not subject to Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SLUDGE 7

Description of Activity:

Blast furnace dusts (a sludge exhibiting the characteristic of EP-toxicity) are returned to the blast furnace (without intermediate reclamation) for reuse.

What is the status of the blast furnace dusts?

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:

Because the blast furnace dusts are reintroduced, without prior reclamation, as a substitute for raw material feedstock in the primary production process in which they were generated, the activity is use/reuse in a closed loop process. Materials that are used/reused are not solid wastes and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - SLUDGE 8

Description of Activity:

Baghouse dust from the production of steel (a sludge exhibiting the characteristic of EP-toxicity) is briquetted and then reintroduced to the blast furnace as a feedstock in the steel production process.

What is the status of the baghouse dust?

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:

Because it does not change the physical form of the baghouse dust, but merely collects the dust for easier reuse, briquetting is not a reclamation step. Thus, the baghouse dust is being reintroduced, without prior reclamation, as a substitute for a raw material feedstock in the primary production process in which it was generated. The activity is defined as use/reuse in a closed loop process. Materials that are used/reused are not solid wastes and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - BY-PRODUCT 1

Description of Activity:

Lime generated in the production of acetylene gas (a by-product exhibiting the characteristic of corrosivity) is used as a wastewater conditioner.

What is the status of the lime?

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),

[X] 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:

Because dumping secondary materials into water to serve as fill or structural support is similar to land disposal, this activity normally is use constituting disposal; thus materials added to water ordinarily are considered solid wastes. The use of secondary materials as wastewater conditioners, however, is not use constituting disposal. Using secondary materials as wastewater conditioners is not similar to land disposal because the secondary material is chemically combined as part of the conditioning process and is subsumed as an ingredient in the conditioned water. In this case, the lime is directly reused without any intermediate reclamation as a substitute for a commercial product. Materials that are used/reused are not considered solid wastes and thus are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.

USE/REUSE - BY-PRODUCT 2

Description of Activity:

Distillation bottoms from the manufacture of carbon tetrachloride (a by-product listed under EPA Hazardous Waste No. K016) are used as a feedstock in the production of tetrachloroethylene.

What is the status of the distillation bottoms?

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 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 process 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 distillation bottoms are directly used as an ingredient in a manufacturing process. Hence, the activity qualifies as use/reuse. Materials that are used/reused are not solid wastes and are not subject to RCRA Subtitle C regulation, unless they are speculatively accumulated, used in a manner constituting disposal, or burned as a fuel.