Waste Determination

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Definition of a “Solid Waste”
“Solid Waste” Definition:

As per 261.2(a)(1)

A *Solid Waste* is any discarded material that is not excluded by 261.4(a) or that is not excluded under 260.30 and 260.31.
Is The Material Discarded?

As per 261.2(a)2

A discarded material is any material which is:

- Abandoned
- Recycled
- Inherently Waste-Like
Materials are solid waste if they are *abandoned* by being:

- Disposed of
- Burned or Incinerated
- Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated
Is The Material Discarded by Being Recycled?

As per 261.2(c)

Materials are solid waste if they are *recycled* - or accumulated, stored, or treated before recycling - by being:

- Used in a manner constituting disposal
- Burned for energy recovery
- Reclaimed
- Accumulated Speculatively
Is The Material Discarded by Being Recycled?

As per 261.2(c)

Materials are solid waste if they are recycled - or accumulated, stored, or treated before recycling - by being:

• Used in a manner constituting disposal
  • Applied to or placed on the land in a manner that constitutes disposal; or
  • Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on land (in which cases the product itself remains a solid waste).

Commercial chemical products listed in 261.33 ("P" and "U" listed waste) are not solid wastes if they are applied to the land and that is their ordinary manner of use. For example, Endrin is a pesticide which is a listed (P051) and characteristic (D012) hazardous waste. Therefore off-specification Endrin could be land applied as a product and therefore not be regulated as a solid waste.
As per 261.2(c)

Materials are solid waste if they are *recycled* - or accumulated, stored, or treated before recycling - by being:

- Burned for energy recovery
  - Burned to recover energy
  - Used to produce a fuel or otherwise contained in fuels

Commercial chemical products listed in 261.33 ("P" and "U" listed waste) are not solid wastes if they are themselves fuels. Recent guidance from EPA has expanded this exemption to include characteristic wastes which are themselves fuels. This exemption is what allows gasoline tank clean-outs to be handled as a ‘product’ when used to make industrial boiler fuel.
Is The Material Discarded by Being Recycled?

As per 261.2(c)

Materials are solid waste if they are \textit{recycled} - or accumulated, stored, or treated before recycling - by being:

• Reclaimed

• As per 261.1(c)4 A material is “reclaimed” if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.
Is The Material Discarded by Being Recycled?

As per 261.2(c)

Materials are solid waste if they are recycled - or accumulated, stored, or treated before recycling - by being:

• Accumulated Speculatively
  
  As per 261.1(c) A material is “accumulated speculatively” if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that - during the calendar year (commencing on January 1) - the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period.
Is The Material Discarded by Being Recycled?

As per 261.2(c)

Materials are solid waste if they are inherently waste-like.

• Hazardous Waste Numbers F020, F021, F022, F023, F026 and F028

• Secondary materials fed to a halogen acid furnace that are characteristic or listed hazardous wastes.

• Materials meeting criteria established by EPA.
Is The Material Exempt by Being Recycled?

As per 261.2(e)(1)

Materials are not solid waste if they are recycled by being:

• Used or reused as ingredients in an industrial process to make a product, provided that the materials are not being reclaimed.
Is The Material Exempt by Being Recycled?

As per 261.2(e)(1)

Materials are not solid waste if they are *recycled* by being:

• Returned to the original process from which they are generated, without first being reclaimed or land disposed. In cases where the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land.
Is The Material Not Exempt by Being Recycled?

As per 261.2(e)(2)

Materials remain solid waste when *recycled* by being used, reused, or returned to original process if this recycling includes:

- Used in a manner constituting disposal, or used to produce products that are applied to the land
- Burned for energy recovery, used to produce a fuel, or contained in fuels
As per 261.2(e)(2)

Materials remain solid waste when *recycled* by being used, reused, or returned to original process if this recycling includes:

- Accumulated Speculatively
- Inherently waste-like
  - Hazardous Waste Numbers F020, F021, F022, F023, F026 and F028
  - Secondary materials fed to a halogen acid furnace that are characteristic or listed hazardous wastes.
  - Materials meeting criteria established by EPA.

Is The Material Not Exempt by Being Recycled?
### Table 1

<table>
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</thead>
<tbody>
<tr>
<td>Spent Materials</td>
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<tr>
<td>Sludges (listed in 40 CFR part 261.31 or 261.32)</td>
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<td>Sludges exhibiting a characteristic of hazardous waste</td>
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<td>Byproducts (listed in 40 CFR part 261.31 or 261.32)</td>
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<td>Commercial chemical products listed in 40 CFR 261.33</td>
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<td>Scrap metal</td>
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</table>

* indicates material is a solid waste

… indicates material is not a solid waste
Definitions 261.1 & 260.10

- **Spent Material** - Any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

- **Sludge** - Any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

- **Byproduct** - A material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a coproduct that is produced for the general public’s use and is ordinarily used in the form it is produced by the process.
Definitions 261.1

- **Commercial Chemical Products** - As per 261.33(d) - comment A chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient.

- **Scrap Metal** - Bits and pieces of metal parts (e.g.,) bars, turnings, rods, sheets, wire) or metal pieces which may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.
“Solid Waste” Definition:

As per 261.2(a)(1)

A Solid Waste is any discarded material that is not excluded by 261.4(a) or that is not excluded under 260.30 and 260.31.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Domestic Sewage (untreated sanitary wastes), and any mixture of domestic sewage and other wastes, that passes through a sewer system to a POTW for treatment. These wastes are regulated under the Clean Water Act.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

- Industrial Wastewater Discharge that are point source discharges subject to regulation under Section 402 of the Clean Water Act. This only applies to the actual point discharge, not to wastewater while being collected, stored, or treated, or to sludges generated by industrial wastewater treatment.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

- Irrigation return flows

- Source, special nuclear or byproduct materials as defined by the Atomic Energy Act

- Materials subject to in-situ mining techniques and which remain in the ground
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Pulping liquors reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless accumulated speculatively

• Spent sulfuric acids used to produce virgin sulfuric acid, unless accumulated speculatively
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

- Secondary materials reclaimed and returned for reuse to original process in which they were generated, provided:
  - Only tank storage involved
  - Closed Process
  - Reclamation does not involve controlled flame combustion
  - Less than 12 months accumulation prior to reclamation
  - Reclaimed material is not used to produce a fuel
  - Reclaimed material is not used in a manner constituting disposal
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Spent wood preserving solutions and waste waters that have been reclaimed and are reused to treat wood, if all of the following conditions are met:
  • The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose
  • Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

- Spent wood preserving solutions and waste waters that have been reclaimed and are reused to treat wood, if all of the following conditions are met:
  - Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;
  - Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in part 265, subpart W of this chapter, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Spent wood preserving solutions and waste waters that have been reclaimed and are reused to treat wood, if all of the following conditions are met:
  • Prior to operating pursuant to this exclusion, the plant owner or operator submits to the appropriate Regional Administrator or State Director a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than 3 years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the appropriate Regional Administrator or State Director for reinstatement. The Regional Administrator or State Director may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

- K060, K087, K141, K142, K143, K144, K145, K147 K148 and any wastes from the coke byproducts processes that are hazardous only because they exhibit characteristic of toxicity…if recycled back to coke ovens, to make coal tar or mixed with coal tar.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Oil-bearing hazardous secondary materials (i.e., sludges, byproducts, or spent materials) that are generated at a petroleum refinery (SIC code 2911) and are inserted into the petroleum refining process (SIC code 2911—including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (i.e., cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph, provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in paragraph (a)(12)(ii) of this section, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under this section. Residuals generated from processing or recycling materials excluded under this paragraph (a)(12)(i), where such materials as generated would have otherwise met a listing under subpart D of this part, are designated as F037 listed wastes when disposed of or intended for disposal.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Recovered oil that is recycled in the same manner and with the same conditions as described in paragraph (a)(12)(i) of this section. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172.) Recovered oil does not include oil-bearing hazardous wastes listed in subpart D of this part; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in 40 CFR 279.1
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.
• Shredded circuit boards being recycled provided that they are:
  • Stored in containers sufficient to prevent a release to the environment prior to recovery; and
  • Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Secondary materials (i.e., sludges, by-products, and spent materials as defined in §261.1) (other than hazardous wastes listed in subpart D of this part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water or other values are recovered by mineral processing, provided that:

  • The secondary material is legitimately recycled to recover minerals, acids, cyanide, water or other values;
  • The secondary material is not accumulated speculatively;
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Secondary materials - continued
  • Except as provided in paragraph (a)(15)(iv) of this section, the secondary material is stored in tanks, containers, or buildings meeting the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except smelter buildings may have partially earthen floors provided the secondary material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 40 CFR 260.10), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If tanks or containers contain any particulate which may be subject to wind dispersal, the owner/operator must operate these units in a manner which controls fugitive dust. Tanks, containers, and buildings must be designed, constructed and operated to prevent significant releases to the environment of these materials.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

- **Secondary materials - continued**
  - The Regional Administrator or the State Director may make a site-specific determination, after public review and comment, that only solid mineral processing secondary materials may be placed on pads, rather than in tanks, containers, or buildings. Solid mineral processing secondary materials do not contain any free liquid. The decision-maker must affirm that pads are designed, constructed and operated to prevent significant releases of the secondary material into the environment. Pads must provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Comparable fuels or comparable syngas fuels (i.e., comparable/syngas fuels) that meet the requirements of §261.38.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided:

  • The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in §261.21) and/or toxicity for benzene (§261.24, waste code D018); and

  • The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility where the primary SIC code is 2869, but where operations may also include SIC codes 2821, 2822, and 2865; and is physically co-located with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (i.e., sludges, byproducts, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.
The Material Is Discarded - Is it excluded by 261.4(a)?

As per 261.4 The following materials are not solid wastes:

• Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in §261.1(c).
The Material Is A Solid Waste
Is It A Hazardous Waste?
“Hazardous Waste” Definition:

As per 261.3 A solid waste, as defined in 261.2, is a hazardous waste if:

• It is not excluded from regulation as a hazardous waste under 261.4(b); and

• It meets any of the following criteria:
  • Exhibits a hazardous waste characteristic
  • Is listed in Subpart D
  • Is a mixture of a solid waste and a listed or characteristic hazardous waste
Is The Solid Waste Excluded From Being A Hazardous Waste?

As per 261.4(b) The following materials are not Solid Waste - and therefore not Hazardous Waste:

• Domestic Sewage (untreated sanitary wastes), and any mixture of domestic sewage and other wastes, that passes through a sewer system to a POTW for treatment. These wastes are regulated under the Clean Water Act.

• Industrial Wastewater Discharge that are point source discharges subject to regulation under Section 402 of the Clean Water Act. This only applies to the actual point discharge, not to wastewater while being collected, stored, or treated, or to sludges generated by industrial wastewater treatment.

• Irrigation return flows

• Source, special nuclear or byproduct materials as defined by the Atomic Energy Act

• Materials subject to in-situ mining techniques and which remain in the ground
Is The *Solid* Waste Excluded From Being A *Hazardous* Waste?

As per 261.4(b) The following materials are not *Solid Waste* - and therefore not *Hazardous Waste*:

- Pulping liquors reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless accumulated speculatively
- Spent sulfuric acids used to produce virgin sulfuric acid, unless accumulated speculatively
- Secondary materials reclaimed and returned for reuse to original process in which they were generated, provided ....
- Spent wood preserving solutions and waste waters that have been reclaimed and are reused to treat wood
Is The Solid Waste Excluded From Being A Hazardous Waste?

As per 261.4(b) The following materials are not Solid Waste - and therefore not Hazardous Waste:

• K060, K087, K141, K142, K143, K144, K145, K147 K148 and any wastes from the coke byproducts processes that are hazardous only because they exhibit characteristic of toxicity…if recycled back to coke ovens, to make coal tar or mixed with coal tar

• Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery

• Recovered oil from petroleum refining, exploration and production, and transportation incident thereto, which is to be inserted into the petroleum refining process (SIC Code 2911) at or before a point (other than a direct insertion into a coker) where contaminants are removed. ....
Does Solid Waste Exhibit A Hazardous Waste Characteristic?

As per 261.20A solid waste, not excluded from regulation under 261.4(b), is a hazardous waste if it exhibits one of the following characteristics:

- Ignitability
- Corrosivity
- Reactivity
- Toxicity
Does Solid Waste Exhibit Characteristic of Ignitibility?

As per 261.21A solid waste exhibits the characteristic of ignitibility if a representative sample of the waste has any of the following properties:

• Is a liquid with a Flash Point less than $140^\circ$ F
• Is not a liquid but can cause fire through friction, absorption or spontaneous chemical change
• Is an Ignitable Compressed Gas
• Is an Oxidizer as defined by 49 CFR 173.151
Does Solid Waste Exhibit Characteristic of Corrosivity?

As per 261.22 A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has any of the following properties:

- Is aqueous and has a pH less than or equal to 2
- Is aqueous and has a pH greater than or equal to 12.5
- Corrodes steel at a rate greater than 1/4 inch per year
Does Solid Waste Exhibit Characteristic of Reactivity?

As per 261.23 A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

- Normally unstable and readily undergoes violent changes without detonation
- Reacts violently with water
- Forms potentially explosive mixture with water
Does Solid Waste Exhibit Characteristic of Reactivity?

As per 261.23 A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

- When mixed with water, generates vapors or fumes which present a danger to human health or environment
- Is cyanide or sulfide bearing and can generate vapors or fumes (when exposed to pH of 2 to 12.5) which present a danger to human health or environment
Does Solid Waste Exhibit Characteristic of Reactivity?

As per 261.23 A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

- Capable of detonation or explosive reaction if subjected to strong initiating source or if heated in confinement
- Readily capable of detonation or explosive decomposition at standard temperature and pressure
Does Solid Waste Exhibit Characteristic of Reactivity?

As per 261.23 A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

- Is a forbidden explosive (49 CFR 173.51)
- Class A explosive (49 CFR 173.53)
- Class B explosive (49 CFR 173.88)
Does Solid Waste Exhibit Characteristic of Toxicity?

As per 261.24 A solid waste exhibits the characteristic of toxicity if the extract of a representative sample contains greater than the regulatory limit of the contaminants listed in table 1 which includes ‘heavy metals’, pesticides, herbicides and various solvents.
Is the Solid Waste A Listed Hazardous Waste?

As per 261.30 A *solid waste* is a *hazardous waste* if it is listed in this part, unless it has been excluded from this list under per 260.20 and 260.22:

“F” Hazardous Wastes From Non-specific Sources (261.31)

“K” Hazardous Wastes From Sources (261.32)
Is the Solid Waste A Listed Hazardous Waste?

As per 261.30 A *solid waste* is a *hazardous waste* if it is listed in this part, unless it has been excluded from this list under per 260.20 and 260.22:

“P” & “U” Discarded Commercial Chemical Products, Off-specification Species, Container Residues, And Spill Residues (261.33)
Commercial Chemical Product Definition

As per 261.33(d) - Comment

**Commercial Chemical Products** - A chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this subtitle, if such facility ...
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Solid wastes generated by any of the following and which are returned to the soils as fertilizers:
  • The growing and harvesting of agricultural crops.
  • The raising of animals, including animal manures.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

- Mining overburden returned to the mine site.
- Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste, generated primarily from the combustion of coal or other fossil fuels, except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

- Wastes which fail the Toxicity Characteristic because chromium is present or are listed due to presence of chromium, which do not fail the Toxicity Characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:
  - The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and
  - The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
  - The waste is typically and frequently managed in non-oxidizing environments.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Wastes which fail the Toxicity Characteristic because chromium is present ...

• Specific waste which meet the standard in paragraphs listed above (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:

  • Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan//wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

  • Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

- Wastes which fail the Toxicity Characteristic because chromium is present...

- Specific waste which meet the standard in paragraphs listed above (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:

  - Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.

  - Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/crome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Wastes which fail the Toxicity Characteristic because chromium is present ...

• Specific waste which meet the standard in paragraphs listed above (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:

  • Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

  • Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

- Wastes which fail the Toxicity Characteristic because chromium is present ...
  - Specific waste which meet the standard in paragraphs listed above (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:
    - Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.
    - Wastewater treatment sludges from the production of TiO2 pigment using chromium-bearing ores by the chloride process.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

- Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Cement kiln dust waste, except as provided by §266.112 of this chapter for facilities that burn or process hazardous waste.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

- Solid waste which consists of discarded arsenical-treated wood or wood products which fails the test for the Toxicity Characteristic for Hazardous Waste Codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood product for these materials' intended end use.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

- Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of §261.24 (Hazardous Waste Codes D018 through D043 only) and are subject to the corrective action regulations under part 280 of this chapter.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Injected groundwater that is hazardous only because it exhibits the Toxicity Characteristic (Hazardous Waste Codes D018 through D043 only) in §261.24 of this part that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines, and petroleum transportation spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, until [insert date six months after publication]. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if ...
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

- Non-terne plated used oil filters that are not mixed with wastes listed in Subpart D of this part if these oil filters have been gravity hot-drained using one of the following methods:
  - Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
  - Hot-draining and crushing;
  - Dismantling and hot-draining; or
  - Any other equivalent hot-draining method that will remove used oil.
The Material Is A Solid Waste - Is it excluded by 261.4(b)?

As per 261.4(b) The following solid wastes are not hazardous wastes:

• Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
The Material Is A Hazardous Waste - Is it partially exempted by 261.4(c)?

As per 261.4(c)

• Hazardous wastes which are exempted from certain regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipe line, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under parts 262 through 265, 268, 270, 271 and 124 of this chapter or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.
The Material Is A Hazardous Waste - Is it partially exempted by 261.4(d)?

As per 261.4(d)

Samples -

Except as provided in paragraph (d)(2) of this section, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this part or parts 262 through 268 or part 270 or part 124 of this chapter or to the notification requirements of section 3010 of RCRA, when:

• The sample is being transported to a laboratory for the purpose of testing; or

• The sample is being transported back to the sample collector after testing; or

• The sample is being stored by the sample collector before transport to a laboratory for testing; or

• The sample is being stored in a laboratory before testing; or

• The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

• The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).
The Material Is A Hazardous Waste - Is it partially exempted by 261.4(d)?

As per 261.4(d)

• Samples - continued

In order to qualify for the exemption in paragraphs above, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

• Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

• Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

  • Assure that the required information accompanies the sample.
The Material Is A Hazardous Waste - Is it partially exempted by 261.4(e, f)?

As per 261.4(e & f)

- Treatability Study Samples

- Samples Undergoing Treatability Studies at Laboratories and Testing Facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this part, part 124, parts 262—266, 268, and 270, or to the notification requirements of Section 3010 of RCRA provided that the conditions of paragraph (f)(1) through (11) of this section are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to paragraph (f)(1) through (11) of this section. Where a group of MTUs are located at the same site, the limitations specified in (f)(1) through (11) of this section apply to the entire group of MTUs collectively as if the group were one MTU.
Mixture Rule

A mixture of listed waste and other material becomes regulated as the listed waste. A mixture of characteristic waste and other material is only regulated as a hazardous waste if it still exhibits the characteristic.
Derived-From Rule

Any residue derived from a listed hazardous waste remains listed as a hazardous waste.
Contained-In Policy

**Contained-in policy.** Contaminated environmental media, of itself, is not hazardous waste and, generally, is not subject to regulation under RCRA. Contaminated environmental media can become subject to regulation under RCRA if they “contain” hazardous waste. As discussed more fully below, EPA generally considers contaminated environmental media to contain hazardous waste: (1) when they exhibit a characteristic of hazardous waste; or, (2) when they are contaminated with concentrations of hazardous constituents from listed hazardous waste that are above health-based levels.

If contaminated environmental media contain hazardous waste, they are subject to all applicable RCRA requirements until they no longer contain hazardous waste. EPA considers contaminated environmental media to no longer contain hazardous waste: (1) when they no longer exhibit a characteristic of hazardous waste; and (2) when concentrations of hazardous constituents from listed hazardous wastes are below health-based levels. Generally, contaminated environmental media that do not (or no longer) contain hazardous waste are not subject to any RCRA requirements; however, as discussed below, in some circumstances, contaminated environmental media that contained hazardous waste when first generated (i.e., first removed from the land, or area of contamination) remain subject to LDR treatment requirements even after they “no longer contain” hazardous waste.