







Exclusions and Exemptions from RCRA Hazardous Waste Regulation

BACKGROUND: The provisions in 40 CFR 261 establish which solid wastes are considered hazardous waste and are regulated under Subtitle C of the Resource Conservation and Recovery Act (RCRA). These provisions also exclude or exempt certain wastes from regulation. Wastes are excluded or exempted from coverage for a variety of reasons. The original RCRA legislation excluded a number of wastes that did not present a significant threat to human health or the environment or that were managed under other environmental programs. Other wastes were excluded by EPA to encourage their recycling or reuse as feedstocks in manufacturing processes. Some exclusions or exemptions serve to establish when a waste material becomes subject to regulation or when waste quantities are too minimal to be fully covered by the Federal hazardous waste regulatory program. As new regulations have caused the universe of RCRA generators and facilities to increase, the number of exclusions and exemptions have increased as well.

This Information Brief provides an overview of the types of waste and hazardous waste management units/facilities that may be excluded or exempted from regulation under the Federal hazardous waste (RCRA Subtitle C) regulatory program. These wastes and units/facilities may or may not be excluded or exempted from coverage under authorized State RCRA programs.

STATUTE: The Resource Conservation and Recovery Act (RCRA), Sections 3001 and 3004; the Federal Facility Compliance Act (FFCA), 40 U.S.C. 6901, *et. al.*, Section 108.

REGULATIONS: 40 CFR 260, 261, 264, & 265.

REFERENCES:

1. *Definitions of Solid and Hazardous Wastes Under the Resource Conservation and Recovery Act*, DOE EH-231 Guidance Manual, August 3, 1992.
2. "Overview of the Identification of Hazardous Waste Under RCRA," EH-231 RCRA Information Brief, EH-231-007-1291, December 1991.
3. "Requirements for the Recycling of Hazardous Waste," EH-231 RCRA Information Brief, EH-231-001/0990, September 1990.
4. "The Mixture Rule Under the Resource Conservation and Recovery Act," EH-231 RCRA Information Brief, EH-231-005/0991, September 1991.
5. "Management of CERCLA Investigation-Derived Wastes," Memorandum from the Director of the RCRA/CERCLA Division, Office of Environmental Guidance, August 27, 1992.
6. "The Small-Scale Treatability Study Sample Exemption," EH-231 RCRA Information Brief, EH-231-002/1991 (January 1991).

Which wastes are excluded from regulation under Subtitle C of RCRA because they are not considered solid waste?

To be a hazardous waste, a material must first be a solid waste. Therefore, a waste that is not considered solid waste cannot be a hazardous waste. (Consult reference 1 to determine whether a waste is a solid waste.) Wastes listed under 40 CFR 261.4(a) are excluded from regulation under Subtitle C of RCRA because they are not considered solid waste. Many of these wastes are excluded based on specific provisions of the original RCRA statute. These wastes include:

- domestic sewage and any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly-owned treatment works (POTW) [§261.4(a)(1)(i) and (ii)];
- any solid or dissolved material introduced by a source into a federally owned treatment work (FOTW) if certain conditions, described in Sect. 108 of the FFCA of 1992, are met;

- industrial wastewater discharges that are point source discharges regulated under section 402 of the Clean Water Act [§261.4(a)(2)];
- irrigation return flows [§261.4(a)(3)];
- source, special nuclear, or byproduct material as defined by the Atomic Energy Act [§261.4(a)(4)]; and
- materials that are subjected to in-situ mining techniques and are not removed from the ground as part of the extraction process [§261.4(a)(5)].

Other wastes that are not solid wastes are excluded to encourage their reclamation or recycling. These wastes include:

- pulping liquors reclaimed in a pulping liquor recovery furnace and then reused in the pulping process [§261.4(a)(6)];
- spent sulfuric acid used to produce virgin sulfuric acid [§261.4(a)(7)],

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- spent wood preserving solutions and wastewaters that have been reclaimed and are reused for their original intended purpose [§261.4(a)(9)], and
- coke and coal tar produced from decanter tar sludge in the iron and steel industry and used as a fuel [§261.4(a)(10)].

In addition, 40 CFR 261.4(a)(8) provides a generic exclusion for reclaimed secondary materials that are returned to the processes from which they were generated and reused, provided that reclamation is accomplished through a controlled process that does not involve burning.

Which solid wastes are excluded from the definition of hazardous waste and therefore, are not regulated under Subtitle C of RCRA?

Solid wastes listed in 40 CFR 261.4(b) are excluded from the definition of hazardous waste and consequently are not regulated under Subtitle C of RCRA. Like the wastes excluded under §261.4(a), many of the wastes listed under §261.4(b) are excluded because of specific provisions of the RCRA statute. These wastes include:

- household waste [261.4(b)(1)];
- wastes generated by the growing and harvesting of agricultural crops or the raising of animals, which are returned to the soils as fertilizers [261.4(b)(2)];
- mining overburden returned to the mine site [§261.4(b)(3)];
- fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste [§261.4(b)(4)];
- drilling fluids, produced wastewater, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy [§261.4(b)(5)];
- certain wastes from the extraction, beneficiation, and processing of ores and minerals (including phosphate rock and overburden from the mining of uranium ore) [§261.4(b)(7)]; and
- cement kiln dust waste [§261.4(b)(8)].

The RCRA statute requires EPA to perform special studies of some of these wastes to determine whether the applicable statutory exclusions were justified. As a result of these studies, EPA decided to retain the exclusions for mining extraction and beneficiation, oil and gas production, and coal and fossil fuel production wastes, and to narrow the scope of the exclusion for wastes from mining production processes. EPA's study of cement kiln dust wastes has not yet been completed.

Some of the wastes listed under 40 CFR 261.4(b) are excluded from the definition of hazardous waste to encourage their reclamation or recycling. These wastes are:

- used CFC refrigerants from totally enclosed heat transfer equipment, which are reclaimed [§261.4(b)(12)], and
- non-terne plated used oil filters that are not mixed with listed waste if these oil filters are gravity hot drained to remove used oil [§261.4(b)(15)]. (Terne is an alloy of tin and lead. This exclusion was promulgated to promote the recycling of used oil remaining in filters.)

The Toxicity Characteristic (TC) regulation, which became effective on September 25, 1990, for large quantity generators and on March 29, 1991, for small quantity generators subjected many more waste streams to RCRA regulations. Several new exclusions

were added to 40 CFR 261.4(b) for wastes that fail the TC. These exclusions are for:

- certain wastes that fail the TC test for chromium [§261.4(b)(6)],
- discarded wood or wood products failing the TC test solely for arsenic [§261.4(b)(9)],
- certain petroleum contaminated media and debris failing the TC test (Codes D018 through D043 only) as long as this waste is subject to the underground storage tank (UST) corrective action regulations [§261.4(b)(10)], and
- for a limited period of time, certain injected groundwater in hydrocarbon recovery operations that is considered hazardous only because it fails the TC test (Codes D018 through D043 only) [§261.4(b)(11)].

Regulations promulgated by EPA under 40 CFR 261.6 establish which regulatory requirements are applicable to certain hazardous recyclable materials that are not excluded from the definition of hazardous waste. Some of the hazardous materials listed in 40 CFR 261.6(a)(3), however, are not subject to hazardous waste regulation when they are reclaimed or recycled. These materials include:

- industrial ethyl alcohol that is reclaimed [§261.6(a)(3)(i)],
- used batteries or battery cells returned to a manufacturer for regeneration [§261.6(a)(3)(ii)],
- scrap metal [§261.6(a)(3)(iii)], and
- certain petroleum refinery wastes [§261.6(a)(3)(iv)-(vii)].

Used oil that is recycled and is hazardous solely because it exhibits a characteristic of hazardous waste is not subject to the 40 CFR 260 through 268 requirements applicable to hazardous waste [§261.6(a)(4)]. It is regulated under 40 CFR 279, Standards for the Management of Used Oil.

Generators of materials excluded from regulation under 40 CFR 261.4(a) or (b), or not subject to hazardous waste regulation under 40 CFR 261.6(a)(3), should refer to the applicable regulatory language or to EH's *Definitions of Solid and Hazardous Wastes Under the Resource Conservation and Recovery Act* guidance manual (reference 1) for the scope and limitations of these exclusions. In addition, EH has prepared an Information Brief to clarify the requirements pertaining to the recycling of hazardous waste (EH-231-001/0990). Recyclers of hazardous waste should refer to this Information Brief for more specific guidance on regulations applicable to recycled materials.

Are any mixtures of hazardous waste and solid waste exempt from RCRA Subtitle C regulation?

According to the "mixture rule," a solid waste mixed with hazardous waste is considered a hazardous waste and must be managed accordingly. There are several exceptions to this rule.

- If the waste is a mixture of solid waste and *characteristic* hazardous waste, the mixture is not hazardous under the mixture rule if the mixture does not exhibit a characteristic of hazardous waste [261.3(a)(2)(i)].
- If the waste is a mixture of solid waste and *listed* hazardous waste, the mixture is not hazardous under the mixture rule if the hazardous component of the mixture was listed solely because it exhibits a hazardous characteristic, *and* the mixture does not exhibit a characteristic of hazardous waste [261.3(a)(2)(iii)].

- Mixtures of wastewater discharged under section 307(b) or 402 of the Clean Water Act and one of the following listed wastes are not considered hazardous waste:
 - certain concentrations of listed spent solvents as specified in 40 CFR 261.3(a)(2)(iv)(A) and (B),
 - heat exchanger bundle cleaning sludge (K050) from the petroleum refining industry [see 40 CFR 261.3(a)(2)(iv)(C)],
 - a discarded commercial chemical product arising from *de minimis* losses from manufacturing operations in which these materials are used as raw materials [see 40 CFR 261.3(a)(2)(iv)(D)], or
 - laboratory wastewater containing toxic listed wastes as specified in 40 CFR 261.3(a)(2)(iv)(E).

Generators of these mixtures should refer to the appropriate regulations under 40 CFR 261.3 and reference 4 to determine if the mixture meets all of the conditions necessary for the exclusion. *N.B.:* The "mixture rule" was declared void by *Shell Oil vs. EPA*, #80-1532, D.C. Circuit, December 6, 1991. EPA reinstated the rule pending development of revisions to the Hazardous Waste Identification Rule.

Are there quantity exclusions or exemptions from hazardous waste regulation?

Yes. Two provisions under the 40 CFR Part 261 regulations exempt small quantities of hazardous waste from regulation under Subtitle C of RCRA.

Wastes generated by conditionally exempt small quantity generators (CESQGs) are exempt from regulation under Subtitle C of RCRA under the provisions of 40 CFR 261.5. CESQGs are generators that do not exceed the following limits for hazardous waste storage or generation:

Type of Limit	Acutely Hazardous Waste	Hazardous Waste
Generation	1 kg/month	100 kg/month
Waste storage	1 kg	1000 kg
Residue from cleanup	100 kg	—

Hazardous waste generated by CESQGs remains exempt from Subtitle C regulation through treatment, storage, and disposal with two exceptions.

- If the CESQG waste is mixed with non-hazardous waste, the mixture exceeds one of the CESQG limits, and the resultant mixture exhibits a characteristic of hazardous waste, the waste is subject to all applicable RCRA Subtitle C regulations.
- If the CESQG waste is mixed with used oil, the mixture is regulated under 40 CFR 279, Standards for the Management of Used Oil.

The other provision involving a quantity exemption is the "empty container" provision under 40 CFR 261.7. Wastes remaining in an empty container or an inner liner removed from an empty container are not subject to hazardous waste regulation. An empty container is defined below.

- A container that has held a hazardous waste that is a *compressed gas* is considered empty when the pressure in the container approaches atmospheric pressure.
- A container or inner liner that has held an *acutely hazardous waste* is considered empty if it has been triple rinsed using an appropriate solvent or cleaned by another method achieving equivalent removal. If the container had an inner liner that prevented contact of the container with the commercial chemical product or manufacturing chemical intermediate, the container is considered empty when the inner liner has been removed.
- A container or inner liner that has held any *other hazardous waste* is considered empty if (1) wastes that can be removed using common practices have been removed and no more than 2.5 cm of residue remain on the bottom of the container or inner liner, or (2) residual waste comprises no more than 3% by weight of the total capacity of the container or inner liner if the container is less than or equal to 110 gallons, or no more than 0.3% by weight if the container is greater than 110 gallons.

Which hazardous wastes are not regulated until they exit the unit in which they were generated?

Regulations promulgated under 40 CFR 261.4(c) serve to establish when certain hazardous wastes become subject to hazardous waste regulation. These regulations state that hazardous waste generated in:

- a product or raw material storage tank,
- a product or raw material transport vehicle or vessel,
- a product or raw material pipeline,
- a manufacturing process unit, or
- an associated non-waste-treatment-manufacturing unit

becomes subject to hazardous waste regulation when it exits the unit in which it was generated. This exemption does not apply to waste generated in a surface impoundment or to waste remaining in a unit more than 90 days after the unit ceases to be operated for manufacturing, storage, or transportation of product or raw materials.

Are waste samples collected to determine their characteristics and composition subject to hazardous waste regulation?

Regulations promulgated under 40 CFR 261.4(d) and (e) exempt waste samples collected for the purposes of testing to determine characteristics or composition, or performing treatability studies. 40 CFR 261.4(f) exempts certain laboratories or testing facilities conducting treatability studies.

As discussed in the August 27, 1992, Memorandum from the Director of the RCRA/CERCLA Division, Office of Environmental Guidance, waste samples derived from the performance of CERCLA field investigations (investigation-derived wastes) may qualify for the treatability study exemptions of 40 CFR 261.4(e-f). There are a variety of conditions associated with qualifying for sampling and treatability study exemptions. Generators and laboratory/testing facilities should refer to applicable regulatory requirements, EH's *Definitions of Solid and Hazardous Wastes* guidance manual, (reference 1) and EH's Information Brief entitled "The Small-Scale Treatability Study Sample Exemption" (EH-231-002/0191) for additional information.

Which wastes are not regulated under Subtitle C of RCRA because they are regulated under other laws?

Certain PCB-containing wastes are excluded from coverage under RCRA because they are regulated under the Toxic Substances Control Act (TSCA) regulations. 40 CFR 261.8 exempts PCB-containing dielectric fluids and electrical equipment containing such fluids from coverage under the hazardous waste regulations as long as these materials are authorized for use and regulated under 40 CFR 761 and are hazardous only because they fail the TC for hazardous waste codes D018 through D043. In the preamble to the final TC rule, EPA noted that these materials could contain chlorinated benzenes and thus, fail the TC (55 FR 11841; March 29, 1990). EPA decided that regulation of these wastes under TSCA should be sufficient to protect human health and the environment. Other PCB-containing wastes that are hazardous (i.e., they are mixed with listed wastes or exhibit a hazardous waste characteristic including the TC for waste codes D004 through D017) are subject to all applicable Subtitle C standards.

Asbestos disposal is not regulated under RCRA. Asbestos waste derived from manufacturing, fabrication, demolition, renovation, or spraying operations must be disposed of in accordance with regulations promulgated under the Clean Air Act in 40 CFR Part 61, Subpart M (National Emissions Standard for Asbestos).

Can a generator or TSDF petition EPA to exclude a specific waste from hazardous waste regulation?

Yes. Regulations promulgated under Subpart C of 40 CFR 260, Rulemaking Petitions, provide three different methods for wastes to be excluded from the hazardous waste regulatory system.

- Any person may petition the EPA Administrator to modify or revoke any provision of the hazardous waste regulations. The petition must justify the proposed action with supporting tests, studies or other information (§260.20).
- Any person may petition the EPA Administrator to exclude or delist a particular facility's listed waste. Delisting involves demonstrating that the waste does not meet any of the criteria for which it was listed as hazardous or acutely hazardous (§260.22).
- In addition, an EPA Regional Administrator may grant a request for a variance from classification as a solid waste for certain recyclable materials (§260.30).

Are there hazardous waste management facilities to which the 40 CFR 264 and 265 standards for owners and operators of TSDFs do not apply?

The 40 CFR 264 and 265 standards do not apply to the owners or operators of certain types of facilities that manage hazardous waste. Exclusions from these requirements that may be applicable to DOE operations are explained below.

- Waste from CESQGs is not subject to RCRA hazardous waste regulations. Facilities permitted, licensed, or registered by a State to manage municipal or industrial solid waste do not need a RCRA permit to manage hazardous waste if the only hazardous waste the facility treats, stores, or disposes of is from CESQGs [40 CFR 264.1(g)(1) and 265.1(c)(5)].
- Facilities accumulating waste on site for fewer than 90 days are exempt from the 40 CFR 264 and 265 requirements [40 CFR 264.1(g)(3) and 265.1(c)(7)].
- Totally enclosed treatment facilities meeting the definition in 40 CFR 260.10 are exempt from the 40 CFR 264 and 265

requirements [40 CFR 264.1(g)(5) and 265.1(c)(9)]. As defined in 40 CFR 260.10, a totally enclosed treatment facility is a facility for the treatment of hazardous waste that is directly connected to an industrial production process and that is constructed and operated in a manner that prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. The example included in the regulatory definition is a pipe in which waste acid has been neutralized. EPA included this exemption in the 40 CFR 264 and 265 regulations in response to commenters who pointed out that in some production processes, wastes (particularly acid and alkaline solutions) are treated in-pipe, often resulting in a non-hazardous discharge. EPA believed that classifying such pipes as treatment facilities would not make sense and possibly discourage the use of such facilities, which in many ways represent the optimum in good waste management practices (45 FR 33218; May 19, 1980).

- Elementary neutralization units meeting the definition in 40 CFR 260.10 are exempt from the 40 CFR 264 and 265 requirements [40 CFR 264.1(g)(6) and 265.1(c)(10)]. As defined in 40 CFR 260.10, an elementary neutralization unit is a device used for neutralizing wastes that are hazardous only because they exhibit a corrosivity characteristic or because they were listed for exhibiting a corrosivity characteristic.
- Wastewater treatment units meeting the definition in 40 CFR 260.10 are exempt from the 40 CFR 264 and 265 requirements [40 CFR 264.1(g)(6) and 265.1(c)(10)]. As defined in 40 CFR 260.10, a wastewater treatment unit is a device that: (1) is part of a wastewater treatment facility that is subject to regulation under either section 402 or 307(b) of the Clean Water Act; (2) receives and treats or stores an influent wastewater (or a wastewater treatment sludge) that is a hazardous waste as defined in 40 CFR 261.3; and (3) is a tank or tank system.
- Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of 40 CFR 263.30 for ten days or fewer at a transfer facility are exempt from the 40 CFR 264 and 265 requirements [40 CFR 264.1(g)(9) and 265.1(c)(12)].
- Operations that involve the addition of absorbent material to waste in a container or the addition of waste to absorbent material in a container (provided that these actions occur when the waste is first placed in the container) are only subject to the following 40 CFR 264 and 265 requirements:
 - precautions to prevent reactions [§§264.17(b) and 265.17(b)],
 - condition of containers (§§264.171 and 265.171), and
 - compatibility of waste with containers (§§264.172 and 265.172) [40 CFR 264.1(g)(10) and 265.1(c)(13)].

Questions of policy or questions requiring policy decisions will not be dealt with in EH-231 Information Briefs unless that policy has already been established through appropriate documentation. Please refer any questions concerning the subject material covered in this Information Brief to Jane Powers, RCRA/CERCLA Division, EH-231, 202-586-7301.



A high-contrast, black and white image showing three distinct horizontal bands. The top band consists of two vertical rectangles, one on the left and one on the right, separated by a narrow white space. The middle band is a single, thick, horizontal black bar. The bottom band is a single, thick, horizontal black bar, positioned lower than the middle one. The entire image is set against a white background.

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